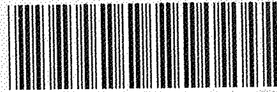
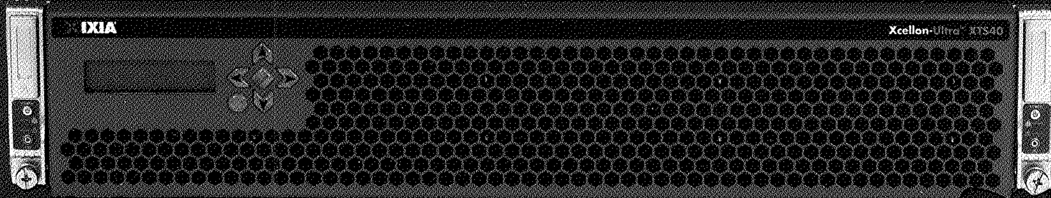
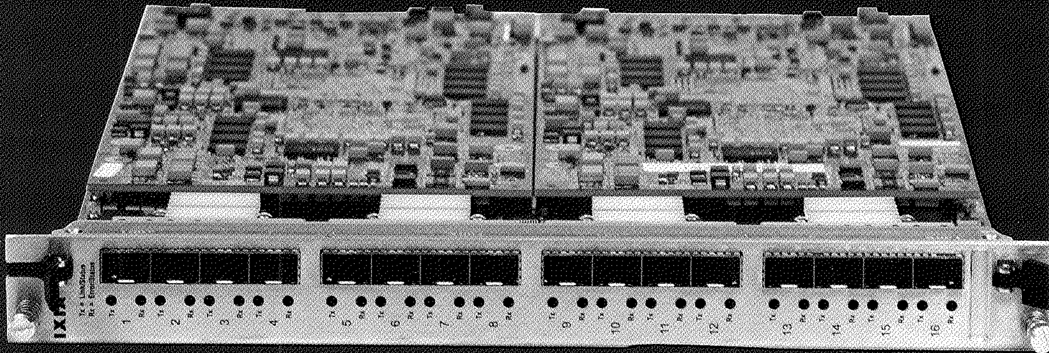


2010 Annual Report

IXIA is a leading, global provider of IP performance test and emulation systems that measure the performance, capability, and conformance of triple-play networks and the devices attached to them, as well as the applications that run over them.



Xcellon-Ultra XT/XTS



Xcellon-Flex

Next-Gen Networks Require
Next-Gen Test Architecture

Annual Report
Financial Summary

(in thousands, except per share and employee data)	2010	2009	2008
Total revenues	$276,815	$177,994	$175,867
Net income (loss)	11,208	(44,203)	(15,895)
Diluted earnings (loss) per share	0.17	(0.70)	(0.24)
Non-GAAP net income [1]	$33,099	$8,010	$14,886
Non-GAAP diluted earnings per share [1]	0.49	0.13	0.23
Cash, cash equivalents and investments	$339,218	$78,980	$206,298
Total assets	589,883	309,088	328,426
Total shareholders' equity	291,480	236,665	273,196
Net cash provided by (used in) operating activities	50,429	(4,725)	24,335
Employees at year end	1,100	1,073	769

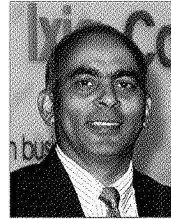
[1] Excludes certain non-cash and non-recurring income and expense items, such as the settlement proceeds received from our previous investments in auction rate securities, proceeds from sale of auction rate securities that were previously written-off, stock-based compensation expenses, restructuring expenses, acquisition related and other costs, the amortization of intangible assets, and impairment charges related to certain investments, and the related income tax effects of these items and any income tax charges related to valuation allowances recorded against our U.S. deferred tax assets. See reconciliation of Non-GAAP to GAAP net income (loss) and diluted earnings (loss) per share below.

Reconciliation of Non-GAAP to GAAP Net Income (Loss) and Diluted Earnings (Loss) per Share

(in thousands, except per share data)	2010	2009	2008
Non-GAAP net income	$33,099	$8,010	$14,886
Amortization of intangible assets	(17,545)	(11,391)	(5,664)
Stock-based compensation	(12,915)	(10,535)	(10,645)
Restructuring, and Acquisition related and other	(6,578)	(10,816)	-
Settlement and certain sales proceeds of auction rate securities	9,919	-	-
Other-than-temporary impairment on investments	-	(2,761)	(20,243)
Other	(651)	(1,785)	-
Income tax effect	5,879	(14,925)	5,771
GAAP net income (loss)	$11,208	$(44,203)	$(15,895)
Non-GAAP diluted earnings per share	$0.49	$0.13	$0.23
Amortization of intangible assets	(0.26)	(0.18)	(0.09)
Stock-based compensation	(0.19)	(0.17)	(0.16)
Restructuring, and Acquisition related and other	(0.10)	(0.17)	-
Settlement and certain sales proceeds of auction rate securities	0.15	-	-
Other-than-temporary impairment on investments	-	(0.04)	(0.31)
Other	(0.01)	(0.03)	-
Income tax effect	0.09	(0.24)	0.09
GAAP diluted earnings (loss) per share	$0.17	$(0.70)	$(0.24)

Dear Fellow Shareholders,

2010 was an exceptional year for Ixia. Solid execution coupled with the resurgence in global demand for IP, Ethernet and LTE test solutions drove revenue to a record $277 million for the year. Our disciplined approach to controlling costs enabled us to achieve our highest level of income in four years and to generate over $50 million in cash from operations for the year. The successful integration of our two significant acquisitions in 2009 – Catapult Communications and the N2X product line from Agilent – propelled Ixia to a new level. By integrating our technology platforms, leveraging our global sales reach, and energizing our human capital, we made an important step in scaling Ixia and proved that we can successfully and profitably grow as well as expand our market leadership through acquisitions.



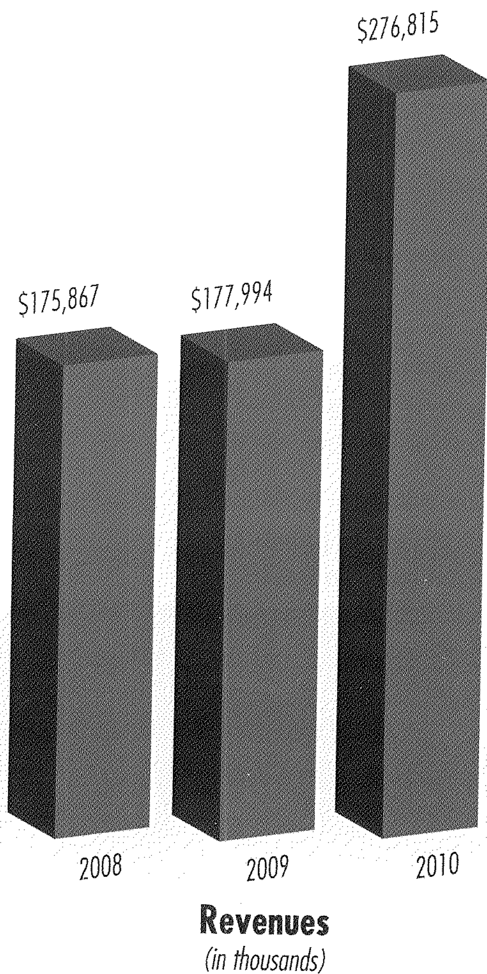
Atul Bhatnagar
President and
Chief Executive Officer

Our core technology, expertise and competitive positioning are fundamental elements to our growth strategy. Our wireline solutions exhibited healthy growth throughout 2010 and we have a leading market share position going into 2011. Demand for our Layer 2-3 testing solutions was driven by strong interest in MPLS and Ethernet synchronization technology across 1 Gigabit and 10 Gigabit Ethernet. Sales of 40 and 100 Gigabit higher speed Ethernet testing solutions increased significantly over 2009 as customers began to roll out next generation data center switches and core routers. We believe that this cycle for higher speed solutions is in its infancy, and we expect continued growth for our 40 and 100 Gigabit Ethernet test solutions as customers incorporate high speed Ethernet technology into their next-generation data center switches, core routers, security appliances and servers.

Demand for our Layer 4-7 application services products, which primarily include our IxLoad software solution, was driven by the continued need

Melbourne, Australia

for testing solutions for data, voice and video. We continue to see performance requirements for next generation server load balancers, firewalls and application delivery systems doubling at regular intervals, resulting in continued need for higher and higher performance test systems. This trend is driven by strong subscriber growth in mobile and broadband networks and demand for video and multimedia applications. Many Network Equipment Manufacturers are increasing their R&D spend towards optimizing video acceleration and service providers are investing in various new technologies for video delivery to mobile and Internet connected devices. Ixia's video test solutions, with technologies such as video on demand, flash-based streaming and smooth streaming, position us well to offer a compelling test solution to our customers.



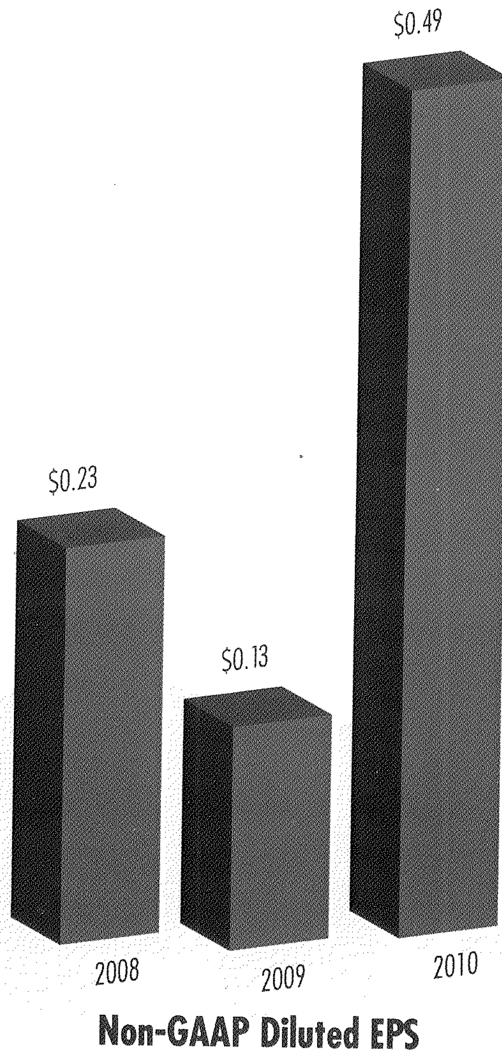
Revenues
(in thousands)

Throughout the year, we remained focused on broadening our core product offerings by integrating and leveraging the technology gained from our two acquisitions in 2009. In the second quarter of 2010, we launched our first Fusion solution that supports both N2X and Ixia software on a high-density 10 Gigabit traffic generation card. In the fourth quarter, we expanded our Fusion-enabled product line with the delivery of a high-density Gigabit Ethernet solution, further leveraging Ixia's advanced technology. The Fusion solution allows N2X customers to harness the power of Ixia's hardware while retaining the familiar look and feel of the N2X graphical user interface.

Additionally, many N2X customers are moving to Ixia's next-generation solutions for emerging new requirements, including advanced Layer 4-7 IP services and high speed Ethernet testing, which were previously unavailable to them. Over the first year post-acquisition timeframe, the top 30 N2X customers significantly increased overall spending and their purchases of Ixia core products grew by an impressive 20 percent. This is a significant positive trend that substantiates the success of our integration efforts.

The Catapult acquisition opened up many new wireless opportunities for Ixia. We are excited by the positive momentum we see in wireless testing for our core Layer 4-7 products, which is a new application for IxLoad. End-to-end service validation is critical, including the ability to simulate traffic that looks like what real users are doing on their smart mobile devices. Ixia can generate realistic end user traffic and then push this traffic into wireless network devices to test how networks will aggregate traffic in the enhanced packet core and route it across the cloud to data centers where the desired content resides. This real world traffic solution, which combines Catapult wireless technology with Ixia's traditional wireline products, is of great interest to service providers rolling out LTE and also to service providers enhancing 3G networks to handle the consumers' rapidly increasing demand for video-rich applications.

Ixia's expertise in LTE networks extends also outward beyond testing the enhanced packet core to the eNodeB base stations at the edge of the wireless access network. Building on Catapult technology, Ixia has developed one of the industry's leading solutions for testing these next generation base stations. We expect to see increased demand in 2011 for our eNodeB test solutions, which provide some of the highest simulated multi-user equipment loads in the industry. As the basics of LTE get sorted out, the next real challenge is ensuring end-to-end network performance for converged wireline and wireless networks. We believe that we are well positioned to be an industry solutions leader in this segment based on our leadership in IP, Ethernet and LTE.



Non-GAAP Diluted EPS

In December, we increased our cash reserves by raising $200 million through an offering of senior convertible notes. We expect that the proceeds will provide the financial wherewithal for Ixia's next wave of growth. We have demonstrated our ability to integrate acquisitions and to succeed in new markets. While we will apply high standards to any

potential acquisition, we are confident that we can opportunistically increase our addressable markets and enter new, high growth markets where we can scale our business and leverage our industry leading solutions.

In summary, we enter 2011 with strong momentum as Ixia is well positioned to benefit from key industry trends and to sustain profitable growth. The benefits of our methodical and thoughtful approach to expanding our business are apparent as we have demonstrated consistent revenue and earnings growth over the past year. We are excited about our achievements as well as the opportunities we see for future growth in a global market. We continue to lead the industry in innovation and customer satisfaction. We will aggressively pursue our customer focused efforts, while efficiently leveraging our operating structure in an effort to deliver superior results. With the continued worldwide support of our employees, customers, and investors, we look forward to the opportunities of the coming year as we focus on strategic growth and delivering test solutions for the converged IP, Ethernet and LTE networks of the future.

Sincerely,

Atul Bhatnagar
President and Chief Executive Officer

Seoul, South Korea

IXIA Form 10-K

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

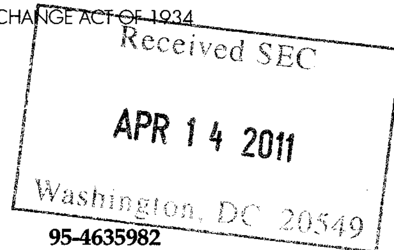
(Mark One)

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended December 31, 2010

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _______ to _______
Commission File Number 000-31523



IXIA

(Exact name of Registrant as specified in its charter)

California	**95-4635982**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

26601 West Agoura Road, Calabasas, CA 91302
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (818) 871-1800

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, without par value	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [ ]No [X]

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes [ ] No [X]

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). Yes [ ] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [ ] Accelerated filer [X] Non-accelerated filer [ ] Smaller reporting company [ ]
(Do not check if a smaller reporting company)

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes [ ] No [X]

The aggregate market value of the shares of the Registrant's Common Stock held by nonaffiliates of the Registrant as of June 30, 2010, computed by reference to the closing sales price on the Nasdaq Global Select Market on that date, was approximately $287,891,883.

As of March 1, 2011, the number of shares of the Registrant's Common Stock outstanding was 68,465,345.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement delivered to shareholders in connection with the Annual Meeting of Shareholders to be held on May 19, 2011 are incorporated by reference into Part III of this Annual Report.

IXIA

FORM 10-K

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PART I

Item 1. Business

Overview

We are a leading provider of converged test systems and services for wireless and wired infrastructures and services. Our hardware and software products allow our customers to test and measure the performance, functionality, service quality and conformance of wireless and wired Internet Protocol (IP) equipment and networks, and the applications that run over them. Our solutions generate, capture, characterize and analyze high volumes of realistic network and application traffic, identifying problems, assessing performance, ensuring functionality and interoperability, and verifying conformance to industry specifications. We offer hardware platforms with interchangeable media interfaces, utilizing a common set of applications, Application Programming Interfaces (APIs) and automation tools that allow our customers to create integrated, easy-to-use automated test environments. The networks that our systems analyze primarily include Ethernet networks operating at speeds of up to 100 Gigabits per second and wireless networks that carry data traffic over optical fiber, electrical cable and airwaves. We also offer hardware platforms and equipment that test wireless equipment, especially those associated with 3G (third generation), 4G (fourth generation) and Long-Term Evolution (LTE) networks. Customers also use our suite of software applications to test and verify web, Internet, security and business applications.

During the year ended December 31, 2010, we received orders from approximately 900 new and existing customers. Based on product shipments for the year ended December 31, 2010, our significant customers by category included:

- Leading network equipment manufacturers such as Cisco Systems, Juniper Networks and Alcatel-Lucent;
- Semiconductor manufacturers such as Broadcom, HSL and LSI Corporation;
- Telecommunications equipment manufacturers such as Ericsson, Nokia Siemens Networks and ZTE Corporation;
- Voice, broadband and/or wireless service providers such as NTT, AT&T and Verizon;
- Cable operators such as Comcast Cable, Time Warner and Charter Communications;
- Enterprises such as Wells Fargo, Morgan Stanley and Oracle; and
- Government contractors, departments and agencies such as General Dynamics, U.S. Navy and Deutsche Bahn.

The delivery of communications and entertainment (e.g., video) traffic is rapidly moving to an all IP infrastructure. To achieve "utility grade" quality, this infrastructure must be thoroughly tested under realistic conditions prior to deployment. Our vision is to accelerate the convergence of all networks to IP by providing the most comprehensive, easy-to-use and automated test systems in the industry. Key growth drivers include the development and deployment of 10, 40 and 100 Gigabit Ethernet network equipment, the build-out of global wired and wireless carrier networks, the proliferation of video and media-rich applications, data center convergence and cloud computing, security devices and applications, and converged IP services such as voice, video and data (multiplay) to the home and wireless devices. We intend to maintain our focus on technology

leadership, expand and further penetrate our customer base, leverage our strengths into adjacent areas, acquire key technologies, businesses and assets, and expand our international presence.

In June 2009, we acquired Catapult Communications Corporation ("Catapult") and have continued to integrate its products into Ixia's IxCatapult product line. The IxCatapult product line adds in-depth testing of wireless network components. In particular, these products include test hardware and software that address 3G, 4G, and Long-Term Evolution (LTE) wireless network access and core components. We have also integrated wireless Catapult technology into our IxLoad product to test the mobile core network.

In October 2009, we acquired from Agilent Technologies, Inc. ("Agilent") its N2X Data Network Testing Product Line ("N2X") to enrich our portfolio with the IxN2X test solution. In addition to broadband and carrier access protocol expertise, the IxN2X product line is known in the industry for its intuitive and powerful user interface and excellent quality. IxN2X best practices are being integrated into the IxNetwork system architecture, and IxN2X customers are taking advantage of Ixia's layer 4-7 and wireless testing on new, high-density Gigabit and 10 Gigabit Ethernet hardware that support both the IxN2X and Ixia applications.

The Increasing Need for Network and Application Testing and Measurement

The measurement and analysis of performance, functionality, service quality and conformance of networks, applications, and communication devices is important to the following groups:

- *Communications Chip Manufacturers.* At the early stages of development of new components, communications chip manufacturers use our test systems to evaluate and analyze the conformance, interoperability, and performance of their components. This occurs during the design and development phase – typically prior to integration by network equipment manufacturers.

- *Network/Telecommunications Equipment Manufacturers (NEMs/TEMs).* NEMs and TEMs provide voice, video, and data service infrastructure equipment to customer network operators, service providers, and network users, who specify high standards of functionality, performance and reliability. To meet these higher standards, NEMs and TEMs must ensure the quality of their products during development and manufacturing and prior to shipping. Failure to ensure the consistent functionality and performance of their products may result in the loss of customers, increased research and development costs, increased support costs and losses resulting from the return of products. NEMs use our test systems to run large-scale subscriber and service emulations, generating extreme traffic loads to verify the performance and capacity of their wired and wireless devices prior to deployment in production networks. Our systems are also used by NEMs and TEMs in the sales and acceptance process to demonstrate to their customers (e.g., service providers and enterprises) how their products will operate under real-world conditions. Our conformance test suites are used by NEMs and TEMs to ensure that their devices conform to published standards -- ensuring that they will be interoperable with other equipment.

- *Network Operators and Service Providers (Service Providers).* Service Providers seek to provide their customers with a growing variety of high quality, advanced network services. Failure to provide satisfactory service can be costly and may result in high subscriber churn rates and reduced Average Revenue per User (ARPU). To ensure desired service levels and overall quality of experience are acceptable, Service Provider R&D and network engineering groups must verify the performance and functionality of staged networks during the equipment selection and network design process prior to deployment. Service Providers use our test systems to emulate millions of subscribers to realistically predict end-user quality of experience delivered by their wired and wireless infrastructure and services.

- *Enterprises and Government.* These large Service Provider customers spend significant amounts on networks and network services. They deploy LANs and WANs that rival some Service Provider networks in size and complexity. These customers use Ixia's solutions in much the same way as Service Providers, verifying the performance and functionality of network equipment and making sure that new networks, services and applications will perform as expected. They also use our products to test the performance and scalability of their internal applications, often based on proprietary protocols.

Characteristics Demanded of Network and Application Test and Measurement Equipment

As networks and network devices become more intelligent and service-aware, performance, functionality, interoperability, and conformance testing solutions must reproduce subscriber traffic with increasing fidelity. Network testing solutions must also be highly scalable and capable of generating and analyzing large amounts of data at high speeds over increasingly complex configurations. Comprehensive, integrated testing must occur throughout network design, development, production, deployment, and operation stages. Because this testing and verification must take place across multiple layers of the network infrastructure and for all network protocols, network testing solutions are also required to be highly flexible, extensible and modular. This rapid evolution of complex network technologies and protocols, including leading-edge technologies such as 40 and 100 Gigabit Ethernet, Metro Ethernet, Carrier Ethernet, and Data Center Ethernet, voice over IP, video over IP, and LTE wireless networks, has resulted in the need for an integrated platform solution that is easy to use with minimal training and set-up.

The Ixia Solution

We are a leading provider of converged test systems and services for wireless and wired infrastructures and services. Our hardware and software allow our customers to test and measure the performance, functionality, service quality and conformance of wireless and wired Internet Protocol (IP) equipment and networks, and the applications that run over them. Our solutions generate, capture, characterize and analyze high volumes of realistic network and application traffic, identifying problems, assessing performance, ensuring functionality and interoperability, and verifying conformance to industry specifications. We offer hardware platforms with interchangeable media interfaces, utilizing a common set of applications, Application Programming Interfaces (APIs) and automation tools that allow our customers to create integrated, easy-to-use automated test environments. The networks that our systems analyze primarily include Ethernet networks operating at speeds of up to 100 Gigabits per second and wireless networks that carry data traffic over optical fiber, electrical cable and airwaves. We also offer hardware platforms and equipment that test wireless equipment, especially those associated with 3G (third generation) and 4G (fourth generation) LTE networks. Customers also use our suite of software applications to test and verify web, Internet, security and business applications.

Our test systems provide the following key benefits to our customers:

Versatile High Performance. Our test systems generate and receive data traffic at full line rate, which is the maximum rate that data traffic can be transmitted over a network medium. Our systems provide accurate analysis across multiple layers of the overall network and of individual network components in real time. Our systems can be configured to either generate programmed packets of data or conduct complete sessions.

Our systems analyze each discrete packet of information, thereby allowing our customers to precisely measure the performance of their networks and individual network components. This precision allows customers to accurately measure critical quality of service parameters such as throughput, latency, loss and jitter and to

check data integrity, packet sequencing throughout the network, and quality of service (QoS) as well as to locate various network problems.

When used for meaningful application sessions, or conversations between network endpoints, our systems emulate highly complex and specialized applications such as those used to transfer electronic mail, browse the Internet, convey voice and video information, manage databases, and establish wireless calls. This emulation allows our customers to accurately measure critical characteristics of their networks such as session setup rate, session tear down rate, and session capacity. By analyzing the content of these sessions, our customers can also accurately measure QoS and media quality.

Highly Scalable. Each of our interface cards provides one or more ports through which our systems generate and receive data traffic. Each physical port contains its own dedicated logic circuits, with substantial memory and compute resources. Our customers can easily scale the size of their test bed or the amount of data traffic generated by inserting additional interface cards. By connecting multiple chassis and synchronizing hundreds of ports to operate simultaneously, our customers can simulate extremely large-scale networks. Our GPS-based components even allow our chassis to be distributed throughout the world, while maintaining the close time synchronization necessary for precision tests. We believe that our systems can offer our customers one of the highest port density and scalable space efficient systems available. In addition, our client-server architecture allows multiple users in the same or different geographic locations to simultaneously access and operate different ports contained in the same chassis to run independent tests.

Hardware Platform. We offer hardware platforms with interchangeable interfaces, utilizing a common set of applications and Application Programming Interfaces (APIs). Our architectures enable the emulation of millions of network users on scalable platforms, with a mixture of both network and application layer traffic. These architectures offer our customers an integrated test environment that might otherwise require multiple products to cover the same test scenarios. We believe that our hardware platform solutions decrease the overall cost while increasing productivity and scalability, and reducing training requirements for our customers.

Highly Modular. Our hardware products consist of stackable and portable chassis, which, depending on the chassis model, can be configured with a mix of interface cards. This modular design allows our customers to quickly and easily create realistic, customized test configurations. Our open architecture accelerates integration of additional network technologies into existing systems through the addition of new interface cards and distributed software.

Flexible. Our customers can easily expand the use of our systems to address changing technologies, protocols and applications without changing system hardware or replacing interface cards. This protects and optimizes the customers' investment by eliminating the need for "forklift upgrades" or the purchase of additional niche products.

Ease of Automation. Our systems make it easy to create automated tests that can run unattended. We offer our customers a growing library of automated tests that simplify and streamline the test process. These tests are repeatable and the results are presented in a structured format for easy analysis. Ixia's Tool Command Language (Tcl) Application Programming Interface (API) is a comprehensive programming interface to our hardware, as well as to our software applications. The Tcl API enables libraries of automated tests to be quickly built with specificity to a customer's environment. We also offer a utility that exports configurations created in our graphical user interface (GUI) as Tcl scripts.

Ease of Use. We have designed our systems so that users can install and operate them with minimal training and setup. Our systems are easy to use and offer our customers a wide range of readily accessible pre-designed test configurations. These tests include industry standard and use case-specific tests. Users can easily

configure and operate our systems to generate and analyze data traffic over any combination of interface cards or ports through our graphical user interface that features a familiar Microsoft™ Windows™ point-and-click environment. Once tests are designed in our GUIs, they can be saved for reuse or in Tcl script form for customization and even greater levels of automation.

Strategy

Our objective is to be the industry leader in providing performance, functionality, service quality, interoperability and conformance testing solutions for wireless and wired IP networks and IP-based services. Our strategy includes being at the forefront of emerging and next generation technologies such as 40/100 Gigabit Ethernet and LTE, growing our portfolio of products and addressable markets through acquisitions of technologies, businesses and assets, expanding our international presence and customer base, and continuing to deliver high quality products and support to our customers. Key elements of our strategy to achieve this objective include the following:

Continue to Expand our Addressable Markets. We plan to further expand our addressable markets into areas of growth for wireless and wired IP-based products and services, such as content-aware routing and switching, networks that carry voice, video and data over IP (commonly referred to in the aggregate as multiplay), wireless devices, network and application security, and next-generation networking technologies. We also plan to continue to apply our knowledge of these advanced communication technologies to develop tools for monitoring traffic in live networks.

Maintain Focus on Technology Leadership. We intend to continue to focus on research and development in order to maintain our technology leadership position and to offer test systems that address new and evolving network technologies. We intend to maintain an active role in industry standards committees such as IEEE and the Internet Engineering Task Force, and to continue our active involvement in industry forums and alliances, such as the Ethernet Alliance, Metro Ethernet Forum, TesLA Alliance (Test Lab Automation), Network Test Automation Forum (NTAF), Multi Service Forum (MSF), IMS Forum, WiFi Alliance, WiMAX Forum and 3GPP. We also plan to continue to work closely with some of our established customers who are developing emerging network technologies, as well as leading edge start-up companies, to enhance the performance and functionality of our existing systems and to design future products that specifically address our customers' needs as they evolve.

Expand and Further Penetrate Customer Base. We plan to strengthen and further penetrate our existing customer relationships, particularly those with network/telecommunications equipment manufacturers, network operators and service providers, and to pursue sales to new customers. We plan to strengthen our customer relationships and to expand our customer base by:

- Continuing to develop and offer new and innovative systems that meet our existing and potential customers' needs,
- Expanding our sales and marketing efforts to increase penetration in under-represented vertical and geographic market segments, and
- Building upon and further strengthening our reputation and brand name recognition.

We also plan to continue our focus on customer support by maintaining and expanding the capabilities of our highly qualified and specialized internal personnel.

License and Acquire Key Technologies. We plan to continue our strategy of acquiring key technologies that expand our product offerings, address customer needs, and enhance the breadth of our evolving product portfolio. Any such acquisitions may be made in the form of partnering with industry leaders, acquiring or licensing technology assets associated with product lines, or acquiring other companies.

Expand International Market Presence. We plan to further pursue sales in key international markets, including the Europe, Middle East and Africa regions (EMEA), and the Asia Pacific region. In order to pursue sales in these markets, we intend to develop and expand our relationships with key customers and distributors, as well as expand our direct sales and marketing presence within these markets.

Products

Our test systems consist of hardware and software products that allow our customers to test and measure the performance, functionality, interoperability, service quality and conformance of their wireless and wired IP equipment and networks, and the applications that run over them. Our hardware platform consists largely of interchangeable interface cards which fit into multi-slot chassis. Our chassis are metal cases that incorporate a computer, a power supply, and a backplane which connects the interface cards to the chassis. The interface cards generate, receive and analyze a wide variety of traffic types at multiple network layers. Our software applications and APIs allow our customers to create and manage integrated, easy-to-use automated test environments.

Our customers can utilize our systems either in test labs or within live networks. Our systems are operated through standard computer peripheral devices, including a monitor, keyboard and mouse. The operator of our systems establishes test parameters for the performance analysis by inputting data using the keyboard and mouse. The operator observes the results of the performance analysis using the monitor and may log results to files for post-analysis or archival. All operations that can be done interactively may also be automated through a variety of scripting interfaces and automation tools.

Our customers configure our systems based on the specific interfaces of the equipment being tested. For example, if our customer wants to analyze the performance of a router with Ethernet interfaces, the customer would insert Ethernet interface cards into our system.

Chassis

Our primary chassis, the 12-slot XM12, provides a high density, highly flexible test platform. Operating in conjunction with our test applications, the XM12 provides the foundation for a complete, high performance test environment. A wide array of interface modules is available for the XM12. The chassis supports up to 192 Gigabit and 10 Gigabit Ethernet ports, twelve 40 Gigabit Ethernet ports and six 100 Gigabit Ethernet ports, and 24 Packet over SONET (POS) or Asynchronous Transfer Mode (ATM) ports. These modules provide the network interfaces and distributed processing resources needed for executing a broad range of data, signaling, voice, video, and application testing from layers 1-7 of the network stack. Each chassis supports an integrated test controller that manages all system and testing resources. Resource ownership down to a per-port level, coupled with hot-swappable interface modules ensures a highly flexible, multi-user testing environment. Backward compatibility is maintained with key existing Ixia interface modules and test applications to provide seamless migration from and integration with existing Ixia test installations.

The IxN2X product line includes legacy N2X hardware chassis (up to four slots) and interface cards as well as new, high-density Gigabit and 10 Gigabit Ethernet load modules for the XM12 chassis that support both the IxN2X and other Ixia applications. The new, high density load modules work seamlessly with legacy N2X

hardware and supports IxN2X applications with no changes to the API and GUI, offering legacy N2X users excellent investment protection. Hardware interfaces are available for 10 Mbps through 10 Gbps Ethernet, SONET/SDH, POS, ATM and Frame Relay.

The IxCatapult product line utilizes three different chassis types. The m500 chassis offers 16 slots for testing 2G, 3G, SS7 and LTE network components. The t600 chassis holds specialized cards used for LTE sector testing. The optional radio heads can be used to generate radio frequency (RF) signals for LTE base station (eNode B) testing.

Interface Cards

We offer a number of optical and electrical interface cards. Each one of our interface cards contains from one to 16 independent traffic generation and analysis ports. These ports operate at line rate. Each port on most interface cards has a unique transmit stream engine that is used to generate packets of information and a real-time receive analysis engine capable of analyzing the packets as they are received. The transmit stream engine generates millions of data packets or continuous test sequences at line rate that are transmitted through the network and received by the analysis engine. When data packets have been generated, the analysis engine then measures throughput, latency, loss and jitter, and checks data integrity and packet sequence on a packet-by-packet basis. In addition, our systems measure the effectiveness of networks in prioritizing different types of traffic. Each of our current generation interface cards also includes a microprocessor per port to generate and analyze sophisticated routing protocols, such as BGP and MPLS, as well as application traffic such as TCP/IP, HTTP and SSL.

Interface cards used with IxCatapult are specialized processors that handle wireless signaling and user data. Small numbers of test ports are typically used for wireless node testing. The t600 chassis holds specialized cards used for LTE 'sector' testing; three to six card sets are used to test each wireless sector.

System Management Software

Our systems are managed through graphical user interfaces that allow users to configure our chassis and interface cards to generate and analyze traffic. Each port can be independently configured to meet specific testing requirements, and results can be viewed using both tables and graphs. We also allow users to create custom and automated test applications tailored to meet their specific requirements with the commonly used Tcl programming environment.

Application Specific Test Suites

We have a comprehensive suite of software applications to address specific technologies. These applications measure and analyze the performance, functionality, interoperability, service quality, and conformance of networks, network equipment and applications that run on these networks. These measurements enable network and telephony equipment manufacturers, enterprises, network operators and service providers, and governments to evaluate the performance of their equipment and networks during the design, manufacture, and pre-deployment stages, as well as after the equipment are deployed in a network. Our technology-specific test suites are targeted at a wide range of popular testing requirements:

Video Testing

Ixia's IxLoad tests the performance of video servers, multicast routers and the IP video delivery network. This is accomplished by emulating video servers and millions of video subscribers in video on demand and multicast video scenarios. Protocols supported include MPEG, IGMP, RTP and RTSP. IxLoad likewise emulates Internet video clients, including Adobe Flash and HLS and Microsoft Silverlight.

IxChariot tests video transport networks. This is accomplished by emulating video traffic, and measuring end-to-end video quality. Measurements include throughput, latency, loss, jitter and media delivery index (MDI).

Voice Testing

IxLoad tests the functionality of VoIP and PSTN devices and services by emulating end devices and servers. Testing areas supported include SIP, SCCP (Skinny), H.323, MGCP and H.248 (MEGACO), as well as TDM and analog telephony services. Performance testing of SIP devices and infrastructure is accomplished by emulating thousands of SIP callers and callees in performance testing scenarios. In 2010, we introduced a PSTN-E1/T1 interface that allows direct testing of telecommunications equipment.

IxChariot tests the voice transport network. This is accomplished by emulating voice traffic and measuring end-to-end voice quality. Measurements include throughput, latency, loss, jitter and mean opinion score (MOS).

Intelligent Network Testing

IxLoad tests the performance of content-aware networks and devices including server load balancers (SLB), deep packet inspection (DPI) devices, firewalls, web servers and mail servers. This is accomplished by emulating millions of clients and a variety of servers in realistic performance testing scenarios. Protocols supported include TCP, HTTP, SSL, FTP, SMTP, POP3, IMAP, RTP, RTSP, Telnet, DNS, LDAP, DHCP, SIP, MPEG and IGMP.

Conformance Testing

IxANVL provides automated network/protocol validation. Developers and manufacturers of networking equipment and Internet devices can use IxANVL to validate protocol compliance and interoperability. IxANVL supports all industry standard test interfaces including 10Mbps/100Mpbs/1Gbps/10Gbps Ethernet, ATM, Serial, Async, T1/E1 and POS. It provides conformance, negative and regression testing on a large selection of protocols including bridging, routing, PPP, TCP/IP, IPv6, IP storage, RMON, VPN, MPLS, voice over IP, Metro Ethernet and multicast.

Security Testing

IxLoad tests the performance of stateful and deep packet inspection security devices, including firewalls, SSL gateways, virus scanners, spam filters, and intrusion detection systems (IDS). This is accomplished by emulating clients and servers, as well as through the use of distributed denial of service (DDoS) attacks. Key capabilities include the ability to mix valid user traffic with malicious traffic and to attach viruses to emails.

Application Testing

IxLoad tests the performance of enterprise applications. This is accomplished by emulating a large number of real users accessing applications. Technologies supported include JavaScript, XML, Java, Document Object Model (DOM) and databases (e.g., Oracle, SQL, Access).

Router Testing

IxNetwork and IxN2X tests core/edge/customer routers and layer 3 switches. This is accomplished by emulating entire network infrastructures and generating high traffic loads across these emulated topologies to verify performance. Protocols supported include IGPs (OSPF, IS-IS, RIP), BGP, MPLS (including layer 2 and 3 VPNs) and IP multicast.

IxAutomate is an automated test harness that can run turnkey tests using Ixia's underlying APIs. Multiple turnkey test suites are available to execute control and data plane performance and functionality testing. Tests include route capacity, route convergence, session scalability, tunnel scalability and data plane performance.

Layer 2-3 Security Testing

IxLoad tests IPSec VPN gateways and systems. This is accomplished by establishing and authenticating IPSec tunnels, and then generating traffic load over the tunnels to verify performance. Site-to-site and remote access VPN testing is supported, as well as DES, 3DES and AES encryption.

IxNetwork, IxLoad and IxN2X test broadband access devices supporting 802.1x authentication. This is accomplished by high scalable emulation of 802.1x clients (supplicants). Authentication modes supported include MD5, TLS, TTLS and PEAP.

Switch Testing

IxNetwork and IxN2X test layer 2-3 switches and forwarding devices. This is accomplished by generating traffic load across a mesh of interfaces, and then measuring results down to a per flow basis. Protocols supported include spanning tree, multicast and IP routing.

IxAutomate tests layer 2-3 switches in an automated fashion. A set of predefined test suites is used to execute performance and functionality tests. Tests include data plane performance, QoS functionality, address cache tests, error filtering and VLAN functionality.

IxExplorer tests layer 2-3 switches and forwarding devices. This is accomplished by generating traffic load with very granular control of packet parameters and detailed results analysis. Measurements include throughput, latency, inter-arrival time, data integrity and sequence checking.

Wireless Testing

IxCatapult tests legacy and wireless network protocols associated with 2G, 3G and 4G/LTE wireless networks. This is accomplished through emulation of each network component. These emulations are used in combinations to isolate and test each component or group of components.

IxLoad tests 3G and 4G/LTE core networks, including the new evolved packet core (EPC) network. This is accomplished by emulating application traffic whether data, voice, or video and measuring end-to-end

performance and quality. Measurements include throughput, latency, jitter, mean opinion score (MOS) and media delivery index (MDI).

Broadband Testing

IxNetwork, IxLoad and IxN2X test broadband aggregation devices including B-RAS, DSLAMs, CMTSs and edge routers. This is accomplished by emulating millions of broadband clients and generating traffic load over those connections. Protocol support includes PPPoE, PPPoA, L2TPv2 and L2TPv3.

IxChariot tests the broadband access transport network. This is accomplished by emulating application traffic - whether data, voice, or video - and measuring end-to-end performance and quality. Measurements include throughput, latency, jitter, mean opinion score (MOS) and media delivery index (MDI).

Automated Testing

IxAutomate provides a complete automation environment for testing layer 2-3 routers, switches and similar devices. A set of predefined test suites is used to execute performance and functionality tests. Multiple tests, whether predefined or custom developed, can be scheduled for execution together with configuration of the device under test.

Test Conductor is a comprehensive, highly scalable regression harness that is compatible with some our other key network testing tools. Test Conductor imports tests, associates them with a named regression test sequences, and allows detailed scheduling. Tests can be scheduled in series or in parallel based on a Windows Outlook™-like calendar tool. At-a-glance logs and summary reports display color-coded pass/fail results, as well as the progress of the tests within each regression. Automated device under test (DUT) configuration scripts can be scheduled to run in synchronization with the individual tests or with complete regression runs.

Our Tcl automation environment provides a comprehensive set of tools and APIs for automating testing with our hardware and software applications. Custom test libraries covering all of a customer's layer 2-7 testing requirements can be created in a single automation environment.

Most test applications contain a "ScriptGen" feature that automatically generates Tcl script code from test configurations. This accelerates the development of automation code and helps train new users in the Ixia Tcl API.

Converged Monitoring Testing

As carriers deploy additional multiplay services over advanced Ethernet networks, their existing support systems are less capable of diagnosing application layer problems. Ixia's IxRave (Remote Access Verification Engine) solution allows carriers and service providers to execute active network tests using Ixia's applications from a web-based control system that can be integrated into their existing infrastructure.

Products in Development

We continue to develop our IP testing capabilities, and throughout 2011 we intend to remain focused on improving our position in performance, functional, interoperability, service quality and conformance testing in the following technology areas:

- 10, 40 and 100 Gigabit Ethernet
- Carrier, Metro and Data Center Ethernet
- Security
- MPLS and MPLS-TP
- IPv6
- Voice and Video over IP
- IPSec
- Test Automation
- LTE/EPC
- Femtocell
- Energy efficiency

We may delay or cancel the introduction of new products to the market as a result of a number of factors, some of which are beyond our control. For more information regarding these factors, see "Business - Research and Development" and "Risk Factors - If we are unable to successfully develop or introduce new products to keep pace with the rapid technological changes that characterize our market, our results of operations will be significantly harmed."

Technology

The design of all of our systems requires a combination of sophisticated technical competencies, including design of field programmable gate arrays, or FPGAs, which are integrated circuits that can be repeatedly reprogrammed to perform different sets of functions as required. The design of all of our systems also requires high-speed digital hardware design, software engineering and optical and mechanical engineering. We have built an organization of professional staff with skills in all of these areas. The integration of these technical competencies enables us to design and manufacture test systems which are highly scalable to meet the needs of our customers.

Complex Logic Design. Our systems use FPGAs that are programmed by the host computer and therefore can be reconfigured for different applications. Our newest products have clock frequencies, which are the timing signals that synchronize all components within our system, and logic densities, which are the number of individual switching components, or gates, of more than four million gates per chip. Our customers may obtain updates and enhancements from our website, thereby allowing rapid updates of the system. Almost all of our logic chips are designed in the VHDL hardware description language, a unique programming language tailored to the development of logic chips. This language enables the easy migration of the hardware design to application specific integrated circuits as volumes warrant. We develop VHDL code in a modular fashion for reuse in logic design, which comprises a critical portion of our intellectual property. This reusable technology allows us to reduce the time-to-market for our new and enhanced products.

Software Technology. We devote substantial engineering resources to the development of software technology for use in our product lines. We have developed software to control our systems, analyze data collected by our systems, and monitor, maintain and self-test our hardware and field programmable gate array subsystems. A majority of our software technology and expertise is focused on the use of object-oriented development techniques to design software subsystems that can be reused across multiple product lines. These objects are client and server independent allowing for distributed network applications. This software architecture allows all of the software tools developed for our existing products to be utilized in all of our new products with very little modification. Another important component of our software technology is our graphical user interface design. Customer experience with our test products has enabled us to design a simple yet effective

method to display complex configurations in clear and concise graphical user interfaces for intuitive use by engineers.

Customers

Since our incorporation in May 1997 through December 31, 2010, we have shipped our systems to over 2,400 customers. No customer other than Cisco Systems has accounted for more than 10% of our total revenues in 2010, 2009 or 2008. Cisco Systems accounted for 13.5% of our total revenues in 2010, 15.6% of our total revenues in 2009 and 21.0% of our total revenues in 2008.

We do not have long-term or volume purchase contracts that commit our customers to future product purchases, and as a result they may reduce or discontinue purchasing from us at any time.

Competition

The market for providing wireless and wired network performance measurement and analysis systems is highly competitive, and we expect this competition to continue in the future. We currently compete with test solution vendors such as Spirent Communications, BreakingPoint Systems, JDS Uniphase, EXFO and Anritsu. We also compete with a number of small companies which are focused on network performance measurement, video and rich media, wireless and IMS, high speed Ethernet and converged monitoring test. Additionally, some of our significant customers have developed, or may develop, in-house performance analysis products for their own use or for sale to others.

We believe that the principal competitive factors in our market include:

- Breadth of product offerings and features on a single platform,
- Timeliness of new product introductions,
- Product quality, reliability and performance,
- Price and overall cost of product ownership,
- Ease of installation, integration and use,
- Customer service and technical support, and
- Company reputation and size.

We believe that we compete favorably in the key competitive factors that impact our markets. We intend to remain competitive through ongoing research and development efforts that enhance existing systems and to develop new systems. We will also seek to expand our market presence through marketing and sales efforts. However, our market is still evolving and we may not be able to compete successfully against current or future competitors.

We expect to continue to experience significant competition from our existing competitors and from companies that may enter our existing or future markets. And, as we move into new market segments within the broader testing arena, we will be challenged by new competitors. These companies may develop similar or

substitute solutions that may be more cost-effective or provide better performance or functionality than our systems. Also, as we broaden our product offerings, we may move into new markets in which we will have to compete against companies already established in those markets. Some of our existing and potential competitors have longer operating histories, substantially greater financial, product development, marketing, service, support, technical and other resources, significantly greater name recognition, and a larger installed base of customers than we do. In addition, many of our competitors have well established relationships with our current and potential customers and have extensive knowledge of our industry. It is possible that new competitors or alliances among competitors will emerge and rapidly acquire market share. Moreover, our competitors may consolidate with each other, or with other companies, giving them even greater capabilities with which to compete against us.

To be successful, we must continue to respond promptly and effectively to the challenges of changing customer requirements, technological advances and competitors' innovations. Accordingly, we cannot predict what our relative competitive position will be as the market evolves for wireless and wired network performance measurement and analysis systems.

Sales, Marketing and Technical Support

Sales. We use our global direct sales force to market and sell our systems. In addition, we use distributors to complement our direct sales and marketing efforts in certain international markets. Our direct sales force maintains close contact with our customers and supports our distributors.

Marketing. We have a number of programs to support the sale and distribution of our systems and to inform existing and potential customers and distributors about the capabilities and benefits of our systems. Our marketing efforts also include promoting our business in the following ways:

- Sponsoring technical seminars and webinars that highlight our solutions,
- Participating in industry trade shows and technical conferences,
- Writing and distribution of various forms of collateral, including brochures, white papers, and application notes,
- Demonstrating the performance and scalability of our products at our iSimCity proof-of-concept labs,
- Communicating through our corporate website, and
- Writing online and print trade journals.

Technical Support. We maintain a technically knowledgeable and responsive customer service and support staff that is critical to our development of long-term customer relationships. Our staff can:

- Offer solutions for performance validation needs,
- Develop custom applications,
- Deploy to customer sites on short notice, and

- Provide guidance to optimally utilize our systems.

Manufacturing and Supply Operations

Our supply operations consist primarily of supply chain planning and procurement, quality control, logistics, final assembly, configuration testing and distribution. We outsource the manufacture, assembly and testing of printed circuit board assemblies, certain interface cards and certain chassis to third party contract manufacturers and assembly companies, the most significant of which are located in Malaysia. This manufacturing process enables us to operate without substantial space and personnel dedicated to solely manufacturing operations. As a result, we can leverage a significant portion of the working capital and capital expenditures that may be required for other operating needs.

We are dependent upon sole or limited source suppliers for some key components and parts used in our systems, including, but not limited to, field programmable gate arrays, processors, oscillators and optical modules. We and our contract manufacturers forecast consumption and purchase components through purchase orders. We have no guaranteed or long-term supply arrangements with our respective suppliers. In addition, the availability of many components is dependent in part on our ability and the ability of our contract manufacturers and assembly companies to provide suppliers with accurate forecasts of future requirements, as well as the global commodity market. Any extended interruption in the supply of any of the key components currently obtained from a sole or limited source or delay in transitioning to a replacement supplier's product or replacement component into our systems could disrupt our operations and significantly harm our business in any given period.

Lead times for materials and components ordered by us and by our contract manufacturers vary and depend on factors such as the specific supplier, purchase terms, global allocations and demand for a component at a given time. We and our contract manufacturers acquire materials, complete standard subassemblies and assemble fully-configured systems based on sales forecasts and historical purchasing patterns. If orders do not match forecasts or substantially deviate from historical patterns, we and our contract manufacturers and assembly companies may have excess or inadequate supply of materials and components.

Research and Development

We believe that research and development is critical to our business. Our development efforts include anticipating and addressing the performance analysis needs of network and telecommunications equipment manufacturers, network operators and service providers, communications chip manufacturers and network users, large enterprises and government customers, and focusing on emerging high growth network technologies.

Our future success depends on our ability to continue to enhance our existing products and to develop new products that address the test and measurement needs of our customers. We closely monitor changing customer needs by communicating and working directly with our customers and distributors. We also receive input from our active participation in industry groups responsible for establishing technical standards.

Development schedules for technology products are inherently difficult to predict, and there can be no assurance that we will introduce any proposed new products in a timely fashion. Also, we cannot be certain that our product development efforts will result in commercially successful products or that our products will not contain software errors or other performance problems or be rendered obsolete by changing technology or new product announcements by other companies.

We plan to continue to make significant investments in research and development, such as our investments in our overseas development facilities, including those in India and Romania. Our research and development expenses were $72.5 million in 2010, $54.0 million in 2009, and $49.2 million in 2008. These costs included stock-based compensation expense of $5.2 million in 2010, $4.5 million in 2009, and $4.2 million in 2008.

Intellectual Property and Proprietary Rights

Our success and ability to compete are dependent in part upon our ability to protect and maintain our proprietary rights to our intellectual property rights. We currently rely on a combination of patent, trademark, trade secret and copyright laws and restrictions on disclosure and use to establish and protect our intellectual property. We have patent applications and existing patents in the United States and in other jurisdictions. We cannot be certain that these applications will result in the issuance of any patents, or that any such patents, if they are issued, or our existing patents, will be upheld. We also cannot be certain that such patents, if issued, or our existing patents, will be effective in protecting our proprietary technology. We have registered the Ixia name, the Ixia logo and certain other trademarks in the United States, the European Union and other jurisdictions, and have filed for registration of additional trademarks.

We generally enter into confidentiality agreements with our officers, employees, consultants, and vendors, and in many instances, our customers. We also generally limit access to and distribution of our source code and further limit the disclosure and use of other proprietary information. However, these measures provide only limited protection of our intellectual property rights. In addition, we may not have signed agreements containing adequate protective provisions in every case, and the contractual provisions that are in place may not provide us with adequate protection in all circumstances.

Despite our efforts to protect our intellectual property rights, unauthorized parties may attempt to copy or otherwise obtain or use technology or information such as trade secrets that we regard as confidential and proprietary. We cannot be certain that the steps taken by us to protect our intellectual property rights will be adequate to prevent misappropriation of our technology or that our competitors will not independently develop technologies that are similar or superior to our technology. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as do the laws of the United States. Any infringement of our intellectual property rights could result in significant litigation costs, and any failure to adequately protect our intellectual property rights could result in our competitors' offering similar products, potentially resulting in loss of competitive advantage, loss of market share and decreased revenues. Litigation may be necessary to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Litigation of this type could result in substantial costs and diversion of resources and could significantly harm our business.

The telecommunication and data communications industries are characterized by the existence of a large number of patents and frequent litigation based on allegations of patent infringement. From time to time, third parties may assert patent, copyright, trademark and other intellectual property rights to technologies or related standards that are important to our business. We have not conducted searches to determine whether the technology we have in our products infringes upon or misappropriates intellectual property rights held by third parties. Any claims asserting that our systems infringe or may infringe proprietary rights of third parties, if determined adversely to us, could significantly harm our business. See Part I, Item 3 of this Form 10-K for additional information.

Employees

As of December 31, 2010, we had approximately 1,100 full-time employees. We also from time to time hire temporary and part-time employees and independent contractors. Our future performance depends, to a significant degree, on our continued ability to attract and retain highly skilled and qualified technical, sales and marketing, and senior management personnel. Our employees are not represented by any labor unions. We consider our relations with our employees to be good.

Available Information

Our website address is www.ixiacom.com. We make available free of charge through a link provided at such website our Forms 10-K, 10-Q and 8-K as well as any amendments thereto. Such reports are available as soon as reasonably practicable after they are filed with the Securities and Exchange Commission.

Item 1A. Risk Factors

The statements that are not historical facts contained in this Form 10-K are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements reflect the current belief, expectations or intent of our management and are subject to and involve certain risks and uncertainties. Many of these risks and uncertainties are outside of our control and are difficult for us to forecast or mitigate. In addition to the risks described elsewhere in this Form 10-K and in certain of our other Securities and Exchange Act Commission filings, the following important factors, among others, could cause our actual results to differ materially from those expressed or implied by us in any forward-looking statements contained herein or made elsewhere by or on behalf of us.

Our business may be adversely affected by unfavorable general economic and market conditions

Our business is subject to the effects of general economic conditions in the United States and globally and, in particular, market conditions in the communications and networking industries. Our operating results have been adversely affected as a result of unfavorable economic conditions and reduced or deferred capital spending in the United States, Europe, Asia and other parts of the world. The recent global financial crisis included, among other things, significant reductions in available capital and liquidity from banks and other credit providers, substantial reductions and/or fluctuations in equity and currency values worldwide, and concerns that the worldwide economy may be in a prolonged recessionary period. Unfavorable economic and market conditions such as these could likely result in lower capital spending by our customers on test and measurement solutions, and therefore demand for our products could decline, adversely impacting our revenue. Challenging economic and market conditions may also impair the ability of our customers to pay for the products and services they have purchased. As a result, our reserves for doubtful accounts and write-offs of accounts receivable may increase.

In addition, prolonged unfavorable economic conditions and market turbulence may also negatively impact our contract manufacturers' and suppliers' capability to timely supply and manufacture our products, thereby impairing our ability to meet our contractual obligations to our customers. These effects, as well as any other currently unforeseeable effects, are difficult to forecast and mitigate. As a result, we may experience material adverse impacts on our business, operating results, financial condition and stock price.

Acquisitions undertaken and any that we may undertake could be difficult to integrate, disrupt our business, dilute shareholder value and significantly harm our operating results

Acquisitions are inherently risky and no assurance can be given that our previous or future acquisitions will be successful or will not materially and adversely affect our business, operating results or financial condition. We expect to continue to review opportunities to acquire other businesses or technologies that would add to our existing product line, complement and enhance our current products, expand the breadth of our markets, enhance our technical capabilities or otherwise offer growth opportunities. While we are not currently a party to any pending acquisition agreements, we may acquire additional businesses, products or technologies in the future. If we make any further acquisitions, we could issue stock that would dilute existing shareholders' percentage ownership, and we could incur substantial debt or assume liabilities. We have limited experience in acquiring and integrating other businesses and technologies, and as a result, we may not fully realize the expected benefits of an acquisition. During 2009, we completed the acquisitions of Catapult Communications Corporation and Agilent's N2X Product Line. See Note 3 to the Financial Statements included in this Annual Report on Form 10-K for the year ended December 31, 2010. Acquisitions involve numerous risks, including the following:

- problems or delays in assimilating or transitioning to Ixia the acquired operations, systems, processes, controls, technologies, products or personnel;
- loss of acquired customer accounts;
- unanticipated costs associated with the acquisition;
- our failure to identify in the due diligence process significant issues with product quality or development;
- multiple and overlapping product lines as a result of our acquisitions that are offered, priced and supported differently, which could cause customer confusion and delays;
- higher than anticipated costs in continuing support and development of acquired products;
- diversion of management's attention from our core business and the challenges of managing larger and more widespread operations resulting from acquisitions;
- adverse effects on existing business relationships of Ixia or the acquired business with its suppliers, licensors, contract manufacturers, customers, distributors and industry experts;
- significant impairment, exit and/or restructuring charges if the products or technologies acquired in an acquisition do not meet our sales expectations or are unsuccessful;
- insufficient revenue to offset increased expenses associated with acquisitions;
- risks associated with entering markets in which we have no or limited prior experience; and
- potential loss of the acquired organization's or our own key employees.

Mergers and acquisitions are inherently risky and subject to many factors outside of our control, and we cannot be certain that we would be successful in overcoming problems in connection with our past or future acquisitions. Our inability to do so could significantly harm our business, revenues and results of operations.

Competition in our market could significantly harm our results of operations

The market for our products is highly competitive. We face competition primarily from wireline and wireless test equipment manufacturers such as Spirent Communications, JDS Uniphase, EXFO and Anritsu. We also compete with a number of other small companies which are focused on network performance analysis and measurement. Additionally, some of our significant customers have developed, or may develop, in-house performance analysis products for their own use or for sale to others. For example, Cisco Systems, our largest customer, has used internally developed test products for a number of years. Although Cisco Systems has in the past accounted for a significant portion of our revenues, we cannot be certain that it will continue to do so.

As we broaden our product offerings, we may move into new markets and face additional competition. Moreover, our competitors may have more experience operating in these new markets and be better established with the customers in these new markets.

Some of our competitors and potential competitors have greater brand name recognition and greater financial, technical, marketing, sales and distribution capabilities than we do. Moreover, our competitors may consolidate with each other, or with other companies, giving them even greater capabilities with which to compete against us.

Increased competition in the wireless and wired network performance analysis and measurement markets could result in increased pressure on us to reduce prices and could result in a reduction in our revenues and/or a decrease in our profit margins, each of which could significantly harm our results of operations. In addition, increased competition could prevent us from increasing our market share, or cause us to lose our existing market share, either of which would harm our revenues and profitability.

We cannot predict whether our current or future competitors will develop or market technologies and products that offer higher performance or more features, or that are more cost-effective than our current or future products. To remain competitive, we must continue to develop cost-effective products and product enhancements which offer higher performance and more functionality. Our failure to do so will harm our revenues and results of operations.

If we are unable to successfully develop or introduce new products to keep pace with the rapid technological changes that characterize our market, our results of operations will be significantly harmed

The market for our products is characterized by:

- rapid technological change such as the recent advancements of IP-based networks and wireless technologies (e.g., LTE);
- frequent new product introductions such as higher speed and more complex routers;
- evolving industry standards;
- changing customer needs such as the increase in advanced IP services agreed to between network service providers and their customers; and
- short product life cycles as a result of rapid changes in our customers' products.

Our performance will depend on our successful development, introduction and market acceptance of new and enhanced performance analysis products that address new technologies and changes in customer requirements. If we experience any delay in the development or introduction of new products or enhancements to our existing products, our operating results may suffer. For instance, undetected software or hardware errors, which frequently occur when new products are first introduced, could result in the delay or loss of market acceptance of our products and the loss of credibility with our customers. In addition, if we are not able to develop, or license or acquire from third parties, the underlying core technologies necessary to create new products and enhancements, our existing products are likely to become technologically obsolete over time and our operating results will suffer. If the rate of development of new technologies and transmission protocols by our

customers is delayed, the growth of the market for our products and therefore our sales and operating results may be harmed.

Our ability to successfully introduce new products in a timely fashion will depend on multiple factors, including our ability to:

- anticipate technological changes and industry trends;
- properly identify customer needs;
- innovate and develop and license or acquire new technologies and applications;
- hire and retain necessary technical personnel;
- successfully commercialize new technologies in a timely manner;
- timely obtain key components for the manufacture of new products;
- manufacture and deliver our products in sufficient volumes and on time;
- price our products competitively;
- provide high quality, timely technical support; and
- differentiate our offerings from our competitors' offerings.

The development of new, technologically advanced products is a complex and uncertain process requiring high levels of innovation and highly skilled engineering and development personnel, as well as the accurate anticipation of technology and market trends. We cannot be certain that we will be able to identify, develop, manufacture, market or support new or enhanced products successfully, if at all, or on a timely or cost-effective basis. Further, we cannot be certain that our new products will gain market acceptance or that we will be able to respond effectively to technological changes, emerging industry standards or product announcements by our competitors. If we fail to respond to technological change and the needs of our markets, we will lose revenues and our competitive position will suffer.

We depend on sales of a narrow range of products and, if customers do not purchase our products, our revenues and results of operations would be significantly harmed

Our business and products are concentrated in the market for systems that analyze and measure the performance of wired and wireless IP-based network equipment and systems. This market is an evolving market, and there is uncertainty regarding its size and scope. Our performance will depend on increased sales of our existing systems and the successful development, introduction and market acceptance of new and enhanced products. We cannot be certain that we will be successful in increasing these sales or in developing and introducing new products. Our failure to do so would significantly harm our revenues and results of operations.

Because we depend on a limited number of customers for a majority of our revenues, any cancellation, reduction or delay in purchases by one of these customers could significantly harm our revenues and results of operations

Historically, a small number of customers has accounted for a significant portion of our total revenues. Sales to our top five customers accounted for between 30% and 40% of total revenues for each of the three years ended December 31, 2010, 2009 and 2008. Additionally, sales to our largest customer, Cisco Systems, accounted for 13.5% of our total revenues in 2010, 15.6% of our total revenues in 2009 and 21.0% of our total revenues in 2008.We expect that significant customer concentration will continue for the foreseeable future and that our operating results will continue to depend to a significant extent upon revenues from a small number of customers. Our dependence on large orders from a limited number of customers makes our relationships with these customers critical to the success of our business. We cannot be certain that we will be able to retain our largest customers, that we will be able to increase our sales to our other existing customers or that we will be able to attract additional customers. From time to time, we have experienced delays and reductions in orders from some of our major customers. In addition, our customers have sought price reductions or other concessions from us and will likely continue to do so. We typically do not have long-term or volume purchase contracts with our customers, and our customers can stop purchasing our products at any time without penalty and are free to purchase products from our competitors. The loss of one or more of our largest customers, any reduction or delay in sales to one of these customers, our inability to successfully develop and maintain relationships with existing and new customers, or requirements that we make price reductions or other concessions could significantly harm our revenues and results of operations.

Our large customers have substantial negotiating leverage, which may require that we agree to terms and conditions that may have an adverse effect on our business

Large network equipment manufacturers and service providers have substantial purchasing power and leverage in negotiating contractual arrangements with us. These customers may require us to develop additional features, reduce our prices or grant other concessions. As we seek to sell more products to these large network equipment manufacturers and service providers, we may be required to agree to such terms and conditions. These terms may affect the amounts and timing of revenue recognition and our margins, which may adversely affect our profitability and financial condition in the affected periods.

If we do not diversify our customer base, we may not be able to grow our business or increase our profitability

To date, the majority of our total revenues have been generated from sales to network equipment manufacturers. Our growth depends, in part, on our ability to diversify our customer base by increasing sales to enterprises, government departments and agencies, network operators and service providers, and communications chip manufacturers. To effectively compete for the business of these customers, we must develop new products and enhancements to existing products and expand our sales, marketing and customer service capabilities, which will result in increases in operating costs. If we cannot offset these increases in costs with an increase in our revenues, our operating results may be adversely affected. Some of our existing and potential competitors have existing relationships with many enterprises, government departments and agencies, network operators and service providers, and communications chip manufacturers. We cannot be certain that we will be successful in increasing our sales presence in these markets. Any failure by us to increase sales in these markets would adversely affect our growth.

Our quarterly and annual operating results have historically fluctuated or may fluctuate significantly in the future as a result of new product introductions and other factors, which fluctuations could cause our stock price to decline significantly

Our quarterly and annual operating results are difficult to predict and have fluctuated and may fluctuate significantly due to a variety of factors, many of which are outside of our control. Some of the factors that could cause our quarterly and annual operating results to fluctuate include the other risks discussed in this "Risk Factors" section.

We may experience a shortfall or delay in generating or recognizing revenues for a number of reasons. Orders on hand at the beginning of a quarter and orders generated in a quarter do not always result in the shipment of products and the recognition of revenues for that quarter. Failure to ship products by the end of the quarter in which they are ordered or our inability to recognize revenue for products shipped in a quarter may adversely affect our operating results for that quarter. Our agreements with customers typically provide that the customer may delay scheduled delivery dates and cancel orders prior to shipment without penalty. Because we incur operating expenses based on anticipated revenues and a high percentage of our expenses are fixed in the short term, any delay in generating or recognizing forecasted revenues could significantly harm our results of operations.

In addition, a significant portion of our orders generated and product shipments in each quarter occurs near the end of the quarter. Since individual orders can represent a meaningful percentage of our revenues and net income in any quarter, the deferral or cancellation of or failure to ship an order in a quarter can result in a revenue and net income shortfall that causes us to fail to meet securities analysts' expectations, our business plan or financial guidance provided by us to investors for that period, and may cause fluctuations in our revenue in subsequent periods.

Our operating results may also vary as a result of the timing of our release of new products. The introduction of a new product in any quarter may cause an increase in revenues in that quarter that may not be sustainable in subsequent quarters. Conversely, a delay in introducing a new product in a quarter may result in a decrease in revenues in that quarter and lost sales.

Further, actual events, circumstances, outcomes, and amounts differing from judgments, assumptions and estimates used in determining the values of certain assets (including the amounts of related valuation allowances), liabilities and other items reflected in our consolidated financial statements could significantly harm our results of operations.

The factors described above are difficult to forecast and mitigate. As a consequence, operating results for a particular period are difficult to predict, and therefore, prior results are not necessarily indicative of results to be expected in future periods. Any of the foregoing factors, or any other factors discussed elsewhere herein, could have a material adverse effect on our business, results of operations and financial condition and could adversely affect our stock price.

We expect our gross margins to vary over time and our recent level of gross margins may not be sustainable, which may have a material adverse effect on our future profitability

Our recent level of gross margins may not be sustainable and may continue to be adversely affected by numerous factors, including:

- increased price competition;
- changes in customer, geographic or product mix (such as the mix of software versus hardware product sales);
- the pricing we are able to obtain from our component suppliers and contract manufacturers;
- increases in material or labor costs;
- new product introductions by us and by our competitors:
- changes in shipment volume;
- excess or obsolete inventory costs; and
- increased industry consolidation among our customers, which may lead to decreased demand for, and downward pricing pressure on, our products.

Each of the above factors may be exacerbated by the decrease in demand for our established products and our transition to our next-generation products. Our failure to sustain our recent level of gross margins due to these or other factors may have a material adverse effect on our results of operations.

The loss of any of our key personnel could significantly harm our results of operations and competitive position

Our success depends to a significant degree upon the continuing contributions of our key management, technical, marketing and sales employees. There can be no assurance that we will be successful in retaining our key employees or that we can attract or retain additional skilled personnel as required. Competition for highly skilled employees in our industry is intense, and the cost to recruit and train new technical personnel is significant. Moreover, companies in our industry whose employees accept positions with competitors frequently claim that those competitors have engaged in unfair hiring practices. We may be subject to such claims as we seek to retain or hire qualified personnel, some of whom may currently be working for our competitors.

Some of these claims may result in material litigation. We could incur substantial costs in defending ourselves against these claims, regardless of their merits. Such claims could also discourage potential employees who currently work for our competitors from joining us. In addition, volatility or lack of positive performance in our stock price may also adversely affect our ability to attract and retain highly skilled employees who may look to stock-based awards as a key component of their compensation. The loss of the services of any of our key employees, the inability to attract or retain qualified personnel in the future or delays in hiring required personnel could hinder the development and introduction of new and enhanced products and harm our ability to sell our products. As a result, failure to retain or attract key personnel could significantly harm our results of operations and competitive position.

Continued growth will strain our operations and require us to incur costs to maintain and upgrade our management and operational resources

We have experienced growth in our operations, including number of employees, sales, products, facility locations and customers. Unless we manage our growth effectively, we may have difficulty in operating our business. As a result, we may inaccurately forecast sales and materials requirements, fail to integrate new personnel or fail to maintain adequate internal controls or systems, which may result in fluctuations in our operating results and cause the price of our stock to decline. We may continue to expand our operations to

enhance our product development efforts and broaden our sales reach, which may place a significant strain on our management and operational resources. In order to manage our growth effectively, we must implement and improve our operational systems, procedures and controls on a timely basis. If we cannot manage growth effectively, our profitability could be significantly harmed.

If we are unable to expand our sales and distribution channels or are unable to successfully manage our expanded sales organization, our revenues and results of operations will be harmed

Historically, we have relied primarily on a direct sales organization, supported by distributors and other resellers, to sell our products. Our distribution strategy focuses primarily on developing and expanding our direct sales organization and our network of distributors and other resellers. We may not be able to successfully expand our sales and distribution channels, and the cost of any expansion may exceed the revenues that we generate as a result of the expansion. To the extent that we are successful in expanding our sales and distribution channels, we cannot be certain that we will be able to compete successfully against the significantly larger and better-funded sales and marketing operations of many of our current or potential competitors. In some cases, we have granted exclusive rights to our distributors to market our products in their specified territories. Our distributors may not market our products effectively or devote the resources necessary to provide us with effective sales, marketing and technical support. Our inability to effectively manage the expansion of our sales and support staff, or to maintain existing or establish new relationships with successful distributors, would harm our business, revenues and results of operations.

If we are unable to expand our international sales and distribution channels or manage them effectively, our results of operations would be harmed

Historically, distributors have generated a significant portion of our international sales. In the past, we have had distributors who entered bankruptcy and were therefore terminated as distributors of our products. Moreover, if we terminate a distribution relationship for performance-related or other reasons, we may be subject to wrongful termination claims which may result in material litigation. We could incur substantial costs in defending ourselves against these claims, regardless of their merits, which could adversely impact our profitability.

Losses of one or more of our international distributors or their failure to sell our products would limit our ability to sustain and grow our revenues in international markets. We intend to expand our operations in the Asia Pacific and EMEA regions by adding distributors and international sales and support personnel. Our failure in these efforts could significantly harm our revenues and results of operations, and decrease the value of our stock.

Changes in industry and market conditions could lead to charges related to discontinuances of certain of our products and asset impairments

In response to changes in industry and market conditions, we may be required to strategically realign our resources by restructuring our operations and/or our product offerings. Any decision to limit investment in or dispose of a product offering may result in the recording of special charges to earnings, such as inventory, fixed asset and technology-related write-offs and charges relating to consolidation of excess facilities, which could adversely impact our business, results of operations and financial position.

Restructuring our workforce can be disruptive

We have in the past restructured or made other adjustments to our workforce in response to the economic environment, performance issues, recent acquisitions and other internal and external considerations. During 2009 and 2010, we completed two restructurings related to our 2009 acquisitions and in 2009 we completed a restructuring as a result of the economic downturn (See Note 4 to the Consolidated Financial Statements).

Restructurings, among other things, can result in a temporary lack of focus and reduced productivity. These effects could recur in connection with future acquisitions and other restructurings and, as a result, our operating results and financial condition could be negatively affected.

Some key components in our products come from sole or limited sources of supply, which exposes us to potential supply shortages that could disrupt the manufacture and sale of our products

We and our contract manufacturers currently purchase a number of key components used to manufacture our products from sole or limited sources of supply for which alternative sources may not be available. From time to time, we have experienced shortages of key components, including chips, oscillators and optical modules. We and our contract manufacturers have no guaranteed or long-term supply arrangements for these or other components, including field programmable gate arrays, or FPGAs, which are integrated circuits that can be repeatedly reprogrammed to perform different sets of functions as required. Financial or other difficulties faced by our suppliers or significant changes in market demand for necessary components could limit the availability to us and our contract manufacturers of these components. Any interruption or delay in the supply of any of these components could significantly harm our ability to meet scheduled product deliveries to our customers and cause us to lose sales.

In addition, the purchase of these components on a sole or limited source basis subjects us to risks of price increases and potential quality assurance problems. Consolidation involving suppliers could further reduce the number of alternatives available to us and affect the availability and cost of components. An increase in the cost of components could make our products less competitive and result in lower gross margins.

There are limited substitute supplies available for many of these components, including field programmable gate arrays. All of these components are critical to the production of our products, and competition exists with other manufacturers for these key components. In the event that we can no longer obtain materials from a sole source supplier, we might not be able to qualify or identify alternative suppliers in a timely fashion, or at all. Any extended interruption in the supply of any of the key components currently obtained from a sole or limited source or delay in transitioning to a replacement supplier's product or replacement component into our systems could disrupt our operations and significantly harm our business in any given period.

Our reported financial results could suffer if there is an impairment of goodwill or acquired intangible assets

We are required (i) to test annually, and review when circumstances warrant, the value of our goodwill associated with past acquisitions and any future acquisitions, and (ii) to test the value of our acquisition-related intangible assets when circumstances warrant to determine if an impairment has occurred. If such assets are deemed impaired, an impairment loss equal to the amount by which the applicable carrying amount exceeds (i) the implied fair value of the goodwill or (ii) the estimated fair value of acquired intangible assets would be recognized. This would result in an incremental charge for that quarter which would adversely impact our earnings for the period in which the impairment was determined to have occurred. For example, such impairment could occur if the market value of our common stock falls below the carrying value of our net assets for a sustained period. The recent economic downturn contributed to extreme price and volume fluctuations in global stock markets that reduced the market price of many technology company stocks, including ours. Such declines in our stock price or the failure of our stock price to recover from these declines, as well as any marked decline in our level of revenues or margins, increase the risk that goodwill may become impaired in future periods. We cannot accurately predict the amount and timing of any impairment of our goodwill or acquired intangible assets.

International activity may increase our cost of doing business or disrupt our business

We plan to continue to maintain or expand our international operations and sales activities. Operating internationally involves inherent risks that we may not be able to control, including:

- difficulties in recruiting, hiring, training and retaining international personnel;
- increased complexity and costs of managing international operations;
- growing demand for and cost of technical personnel;
- changing governmental laws and regulations, including those related to income taxes;
- increased exposure to foreign currency exchange rate fluctuations;
- political and economic instability, including military conflict and social unrest;
- commercial laws and business practices that favor local competition;
- differing labor and employment laws;
- supporting multiple languages;
- reduced or limited protections of intellectual property rights;
- more complicated logistical and distribution arrangements; and
- longer accounts receivable cycles and difficulties in collecting receivables.

The above risks associated with our international operations and sales activities can restrict or adversely affect our ability to sell in international markets, disrupt our business and subject us to additional costs of doing business.

Adverse resolution of legal proceedings may harm our results of operations or financial condition

We are a party to lawsuits and other legal proceedings in the normal course of our business. Litigation and other legal proceedings can be expensive, lengthy and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict. We cannot provide assurance that we will not be a party to additional legal proceedings in the future or that we will be able to favorably resolve our current lawsuits. To the extent legal proceedings continue for long time periods or are adversely resolved, our business, results of operations and financial position could be significantly harmed. For additional information regarding certain of the matters in which we are involved, see Item 3, "Legal Proceedings," contained in Part I of this report.

Claims that we infringe third-party intellectual property rights could result in significant expenses or restrictions on our ability to sell our products

From time to time, other parties may assert patent, copyright, trademark and other intellectual property rights to technologies that are important to our business. For example, in November 2008, IneoQuest filed a complaint against us alleging that we make and sell products that infringe a patent owned by IneoQuest and that we misappropriated certain of IneoQuest's trade secrets, in addition to numerous other related claims. We cannot provide assurance that others will not claim that we are infringing their intellectual property rights or that we do not in fact infringe those intellectual property rights. We have not conducted searches to determine whether the technology we have in our products infringes or misappropriates intellectual property rights held by third parties.

Any claims asserting that our products infringe or may infringe proprietary rights of third parties, if determined adversely to us, could significantly harm our results of operations. Any such claims, with or without merit, could:

- be time-consuming;
- result in costly litigation;
- divert the efforts of our technical and management personnel;
- require us to modify the products at issue or to develop alternative technology, thereby causing product shipment delays and the loss or deferral of revenues;
- require us to cease selling the products at issue;
- require us to pay substantial damage awards;
- expose us to indemnity claims from our customers;
- damage our reputation; or
- require us to enter into royalty or licensing agreements which, if required, may not be available on terms acceptable to us, if at all.

In the event any such claim against us was successful and we could not obtain a license to the relevant technology on acceptable terms or license a substitute technology or redesign our products to avoid infringement, our revenues, results of operations and competitive position could be harmed.

If we fail to accurately forecast our manufacturing requirements, we could incur additional costs and experience manufacturing delays

We provide our contract manufacturers with rolling forecasts based on anticipated product orders to determine our manufacturing requirements. Some of the components used in our products have significant lead times or lead times which may unexpectedly increase depending on factors such as the specific supplier, contract terms and the demand for components at a given time. Because of these long lead times, we are often required to forecast and order products before we know what our specific manufacturing requirements will be. If we overestimate our product orders, our contract manufacturers may have excess inventory of completed products

which we would be obligated to purchase. This will lead to increased costs and the risk of obsolescence. If we underestimate our product orders, our contract manufacturers may have inadequate inventory, which could result in delays in shipments, the loss or deferral of revenues and/or higher costs of sales. Costs are also added to our products when we are required to expedite delivery of our products to customers or of components with long lead times to our contract manufacturers. We cannot be certain that we will be able to accurately forecast our product orders and may in the future carry excess or obsolete inventory, be unable to fulfill customer demand, or both, thereby harming our revenues, results of operations and customer relationships.

Failure by our contract manufacturers to provide us with adequate supplies of high quality products could harm our revenues, results of operations, competitive position and reputation

We currently rely on a limited number of contract manufacturers to manufacture and assemble our products. We may experience delays in receiving product shipments from contract manufacturers or other problems, such as inferior quality and insufficient quantity of product. We cannot be certain that we will be able to effectively manage our contract manufacturers or that these manufacturers will meet our future requirements for timely delivery of products of sufficient quality and quantity. We intend to introduce new products and product enhancements, which will require that we rapidly achieve adequate production volumes by effectively coordinating with our suppliers and contract manufacturers. The inability of our contract manufacturers to provide us with adequate supplies of high-quality products or the loss of any of our contract manufacturers would cause a delay in our ability to fulfill customer orders while we obtain a replacement manufacturer and would harm our revenues, results of operations, competitive position and reputation.

To the extent that our customers consolidate, they may reduce purchases of our products and demand more favorable terms and conditions from us, which would harm our revenues and profitability

Consolidation of our customers could reduce the number of customers to whom our products could be sold. These merged customers could obtain products from a source other than us or demand more favorable terms and conditions from us, which would harm our revenues and profitability. In addition, our significant customers may merge with or acquire our competitors and discontinue their relationships with us.

Our products may contain defects which may cause us to incur significant costs, divert our attention from product development efforts and result in a loss of customers

Our existing products and any new or enhanced products we introduce may contain undetected software or hardware defects when they are first introduced or as new versions are released. These problems may cause us to incur significant damages or warranty and repair costs, divert the attention of our engineering personnel from our product development efforts and cause significant customer relation problems or loss of customers and reputation, all of which would harm our results of operations. A successful claim against us for an amount exceeding the limit on our product liability insurance policy would force us to use our own resources, to the extent available, to pay the claim, which could result in an increase in our expenses and a reduction of our working capital available for other uses, thereby harming our profitability and capital resources.

Our failure to protect our intellectual property may significantly harm our results of operations and reputation

Our success and ability to compete is dependent in part on our ability to protect and maintain our proprietary rights to our intellectual property. We currently rely on a combination of patent, trade secret, trademark and copyright laws to establish and protect our intellectual property. To date, we have relied primarily on trade secret laws to protect our proprietary processes and know-how. We have patent applications and existing patents in the United States and other jurisdictions. We cannot be certain that any of these

applications will be approved or that any such patents, if issued, or our existing patents, will be upheld. We also cannot be certain that our existing patents and any such additional patents, if issued, will be effective in protecting our proprietary technology.

We generally enter into assignment of rights and confidentiality agreements with our officers, employees and consultants. We also generally limit access to and distribution of our source code and further limit the disclosure and use of our other proprietary information. However, these measures provide only limited protection of our intellectual property rights. In addition, we may not have signed agreements containing adequate protective provisions in every case, and the contractual provisions that are in place may not provide us with adequate protection in all circumstances. Any infringement of our proprietary rights could result in significant litigation costs, and any failure to adequately protect our proprietary rights could result in our competitors' offering similar products, potentially resulting in loss of one or more competitive advantages, loss of market share and decreased revenues.

Despite our efforts to protect our proprietary rights, existing trade secret, copyright, patent and trademark laws afford us only limited protection. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as do the laws of the United States. Accordingly, we may not be able to prevent misappropriation of our technologies or to deter others from developing similar technologies. Others may attempt to copy or reverse engineer aspects of our products or to obtain and use information that we regard as proprietary. Further, monitoring the unauthorized use of our products and our proprietary rights is difficult. Litigation may be necessary to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Litigation of this type could result in substantial costs and diversion of resources and could significantly harm our results of operations and reputation.

The inability to successfully defend claims from taxing authorities or the adoption of new tax legislation could adversely affect our operating results and financial position

We conduct business in many countries, which requires us to interpret the income tax laws and rulings in each of those jurisdictions. Due to the complexity of tax laws in those jurisdictions as well as the subjectivity of factual interpretations, our estimates of income tax liabilities may differ from actual payments or assessments. Claims from tax authorities related to these differences could have an adverse impact on our results of operations, financial condition and cash flows. In addition, legislative bodies in the various countries in which we do business may from time to time adopt new tax legislation that could have a material adverse effect on our results of operations, financial condition and cash flows.

Servicing our debt will require a significant amount of cash, and we may not have sufficient cash flow from our business to service our existing debt or debt we may incur

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our existing or new indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our indebtedness and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our existing or future debt obligations.

When we issue shares of our common stock upon conversion of the Convertible Senior Notes, such issuance will dilute the ownership interest of our existing shareholders, including holders who had previously converted their Convertible Senior Notes

When we issue shares of our common stock upon conversion of our Convertible Senior Notes (the "Notes"), including the effect on the conversion rate should a make whole adjustment event occur, such issuance will dilute the ownership interests of our existing shareholders. Any sales in the public market of our common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the Notes may encourage short selling by market participants because the conversion of the Notes could depress the price of our common stock.

The fundamental change repurchase feature of the Convertible Senior Notes may delay or prevent an otherwise beneficial attempt to take over our company

The terms of the Notes require us to offer to repurchase the Notes for cash in the event of a fundamental change (such as a change in control event or if our common stock ceases to be listed or quoted on any of the New York Stock Exchange, the Nasdaq Global Select Market or the Nasdaq Global Market or any of their respective successors). A non-stock takeover of our company may trigger the requirement that we repurchase the Notes. This feature may have the effect of delaying or preventing a takeover of our company that would otherwise be beneficial to investors.

Our investment portfolio may become impaired by deterioration of the financial markets

We follow an established investment policy and set of objectives designed to preserve principal and liquidity, to generate a market return given the policy's guidelines and to avoid certain investment concentrations. The policy also sets forth credit quality standards and limits our exposure to any one non-government issuer. Our cash equivalent and short- and long-term investment portfolio as of December 31, 2010 consisted of money market funds, U.S. government and government agency debt securities, corporate debt securities and auction rate securities.

Although the remainder of our investment portfolio's carrying value approximated fair value as of December 31, 2010, we cannot predict future market conditions or market liquidity, or the future value of our investments. As a result, we can provide no assurance that our investment portfolio will not be impaired in the future and that any such impairment will not materially and adversely impact our financial condition, results of operations and cash flows.

Changes in laws, regulations and financial accounting standards may affect our reported results of operations

Changes in accounting regulations and standards, such as the new revenue recognition guidance implemented by us in the first quarter of 2011, increased use of fair value measures and the potential requirement that U.S. registrants prepare financial statements in accordance with International Financial Reporting Standards, could have a significant effect on our results of operations. New pronouncements and varying interpretations of pronouncements have occurred in the past and are likely to occur in the future as a result of recent Congressional and regulatory actions. New laws, regulations and accounting standards, as well as the questioning of, or changes to, currently accepted accounting practices in the technology industry may adversely affect our financial results, may also require significant resources to implement and these resources may not be available or may have a premium attached, may divert existing resources from operational initiatives to financial reporting compliance, one or all of which could have an adverse effect on our stock price.

Our business is subject to changing regulation that has resulted in increased costs and may continue to result in additional costs in the future

We are subject to laws, rules and regulations of federal and state regulatory authorities, including The Nasdaq Stock Market LLC ("Nasdaq") and financial market entities charged with the protection of investors and the oversight of companies whose securities are publicly traded. During the past few years, these entities, including the Public Company Accounting Oversight Board, the SEC and Nasdaq, have issued new requirements and regulations and continue to develop additional regulations and requirements partly in response to laws enacted by Congress, most notably the Sarbanes-Oxley Act of 2002 ("SOX") and, more recently, the Dodd-Frank Wall Street Reform and Consumer Protection Act. Our efforts to comply with these requirements and regulations have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of substantial management time and attention from revenue-generating activities to compliance activities.

In particular, our efforts to comply with Section 404 of SOX and the related regulations regarding our required assessment of our internal control over financial reporting and our independent registered public accounting firm's audit of the effectiveness of our internal control over financial reporting, have required, and continue to require, the commitment of significant financial and managerial resources. Moreover, because these laws, regulations and standards are subject to varying interpretations, their application in practice may evolve over time as new guidance becomes available. This evolution may result in continuing uncertainty regarding compliance matters and additional costs necessitated by ongoing revisions to our disclosure and governance practices.

We are also subject to laws, rules and regulations of authorities in other countries where we do business, and these laws, rules and regulations are also subject to change and uncertainty regarding their application and interpretation. The growth of our operations, both domestically and internationally, has resulted in and is likely to continue to result in increased expense, resources and time spent on matters relating to compliance, including monitoring and training activities.

If we fail to maintain our relationships with industry experts, our products may lose industry and market recognition and sales could decline

Our relationships with industry experts in the field of performance analysis and measurement of networks and network equipment are critical for maintaining our industry credibility and for developing new products and testing methodologies in a timely fashion. These experts have established standard testing methodologies that evaluate new network equipment products and technologies. We provide these experts and their testing labs with our products and engineering assistance to perform tests on these new network equipment products and technologies. These industry experts refer to our products in their publications which has given our products industry recognition. In addition, these labs offer us the opportunity to test our products on the newest network equipment and technologies, thereby assisting us in developing new products that are designed to meet evolving technological needs. We cannot be certain that we will be able to maintain our relationships with industry experts or that our competitors will not maintain similar or superior relationships with industry experts. If we are unable to maintain our relationships with industry experts or if competitors have superior relationships with them, our products may lose industry and market recognition which could harm our reputation and competitive position and cause our sales to decline.

Our business and operations are subject to the risks of earthquakes, floods, hurricanes and other natural disasters

Our operations could be subject to natural disasters and other business disruptions, which could adversely affect our business and financial results. A number of our facilities and those of our suppliers, our contract manufacturers, and our customers are located in areas that have been affected by natural disasters such as ice and snow storms, earthquakes, floods or hurricanes in the past. For example, currently, our corporate headquarters and many of our customers are located in California. California historically has been vulnerable to natural disasters and other risks, such as earthquakes, fires and floods, which at times have disrupted the local economy and posed physical risks to our property. To mitigate some of this risk, certain of our U.S. and international locations are insured up to certain levels against losses and interruptions caused by earthquakes, floods and/or other natural disasters. However, a significant natural disaster could have a material adverse impact on our business, operating results and financial condition.

Man-made problems such as computer viruses or terrorism may disrupt our operations and harm our operating results

Despite our implementation of network security measures, our network may be vulnerable to computer viruses, break-ins and similar disruptions from unauthorized tampering with our computer systems. Any such event could have a material adverse effect on our business, operating results and financial condition. In addition, the effects of war or acts of terrorism could have a material adverse effect on our business, operating results and financial condition. The continued threat of terrorism and heightened security and military action in response to this threat, or any future acts of terrorism, may cause further disruption to the economy and create further uncertainties in the economy. Energy shortages, such as gas or electricity shortages, could have similar negative impacts. To the extent that such disruptions or uncertainties result in delays or cancellations of customer orders, or the manufacture or shipment of our products, our business, operating results and financial condition could be materially and adversely affected.

Provisions of our articles of incorporation and bylaws may make it difficult for a third party to acquire us, despite the possible benefits to our shareholders

Our Board of Directors has the authority to issue up to 1,000,000 shares of preferred stock and to determine the price, rights, preferences, privileges and restrictions, including voting rights, of those shares without any further vote or action by the shareholders. The rights of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any preferred stock that we may issue. The issuance of preferred stock could have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting stock. Furthermore, some provisions of our articles of incorporation and bylaws could delay or make more difficult a merger, tender offer or proxy contest involving us. Our articles of incorporation include provisions that limit the persons who may call special meetings of shareholders and establish advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted on by shareholders at shareholder meetings. These and other provisions of our articles of incorporation and bylaws may have the effect of delaying, deferring or preventing a change in our control despite possible benefits to our shareholders, may discourage bids at a premium over the market price of our common stock and may harm the market price of our common stock and the voting and other rights of our shareholders.

Our stock price may continue to be volatile

The trading price of our common stock has fluctuated substantially in recent years. The trading price may be subject to future fluctuations in response to, among other events and factors: (i) global economic environment; (ii) variations in our quarterly operating results; (iii) the gain or loss of significant orders; (iv) changes in earnings estimates by analysts who cover our stock; (v) changes in our revenue and/or earnings guidance as periodically announced in our earnings calls or press releases; (vi) announcements of technological innovations and new products by us or our competitors; (vii) changes in domestic and international economic, political and business conditions; (viii) consolidation and general conditions in our industry; and (ix) changes in our executive management team. In addition, the stock market in general has experienced extreme price and volume fluctuations that have affected the market prices for many companies in our industry that have been unrelated to the operating performance of these companies. These market fluctuations have affected and may continue to affect the market price of our common stock.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

As of December 31, 2010, all of our properties are leased and we do not own any real property. Our corporate headquarters are located in Calabasas, California, where we currently lease approximately 84,100 square feet of space which houses our research and development, sales and marketing, finance and administration and manufacturing operations. This lease terminates on May 31, 2013, and we have an option to extend the term of the lease for an additional five-year period. We also lease office space for sales, support, marketing, operations and administration in the United Kingdom, Ireland, Germany, France, Finland, Sweden, Canada, South Korea, Japan, China, Singapore, India and Malaysia, and in various states throughout the United States. Additionally, we have leased research and development facilities in Romania, India, Australia, the United Kingdom and Canada. We believe that our current facilities will be adequate to meet our needs for the next 12 months, or that we will be able to obtain additional space when and as needed on acceptable terms.

Item 3. Legal Proceedings

We are involved from time to time in claims, proceedings and litigation, including the following:

IneoQuest Technologies, Inc. vs. Ixia. In November 2008, IneoQuest filed a complaint against Ixia in the United States District Court for the Central District of California. The complaint alleges that Ixia makes and sells products that infringe a patent owned by IneoQuest, and that Ixia misappropriated IneoQuest's trade secrets, in addition to numerous other related claims. The patent at issue allegedly relates to a system and method for analyzing the performance of multiple transportation streams of streaming media in packet-based networks. IneoQuest seeks a permanent injunction enjoining Ixia from infringing the patent at issue and from using IneoQuest's trade secrets and confidential information, unspecified general and exemplary damages, and attorneys' fees and costs.

In January 2009, Ixia filed an answer and counterclaim to IneoQuest's complaint denying IneoQuest's claims and raising several affirmative defenses. Ixia has also asserted a counterclaim against IneoQuest seeking

declaratory relief that Ixia has not infringed the IneoQuest patent and that such patent is invalid. In April 2009, Ixia filed an amended answer and counterclaim to IneoQuest's complaint in which Ixia asserted that IneoQuest has infringed four patents owned by Ixia. Although the Company cannot predict the outcome of this matter, Ixia believes that it has strong defenses to IneoQuest's claims and is defending the action vigorously. The parties commenced discovery in this matter in the 2009 second quarter. The parties filed a Joint Claim Construction brief on November 30, 2009. On July 27, 2010, the Court issued a claim construction ruling relating to certain terms within the claims of IneoQuest's patent and ordered the parties to further brief claim construction issues related to Ixia's four asserted patents. Fact discovery is set to conclude 90 days after the issuance of the claim construction ruling related to Ixia's four asserted patents. Expert discovery is set to conclude 150 days after the issuance of the claim construction ruling. As yet, a trial date has not been set.

Tucana Telecom NV vs. Catapult. On May 22, 2007, the Antwerp Court of Appeal heard an appeal by Tucana Telecom NV, a Belgian company, of the previous dismissal by the Antwerp Commercial Court of an action by Tucana against Catapult. Tucana had sought damages of 10.4 million Euros (approximately $13.8 million as of December 31, 2010) for the alleged improper termination in 2002 by Catapult of Tucana's distribution agreement with Catapult. On June 19, 2007, the Antwerp Court of Appeal confirmed the Commercial Court's dismissal of Tucana's action and assessed the costs of the appeal against Tucana. On July 22, 2008, Catapult was notified by its Belgian counsel that Tucana had appealed the judgment of the Antwerp Court of Appeal to the Belgian Supreme Court. In a decision dated January 14, 2010, the Belgium Supreme Court set aside the decision of the Antwerp Court of Appeal and remanded the matter for trial to the Ghent Court of Appeal. Catapult's Belgian counsel was informed by Tucana's counsel on January 19, 2011 that Tucana has sent out for service a writ scheduling an introductory hearing before the Ghent Court of Appeals. Catapult's counsel was informed that Tucana now asserts that it is entitled to additional compensation of approximately 2.7 million Euros (approximately $3.6 million as of December 31, 2010). Once Catapult is served and learns the proposed date for the introductory hearing, a briefing schedule will be established for the exchange of trial briefs.

In June 2010, Catapult filed a complaint against Tucana in the Superior Court of the State of California, County of Los Angeles, seeking declaratory and injunctive relief and damages for breach of the distribution agreement. Catapult filed its First Amended Complaint on September 8, 2010 to address a statute of limitations issue raised by Tucana's initial response. Catapult seeks a declaration that the distribution agreement is a valid and enforceable agreement, and that the distribution agreement's mandatory forum selection and choice of law provisions are enforceable and require that the litigation of any dispute involving the agreement be brought in a court located in the County of Los Angeles. Catapult also seeks an order permanently enjoining Tucana from prosecuting any claims arising out of Tucana's distribution relationship with Catapult in any judicial forum outside the County of Los Angeles. Catapult also seeks compensatory damages of not less than $200,000 for damages suffered by Catapult arising out of Tucana's breach of the distribution agreement. Tucana filed a demurrer to the First Amended Complaint on October 12, 2010 seeking dismissal of the action based on the statute of limitations and the doctrine of laches. Catapult filed its opposition to the demurrer on November 23, 2010. The hearing on the demurrer has been scheduled by the Court for April 18, 2011. While awaiting the hearing on the demurrer, Catapult has begun discovery in the California proceeding by requesting Tucana to produce documents relevant to Tucana's underlying claims. Tucana has not yet responded to that request.

Catapult believes that it properly terminated any contract it had with Tucana and that Tucana is not entitled to any damages in this matter. Catapult has defended the action vigorously to date and will continue to do so. Catapult may be able to seek indemnification from Tekelec for any damages assessed against Catapult in this matter under the terms of the Asset Purchase Agreement that Catapult entered into with Tekelec, although there is no assurance that such indemnification would be available. On March 30, 2010, Tekelec's legal counsel in Belgium informed Catapult's Belgian counsel that its client is considering intervening voluntarily in the Ghent

appeal proceedings but that no final decision has been taken in this respect. It is not possible to determine the amount of any loss that might be incurred in this matter.

We are not aware of any other pending legal proceedings than the matters mentioned above that, individually or in the aggregate, would have a material adverse effect on our business, results of operations or financial position. We may in the future be party to litigation arising in the ordinary course of business, including claims that we allegedly infringe upon third party trademarks or other intellectual property rights. Such claims, even if without merit, could result in the expenditure of significant financial and managerial resources.

Item 4. Reserved

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

(a) Market Price, Dividends and Related Matters

Ixia's Common Stock is traded on the Nasdaq Global Select Market under the symbol "XXIA." The following table sets forth the high and low closing sales prices of our Common Stock as reported on the Nasdaq Global Select Market for the following time periods.

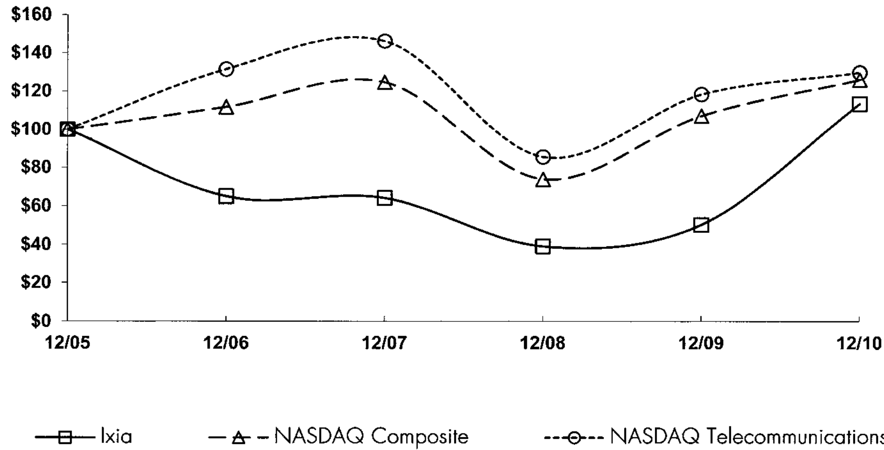
	High	Low
2010		
Fourth quarter	$ 18.21	$ 12.48
Third quarter	12.75	8.47
Second quarter	10.81	8.53
First quarter	9.59	7.00
2009		
Fourth quarter	$ 8.22	$ 6.33
Third quarter	7.70	6.08
Second quarter	7.03	4.98
First quarter	6.00	4.36

On February 18, 2011, the closing sales price reported for our Common Stock was $18.83 per share, and as of that date there were approximately 23 shareholders of record.

We have never declared or paid cash dividends on our Common Stock and do not anticipate paying any dividends in the foreseeable future.

The following graph compares the cumulative total return on the Company's Common Stock with the cumulative total return of the Nasdaq Composite Index and the Nasdaq Telecommunications Index for the five-year period commencing January 1, 2006. Ixia is one of the companies that makes up the Nasdaq Telecommunications Index. The stock price performance shown on the graph below is not necessarily indicative of future price performance.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among Ixia, the NASDAQ Composite Index
and the NASDAQ Telecommunications Index



*$100 invested on 12/31/05 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09	12/31/10
Ixia	$ 100	$ 64.86	$ 64.05	$ 39.05	$ 50.34	$ 113.38
Nasdaq Composite Index	100	111.74	124.67	73.77	107.12	125.93
Nasdaq Telecommunications Index	100	131.50	146.22	85.43	118.25	129.78

* Assumes (i) $100 invested on December 31, 2005 in Ixia Common Stock, the Nasdaq Composite Index and the Nasdaq Telecommunications Index and (ii) immediate reinvestment of all dividends.

(b) Use of Proceeds

None.

(c) Issuer Repurchases of Equity Securities

None.

Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the notes to those consolidated financial statements. The consolidated statement of operations data set forth below for the years ended December 31, 2010, 2009 and 2008 and the consolidated balance sheet data as of December 31, 2010 and 2009 are derived from, and are qualified in their entirety by reference to, the Company's audited consolidated financial statements included elsewhere in this Form 10-K.

The consolidated statements of operations data set forth below for the years ended December 31, 2007 and 2006 and the consolidated balance sheet data as of December 31, 2008, 2007 and 2006 are derived from the audited consolidated financial statements not included herein, but which were previously filed with the SEC.

	2010	2009	2008	2007	2006
Consolidated Statement of Operations Data (in thousands, except per share data):					
Revenues:					
Products	$ 227,880	$ 142,871	$ 146,802	$ 148,226	$ 155,388
Services	48,935	35,123	29,065	25,895	24,744
Total revenues	276,815	177,994	175,867	174,121	180,132
Costs and operating expenses:[1]					
Cost of revenues - products	54,378	36,722	32,411	32,724	29,437
Cost of revenues - services	6,327	3,859	4,475	3,870	2,681
Research and development	72,488	53,977	49,167	47,407	43,450
Sales and marketing	79,986	60,374	59,374	57,420	59,020
General and administrative	35,142	28,061	25,502	24,927	23,800
Amortization of intangible assets	17,545	11,391	5,664	7,108	6,450
Acquisition and other related[5]	2,991	6,179	1,479	—	—
Restructuring	3,587	4,637	—	—	—
Impairment of purchased technology and intangible assets[4]	—	—	—	3,263	—
Total costs and operating expenses	272,444	205,200	178,072	176,719	164,838
Income (loss) from operations	4,371	(27,206)	(2,205)	(2,598)	15,294
Interest income and other, net[6]	10,970	2,160	6,574	11,723	9,409
Interest expense	(480)	—	—	—	—
Other-than-temporary impairment on investments[2]	—	(2,761)	(20,243)	—	—
Income (loss) before income taxes	14,861	(27,807)	(15,874)	9,125	24,703
Income tax expense[3]	3,653	16,396	21	2,119	11,222
Net income (loss)	$ 11,208	$ (44,203)	$ (15,895)	$ 7,006	$ 13,481
Earnings (loss) per share:					
Basic	$ 0.17	$ (0.70)	$ (0.24)	$ 0.10	$ 0.20
Diluted	$ 0.17	$ (0.70)	$ (0.24)	$ 0.10	$ 0.20
Weighted average number of common and common equivalent shares outstanding:					
Basic	65,157	62,710	65,087	67,936	67,005
Diluted	67,769	62,710	65,087	69,386	68,792

[1]Stock-based compensation included in:					
Cost of revenues - products	$ 524	$ 478	$ 513	$ 519	$ 590
Cost of revenues - services	198	182	195	197	224
Research and development	5,195	4,491	4,166	5,243	6,481
Sales and marketing	3,592	2,989	3,411	4,416	7,838
General and administrative	3,406	2,395	2,360	2,659	2,890

[2]Our 2009 and 2008 results include a pre-tax other-than-temporary impairment charge of $2.8 million and $15.8 million, respectively, to earnings related to our investments in auction rate securities. Our 2008 results also include a pre-tax other-than-temporary impairment charge of $4.4 million to earnings related to our investments in bonds issued by Lehman Brothers Holdings, Inc.

[3]In 2009, our income tax expense includes a $28.1 million charge related primarily to the establishment of a valuation allowance against our remaining net U.S. deferred tax assets. In 2008, our income tax expense includes a $7.9 million charge related primarily to the establishment of a valuation allowance against our deferred tax assets associated with the unrealized impairment (capital) losses as discussed above.

[4]Our 2007 results include a pre-tax impairment charge of $3.3 million, which consists of the impairment of purchased technology of $1.5 million and the impairment of certain intangible assets of $1.8 million related to the acquisition of Communication Machinery Corporation in July 2005 and to the acquisition of the mobile video test product line from Dilithium Networks in January 2006.

[5]In 2009, we adopted new accounting guidance for business combinations. As a result, transactions costs related to our acquisitions of Catapult and N2X were expensed as incurred rather than treated as part of the purchase price.

[6]In 2010, we recorded $8.9 million and $1.0 million, respectively, relating to (i) settlement proceeds received for claims asserted by us against our former investment manager for damages and losses relating to our previous investments in auction rate securities with an aggregate par value of $19.0 million, and (ii) proceeds received for the sale of certain of these auction rate securities that were previously written-off.

	2010	2009	2008	2007	2006
Consolidated Balance Sheet Data (in thousands):					
Cash and cash equivalents	$ 76,082	$ 15,061	$ 192,791	$ 188,892	$ 64,644
Short-term investments in marketable securities	151,696	10,337	9,850	4,999	152,703
Working capital	254,373	46,937	217,882	206,059	235,168
Long-term investments in marketable securities	111,440	53,582	3,657	54,609	4,354
Total assets	589,883	309,088	328,426	369,440	349,059
Convertible senior notes	200,000	—	—	—	—
Total liabilities	298,403	72,423	55,230	52,940	48,270
Total shareholders' equity	291,480	236,665	273,196	316,500	300,789

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of many factors. The consolidated results of operations for the years ended December 31, 2010, 2009 and 2008 are not necessarily indicative of the results that may be expected for any future period. The following discussion should be read in conjunction with the consolidated financial statements and the notes thereto included in Part IV, Item 15 of this Form 10-K and in conjunction with the "Risk Factors" included in Part I, Item 1A of this Form 10-K.

Business Overview

We are a leading provider of converged test systems and services for wireless and wired infrastructures and services. Our hardware and software products allow our customers to test and measure the performance, functionality, service quality and conformance of wireless and wired Internet Protocol (IP) equipment and networks, and the applications that run over them. Our solutions generate, capture, characterize and analyze high volumes of realistic network and application traffic, identifying problems, assessing performance, ensuring functionality and interoperability, and verifying conformance to industry specifications. We offer hardware platforms with interchangeable media interfaces, utilizing a common set of applications, Application Programming Interfaces (APIs) and automation tools that allow our customers to create integrated, easy-to-use automated test environments. The networks that our systems analyze primarily include Ethernet networks operating at speeds of up to 100 Gigabits per second and wireless networks that carry data traffic over optical fiber, electrical cable and airwaves. We also offer hardware platforms and equipment that test wireless equipment, especially those associated with 3G (third generation), 4G (fourth generation) and Long-Term Evolution (LTE) networks. Customers also use our suite of software applications to test and verify web, Internet, security and business applications.

Issuance of Convertible Senior Notes. On December 7, 2010, we completed our offering of $200.0 million in aggregate principal amount of 3.0% Convertible Senior Notes (the "Notes") due December 15, 2015. The net proceeds from the offering after deducting debt issuance costs were $194.0 million, which we intend to use for general corporate purposes, potential acquisitions and strategic transactions. See Note 2 to the Consolidated Financial Statements included in this Form 10-K.

Acquisition of Agilent Technologies' N2X Data Network Testing Product Line. On October 30, 2009, we completed our acquisition from Agilent Technologies, Inc. ("Agilent") of its N2X Data Network Testing Product Line ("N2X") for $42.8 million in cash and the assumption of certain liabilities of N2X. In return for the consideration paid, we acquired certain assets and liabilities of N2X, including inventory, accounts receivables, fixed assets, accounts payable, customer relationships, certain intellectual property rights, and other assets. The N2X products provide network equipment manufacturers and service providers with solutions to validate the performance and scalability characteristics of next-generation network equipment for voice, video and data (multiplay) services. The acquisition was funded from our existing cash and investments. The results of operations of N2X have been included in the consolidated statements of operations and cash flows since the date of the acquisition. See Note 3 to the Consolidated Financial Statements included in this Form 10-K.

Acquisition of Catapult Communications Corporation. On June 23, 2009, we completed our acquisition of all of the outstanding shares of common stock of Catapult Communications Corporation ("Catapult"). Catapult provides advanced wireless test systems to network equipment manufacturers and service providers worldwide. Catapult's 3G and 4G wireless networking test solutions complement our IP performance test systems and service verification platforms. With this acquisition, we will be able to broaden our product portfolio and provide a single source solution for testing converged multiplay IP services over wireless and wireline networks to new and

existing customers. The purchase price for Catapult totaled $106.6 million, or $65.4 million net of Catapult's existing cash and investment balances at the time of the acquisition. The acquisition was funded from our existing cash and cash equivalents. The results of operations of Catapult have been included in the consolidated statements of operations and cash flows since the date of the acquisition. See Note 3 to the Consolidated Financial Statements included in this Form 10-K.

Revenues. Our revenues are principally derived from the sale and support of our test systems. Product revenues primarily consist of sales of our hardware and software products. Our service revenues primarily consist of the provision of post contract customer support and maintenance ("PCS") related to the initial period provided with the product purchase (generally for 90-day or 12-month periods) and separately purchased extended PCS contracts, and to our implied PCS obligations. Service revenues also include separately purchased extended hardware warranty support for certain of our products, training and other professional services. PCS on our software products includes unspecified when and if available software upgrades and customer technical support services. Our hardware products primarily consist of chassis and interface cards, and during the three years ended December 31, 2010, our Ethernet interface cards have represented the majority of our product revenues. In general, our Ethernet interface cards are used to test equipment and advanced IP services in the core and at the edge of the Internet at network speeds of up to 100 Gigabits per second. During 2010, we have seen increased sales for our testing solutions across our Gigabit Ethernet, 10 Gigabit Ethernet and 40/100 Gigabit Ethernet interface cards, with our 10 Gigabit Ethernet interface cards continuing to be our strongest seller, as our customers upgraded and added capacity to their test environments. Over the next 12 months, we expect that the sale of our Ethernet interface cards will continue to represent the majority of our revenues with 10 Gigabit Ethernet interface cards continuing to be our top selling product category. During 2010, our business stabilized across nearly all of our product categories and our revenues grew significantly over the revenues generated in 2009. While we were encouraged by our 2010 performance, we remain cautiously optimistic about the extent and length of the economic recovery and about some of our customers' willingness to continue spending at the levels we experienced during 2010.

Sales to our largest customer accounted for $37.5 million, or 13.5%, of our total revenues in 2010, $27.8 million, or 15.6%, of our total revenues in 2009 and $36.9 million, or 21.0%, of our total revenues in 2008. To date, we have generated the majority of our revenues from network equipment manufacturers. While we expect that we will continue to have some customer concentration for the foreseeable future, we continue to sell our products to a wider variety and increasing number of customers. To the extent that we develop a broader and more diverse customer base, our reliance on any one customer or customer type should diminish. From a geographic perspective, our revenues from sales to customer locations outside of the United States continues to grow, especially in Europe and the Asia Pacific region. We generated revenues from product shipments and services to international locations of $136.0 million, or 49.1% of our total revenues, in 2010, $76.3 million, or 42.9% of our total revenues, in 2009, and $63.0 million, or 35.8% of our total revenues, in 2008. During 2010, our total revenues generated from international locations increased both in dollars and as a percentage of revenues when compared to the same periods in 2009 and 2008, respectively, due in part to additional international sales arising from our acquisitions of Catapult in June 2009 and N2X in October 2009. We intend to continue increasing our sales efforts internationally with specific focus on Europe and the Asia Pacific region. Looking forward, we expect our international revenues to be approximately 50% of our total revenues on an annualized basis.

In some instances our software products may be installed and operated independently from our hardware products. At other times, our software products are installed on and work with our hardware products to enhance the functionality of the overall test system. As our software is generally more than incidental to the sale of our test systems, we recognize revenue by applying software revenue recognition guidance.

Our test systems are generally fully functional at the time of shipment and do not require us to perform any significant production, modification, customization or installation after shipment. As such, revenue from hardware and software product sales to customers, including distributors, is recognized upon shipment provided that (i) evidence of an arrangement exists, which is typically in the form of a customer purchase order; (ii) delivery has occurred (i.e., risks and rewards of ownership have passed to the customer); (iii) the sales price is fixed or determinable; and (iv) collection is deemed probable.

When sales arrangements involve multiple elements, or multiple products, and we have vendor-specific objective evidence ("VSOE") of fair value for each element in the arrangement, we recognize revenue based on the relative fair value of all elements within the arrangement. We determine VSOE based on sales prices charged to customers when the same element is sold separately or based upon stated substantive PCS renewal rates for certain arrangements. Many of our products, such as our software products, typically include an initial period (generally 90-day or 12–month periods) of free PCS, which is not sold separately. Accordingly, we are unable to establish VSOE for these products.

In cases where VSOE only exists for the undelivered elements such as PCS, we apply the residual method to recognize revenue. Under the residual method, the total arrangement fee is allocated first to the undelivered elements, typically PCS, based on their VSOE, and the residual portion of the fee is allocated to the delivered elements, typically our hardware and software products, and is recognized as revenue assuming all other revenue recognition criteria as described above have been met.

If VSOE cannot be determined for all undelivered elements of an arrangement, we defer revenue until the earlier of (i) the delivery of all elements or (ii) the establishment of VSOE for all undelivered elements, provided that if the only undelivered element is PCS or a service, the total arrangement fee is recognized as revenue over the PCS or service term.

Services revenues from our initial and separately purchased extended PCS arrangements (generally offered for 12-month periods) are recognized ratably over the contractual coverage period. In addition, for implied PCS obligations we defer revenues from product sales and allocate these amounts to PCS revenues to account for the circumstances in which we provide PCS after the expiration of the customer's contractual PCS period. Deferred revenues for these implied PCS obligations are recognized ratably over the implied PCS period, which is typically based on the expected economic life of our software products of four years. To the extent we determine that implied PCS is no longer being provided after the expiration of the customer's contractual PCS period, the remaining deferred revenue balance related to the implied PCS obligation is reversed and recognized as revenue in the period of cessation of the implied PCS obligation.

Revenues from our separately purchased extended hardware warranty arrangements are recognized ratably over the contractual coverage period. We recognize revenues from training and other professional services at the time the services are provided or completed, as applicable.

We use distributors to complement our direct sales and marketing efforts in certain international markets. Due to the broad range of features and options available with our hardware and software products, distributors generally do not stock our products and typically place orders with us after receiving an order from an end customer. These distributors receive business terms of sale generally similar to those received by our other customers.

Stock-Based Compensation. Share-based payments, including grants of stock options, restricted stock units and employee stock purchase rights, are required to be recognized in the financial statements based on the estimated fair values for accounting purposes on the grant date. We use the Black-Scholes option pricing model to estimate the fair value for accounting purposes of our share-based awards. The determination of the fair value

for accounting purposes of share-based awards using the Black-Scholes model is affected by our stock price and a number of assumptions, including expected volatility, expected life and risk-free interest rate. The expected life and expected volatility are estimated based on historical data. The risk-free interest rate assumption is based on observed interest rates appropriate for the terms of our share-based awards. Stock-based compensation expense recognized in our consolidated financial statements is based on awards that are ultimately expected to vest. The amount of stock-based compensation expense is reduced for estimated forfeitures based on historical experience as well as future expectations. Forfeitures are required to be estimated at the time of grant and revised, if necessary, in subsequent periods if estimated and actual forfeitures differ from these initial estimates. We evaluate the assumptions used to value share-based awards on a periodic basis. If factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. If there are any modifications or cancellations of the underlying unvested securities, we may be required to accelerate, increase or cancel any remaining unrecognized stock-based compensation expense. Consistent with our past practice, we attribute the value of stock-based compensation to expense based on the graded, or accelerated multiple-option, approach.

We have outstanding share-based awards that have performance-based vesting conditions. Awards with performance-based vesting conditions require the achievement of certain financial or other performance criteria as a condition to the vesting. We recognize the estimated fair value of performance-based awards, net of estimated forfeitures, as stock-based compensation expense over the performance period, using graded approach, based upon our determination of whether it is probable that the performance targets will be achieved. At each reporting period, we reassess the probability of achieving the performance criteria and the performance period required to meet those targets. Determining whether the performance criteria will be achieved involves judgment, and the estimate of stock-based compensation expense may be revised periodically based on changes in the probability of achieving the performance criteria. Revisions are reflected in the period in which the estimate is changed. If performance goals are not met, no stock-based compensation expense is recognized, and, to the extent stock-based compensation was previously recognized, such stock-based compensation is reversed.

For the years ended December 31, 2010, 2009 and 2008, stock-based compensation expense was $12.9 million, $10.5 million and $10.6 million, respectively. Our stock-based compensation expense increased for the year ended December 31, 2010 as compared to the comparable prior period in 2009 due in part to (i) the incremental impact of the share-based awards granted to the employees related to our 2009 acquisitions of Catapult and N2X, (ii) a decrease in estimated and actual forfeitures, and (iii) the increase in the price of our common stock and weighted grant date fair values for new awards in 2010 when compared to 2009.The aggregate balance of gross unrecognized stock-based compensation to be expensed in the years 2011 through 2014 related to unvested share-based awards as of December 31, 2010 was approximately $18.0 million. To the extent that we grant additional share-based awards, future expense may increase by the additional unearned compensation resulting from those grants. We anticipate that we will continue to grant additional share-based awards in the future as part of our long-term incentive compensation programs. The impact of future grants cannot be estimated at this time because it will depend on a number of factors, including the amount of share-based awards granted and the then current fair values of such awards for accounting purposes.

Cost of Revenues. Our cost of revenues related to the sale of our hardware and software products includes materials, payments to third party contract manufacturers, royalties, and salaries and other expenses related to our manufacturing and supply operations, technical support and professional service personnel. We outsource the majority of our manufacturing operations, and we conduct supply chain management, quality assurance, documentation control, shipping and some final assembly and testing at our facility in Calabasas, California and/or in Penang, Malaysia. Accordingly, a significant portion of our cost of revenues related to our products consists of payments to our contract manufacturers. Cost of revenues related to the provision of services includes

salaries and other expenses associated with technical support services, professional services and the warranty cost of hardware that is replaced or repaired during the warranty coverage period. Cost of revenues does not include the amortization of purchased technology related to our acquisitions of certain businesses, product lines and technologies of $12.8 million, $9.2 million and $4.8 million for the years ended December 31, 2010, 2009 and 2008, respectively, which are included within our Amortization of Intangible Assets line item on our consolidated statements of operations.

Our cost of revenues as a percentage of total revenues is primarily affected by the following factors:

- our pricing policies and those of our competitors;
- the pricing we are able to obtain from our component suppliers and contract manufacturers;
- the mix of customers and sales channels through which our products are sold;
- the mix of our products sold, such as the mix of software versus hardware product sales;
- new product introductions by us and by our competitors;
- demand for and quality of our products; and
- production volume.

In the near term, although we anticipate that our cost of revenues as a percentage of total revenues will remain relatively flat, we expect to continue to experience pricing pressure on larger transactions and from larger customers as a result of competition.

Operating Expenses. Our operating expenses are generally recognized when incurred and consist of research and development, sales and marketing, general and administrative, amortization of intangible assets, acquisition and other related costs and restructuring expenses. In dollar terms, we expect total operating expenses, excluding stock-based compensation expense discussed above and amortization of intangible assets, acquisition and other related and restructuring expenses discussed below, to increase modestly in 2011 when compared to 2010 to achieve our sales growth goals and product initiatives.

- *Research and development expenses* consist primarily of salaries and other personnel costs related to the design, development, testing and enhancement of our products. We expense our research and development costs as they are incurred. We also capitalize and depreciate over a five-year period costs of our products used for internal purposes.
- *Sales and marketing expenses* consist primarily of compensation and related costs for personnel engaged in direct sales, sales support and marketing functions, as well as promotional and advertising expenditures. We also capitalize and depreciate over a two-year period costs of our products used for sales and marketing activities, including product demonstrations for potential customers.
- *General and administrative expenses* consist primarily of salaries and related expenses for certain executive, finance, legal, human resources, information technology and administrative personnel, as well as professional fees (e.g., legal and accounting), facility costs related to our corporate headquarters, insurance costs and other general corporate expenses.

- *Amortization of intangible assets* consists of the amortization of the purchase price of the various intangible assets over their estimated useful lives. Periodically we review goodwill and other intangible assets for impairment. An impairment charge would be recorded to the extent that the carrying value exceeds its estimated fair value in the period that the impairment circumstances occurred. The future amortization of acquired intangible assets depends on a number of factors, including the extent to which we acquire additional businesses, technologies or product lines, or if we are required to record impairment charges related to our acquired intangible assets. See Note 8 to the Consolidated Financial Statements included in this Form 10-K.

- *Acquisition and other related* costs are expensed as incurred and consist primarily of transaction and integration related costs such as success-based banking fees, professional fees for legal, accounting, tax, due diligence, valuation and other related services, change in control payments, consulting fees, required regulatory costs, certain employee, facility and infrastructure transition costs, and other related expenses. We expect our acquisition and other related expenses to fluctuate over time based on the timing of our acquisitions and related integration activities.

- *Restructuring expenses* consist primarily of employee severance costs and related charges, as well as facility-related charges to exit certain locations.

Interest income and other, net represents interest on cash and a variety of securities, including money market funds, U.S. government and government agency debt securities, corporate debt securities and auction rate securities, realized gains/losses on the sale of investment securities, certain foreign currency gains and losses, and other non-operating items such as legal settlement proceeds.

Interest expense consists of interest due to the holders of our 3.00% convertible senior notes issued in December 2010, as well as the amortization of the associated debt issuance costs. See Note 2 to the Consolidated Financial Statements included in this Form 10-K.

Income Tax is determined based on the amount of earnings and enacted federal, state and foreign tax rates, adjusted for allowable credits and deductions, and for other effects of equity compensation plans. Our income tax provision may be significantly affected by changes to our estimates for tax in jurisdictions in which we operate and other estimates utilized in determining the global effective tax rate. Actual results may also differ from our estimates based on changes in economic conditions. Such changes could have a substantial impact on the income tax provision. Our income tax provision could also be significantly impacted by estimates surrounding our uncertain tax positions and the recording of valuation allowances against certain deferred tax assets and changes to these valuation allowances in future periods. We reevaluate the judgments surrounding our estimates and make adjustments as appropriate each reporting period.

Critical Accounting Policies and Estimates

Management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, allowance for doubtful accounts, write-downs for obsolete inventory, income taxes, acquisition purchase price allocation, impairments of long-lived assets and marketable securities, stock-based compensation, and contingencies and litigation. We base our estimates on

historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ materially from these estimates.

We apply the following critical accounting policies in the preparation of our consolidated financial statements:

- *Revenue Recognition Policy.* We recognize revenue as discussed in "Revenues" in the "Business Overview" section of Item 7.

- *Acquisition Purchase Price Allocation.* When we acquire a business, product line or rights to a product or technology, we allocate the purchase price to the various tangible and intangible assets acquired and the liabilities assumed, based on their estimated fair values. Determining the fair value of certain assets and liabilities acquired is subjective in nature and often involves the use of significant estimates and assumptions, some of which may be based in part on historical experience and information obtained from the management of the acquired business, and are inherently uncertain. Many of the estimates and assumptions used to determine fair values, such as those for purchased technologies and customer relationships, are made based on forecasted information and discount rates. To assist in the purchase price allocation process, as well as the determination of estimated useful lives of acquired intangible assets, we may obtain appraisals from valuation specialists. Unanticipated events and circumstances may occur which may affect the accuracy or validity of such estimates and assumptions.

- *Write-Down of Obsolete Inventory.* We write down inventory for estimated obsolescence, excessive quantities or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. If actual future demand is less favorable than our initial estimate, additional inventory write-downs may be required. Once written down, the reserves are not reversed until inventory is sold or disposed of.

- *Income Taxes.* We operate in numerous states and countries through our various subsidiaries, and must allocate our income, expenses, and earnings under the various laws and regulations of each of these taxing jurisdictions. Accordingly, our provision for income taxes represents our total estimate of the liability that we have incurred in doing business each year in all of our locations. Deferred income tax balances reflect the effects of temporary differences between the carrying amounts of assets and liabilities and their tax bases and are stated at enacted tax rates expected to be in effect when taxes are actually paid or recovered. In determining whether we need to record a valuation allowance against our deferred tax assets, management must make a number of estimates, assumptions and judgments, including estimates of future earnings and taxable income. We establish a valuation allowance to reduce deferred tax assets to the amount we believe is more likely than not to be realized. The determination to record or release valuation allowance requires significant judgment. During 2010 and 2009, we concluded that a full valuation allowance against our net U.S. deferred tax assets was warranted due to, among other reasons, (i) the recently realized cumulative accounting losses sustained in the U.S., (ii) the taxable losses incurred in the U.S. in 2010 and 2009 and (iii) our uncertainty with respect to generating future U.S. taxable income in the near term given our recently completed U.S. projections and a number of inherent uncertainties such as the future level of U.S. tax deductions from our share-based awards. To the extent these circumstances change we may need to release the valuation allowance.

Annually, we file tax returns that represent our filing positions with each jurisdiction and settle our return liabilities. Each jurisdiction has the right to audit those returns and may take different positions with respect to income and expense allocations and taxable earnings determinations. We may provide for estimated liabilities in our consolidated financial statements associated with uncertain tax return filing positions that are subject to audit by various tax authorities. Because the determinations of our annual provisions are subject to assumptions, judgments and estimates, it is likely that actual results may vary from those recognized in our consolidated financial statements. As a result, additions to, or reductions of, income tax expense will occur each year for prior reporting periods as our estimates or judgments change, or as actual tax returns and tax audits are settled. We recognize any such prior year adjustment in the discrete quarterly period in which it is determined.

- *Impairment of Long-Lived Assets.* We evaluate our identifiable definite life intangible assets and other long-lived assets for impairment, when events or changes in circumstances indicate that a potential impairment may exist. We first estimate the undiscounted cash flows to be generated from the use and ultimate disposition of the applicable asset. To the extent that the estimated undiscounted cash flows fall below the carrying value of the related intangible or other long lived asset, we write-down the asset to its estimated fair value. Fair value is generally determined based on discounted cash flows. Determining the fair value based on discounted cash flows is subjective in nature and often involves the use of significant estimates and assumptions about future results and discount rates. We evaluate the recoverability of our goodwill on an annual basis or if events or changes in circumstances indicate that an impairment in the value of goodwill recorded on our balance sheet may exist. Impairment losses are recorded to the extent that the carrying value of the goodwill exceeds its estimated fair value. We completed our annual goodwill impairment test of our single reporting unit in the fourth quarter of 2010 and determined that there was no impairment.

- *Stock-Based Compensation.* We record stock-based compensation as discussed in "Stock-based Compensation" in the "Business Overview" section of Item 7.

- *Impairment of Marketable Securities.* We periodically review our marketable securities for impairment. If we conclude that any of our investments are impaired, we determine whether such impairment is "other-than-temporary." Factors we consider to make such a determination include, among others, the severity of the impairment, the reason for the decline in value and the potential recovery period. If any impairment is considered "other-than-temporary," we write down the asset to its fair value and take a charge to earnings for the portion of the write-down related to credit losses with the balance, if any, recorded to other comprehensive income.

- *Contingencies and Litigation.* We evaluate contingent liabilities, including threatened or pending litigation, and record accruals when the loss is deemed probable and the liability can reasonably be estimated. We make these assessments based on the facts and circumstances of each situation and in some instances based in part on the advice of outside legal counsel.

Results of Operations

The following table sets forth certain statement of operations data as a percentage of total revenues for the periods indicated:

	2010	2009	2008
Revenues:			
Products	82.3%	80.3%	83.5%
Services	17.7	19.7	16.5
Total revenues	100.0	100.0	100.0
Costs and operating expenses: [1]			
Cost of revenues - products	19.6	20.6	18.4
Cost of revenues - services	2.3	2.2	2.5
Research and development	26.2	30.3	28.0
Sales and marketing	28.9	33.9	33.8
General and administrative	12.7	15.7	14.6
Amortization of intangible assets	6.3	6.4	3.2
Acquisition and other related	1.1	3.5	0.8
Restructuring	1.3	2.6	—
Total costs and operating expenses	98.4	115.2	101.3
Income (loss) from operations	1.6	(15.2)	(1.3)
Interest income and other, net	3.9	1.2	3.7
Interest expense	(0.2)	—	—
Other-than-temporary impairment on investments	—	(1.6)	(11.4)
Income (loss) before income taxes	5.3	(15.6)	(9.0)
Income tax expense	1.3	9.2	—
Net income (loss)	4.0%	(24.8)%	(9.0)%

[1] Stock-based compensation included in:			
Cost of revenues - products	0.2%	0.3%	0.3%
Cost of revenues - services	0.1	0.1	0.1
Research and development	1.9	2.5	2.4
Sales and marketing	1.3	1.7	1.9
General and administrative	1.2	1.3	1.3

Comparison of the Years Ended December 31, 2010 and 2009

As a result of our acquisitions of Catapult Communications Corporation ("Catapult") on June 23, 2009 and of the N2X Data Network Testing Product Line business ("N2X") of Agilent Technologies, Inc. on October 30, 2009 (collectively the "2009 Acquisitions"), our 2010 consolidated results of operations include the results of these operations. Our consolidated results of operations include the results of operations of our 2009 Acquisitions from the respective acquisition dates. The integration of Catapult and its processes was substantially completed as of December 31, 2009, while the integration activities with respect to N2X were substantially completed as of September 30, 2010. To assist the readers of our financial statements in reviewing our year over year consolidated operating results, we have estimated the impacts of the 2009 Acquisitions in the statement of operations sections below, although some activities cannot be reasonably extracted and identified

as either a Catapult or N2X activity. Revenues and expenses attributable to our 2009 Acquisitions generally increased (other than general and administrative expenses) in the current year as compared to the prior year primarily as a result of 2010 representing a full year of acquisition related revenues and expenses. General and administrative expenses declined over the same time period as a result of operational synergies and the Catapult restructuring.

Revenues. In 2010, total revenues increased 55.5% to $276.8 million from $178.0 million in 2009. As a result of our 2009 Acquisitions, revenues for 2010 and 2009 included $70.0 million and $24.1 million, respectively, of revenue related to the 2009 Acquisitions. Excluding the revenues from our 2009 Acquisitions, the increase in total revenues was principally due to a $44.1 million increase in shipments of our hardware products (primarily our 10 Gigabit and 40/100 Gigabit Ethernet interface cards) in 2010 over 2009 and a $7.9 million increase in shipments of our software products (primarily our IxLoad and IxNetwork software products) in 2010 over 2009.

Cost of Revenues. As a percentage of total revenues, our total cost of revenues decreased by 0.9% to 21.9% in 2010 from 22.8% in 2009. This was primarily due to certain inventory-related charges aggregating $1.6 million for slow moving and excess inventory that were incurred in 2009 that did not recur in the 2010 period.

Research and Development Expenses. In 2010, research and development expenses increased 34.3% to $72.5 million from $54.0 million in 2009. As a result of our 2009 Acquisitions, our research and development expenditures in 2010 and 2009 included approximately $21.1 million and $8.5 million, respectively, related to the research and development activities of the acquired operations. Excluding the incremental research and development costs related to the 2009 Acquisitions, research and development expenses in 2010 were $51.4 million compared to $45.5 million in 2009. This increase was primarily due to an increase in compensation and related employee costs, including travel, of $4.8 million. The increase in compensation and related employee costs was primarily due to the reinstatement of our company-wide bonus plan in 2010.

Sales and Marketing Expenses. In 2010, sales and marketing expenses increased 32.5% to $80.0 million from $60.4 million in 2009. As a result of our 2009 Acquisitions, our sales and marketing costs in 2010 and 2009 included approximately $21.9 million and $8.6 million, respectively, related to the sales and marketing activities of the acquired operations. Excluding the incremental sales and marketing costs related to the 2009 Acquisitions, sales and marketing expense in 2010 increased to $58.1 million from $51.8 million in 2009 principally due to an increase in compensation and related employee costs, including travel, of $6.2 million. The increase in compensation and related employee costs was primarily due to higher sales commissions as revenue levels increased in 2010 over the prior year.

General and Administrative Expenses. In 2010, general and administrative expenses increased 25.2% to $35.1 million from $28.1 million in 2009. As a result of our 2009 Acquisitions, our general and administrative costs in 2010 and 2009 included approximately $0.9 million and $2.9 million, respectively, of general and administrative costs of the acquired operations. Excluding the incremental general and administrative costs related to the 2009 Acquisitions, general and administrative expenses in 2010 were $34.2 million compared to $25.2 million in 2009. The increase was primarily due to an increase in compensation and related employee costs of $4.1 million, higher legal fees and expenses of $1.2 million and an increase in stock-based compensation expense of $1.0 million. The increase in compensation and related employee costs was primarily due to the reinstatement of our company-wide bonus plan in 2010.

Amortization of Intangible Assets. In 2010, amortization of intangible assets increased to $17.5 million from $11.4 million in 2009. The increase primarily related to the incremental amortization of intangibles related to our 2009 Acquisitions, partially offset by the completion of amortization periods for certain intangible assets.

Acquisition and Other Related Expenses. Acquisition and other related expenses for 2010 and 2009 were $3.0 million and $6.2 million, respectively. For 2010, acquisition and other related expenses consisted primarily of employee, facility and infrastructure transition costs, as well as professional fees attributable to our 2009 Acquisitions. For 2009, acquisition and other related expenses consisted primarily of success-based banking fees and professional fees. For additional information, see Note 3 to Consolidated Financial Statements.

Restructuring. Restructuring expenses for 2010 and 2009 were $3.6 million and $4.6 million, respectively. Restructuring expenses in 2009 relate to the Ixia and Catapult restructuring plans, which were substantially completed in 2009, and the restructuring expenses in 2010 primarily relate to the N2X restructuring plan, which was substantially completed in the first quarter of 2010. For additional information, see Note 4 to Consolidated Financial Statements.

Interest Income and Other, Net. Interest and other income, net increased to $11.0 million in 2010 from $2.2 million in 2009. This increase was due to an $8.9 million favorable settlement with a former investment manager in the first quarter of 2010 related to our purchase in prior periods of certain investments in auction rate securities with an aggregate par value of $19.0 million that had been substantially written down and due to approximately $1.0 million of proceeds received in the fourth quarter of 2010 for the sale of certain of these auction rate securities that were previously written off.

Interest expense. Interest expense for 2010 was $480,000, including the amortization of debt issuance costs, and related to convertible senior notes issued during December 2010. There was no interest expense in 2009. For additional information, see Note 2 to Consolidated Financial Statements.

Other-than-temporary Impairment on Investments. For 2009, other-than-temporary impairments on investments totaled $2.8 million. When, in the opinion of management, a decline in the fair value of an investment is considered to be other-than -temporary, such investment is written down to its fair value. During 2009, other-than-temporary impairments on investments included impairment charges of $2.8 million (pre-tax) to earnings related to our illiquid auction rate securities. There were no such charges for 2010. For additional information, see Note 6 to Consolidated Financial Statements.

Income Tax Expense. Income tax expense decreased to $3.7 million, or an effective rate of 24.6%, in 2010 from $16.4 million, or an effective rate of -59.0%, in 2009. The decrease in our overall tax expense was primarily due to the establishment of a full valuation allowance during 2009.

Our effective tax rate differs from the federal statutory rate due to state taxes and significant permanent differences. Significant permanent differences arise due to research and development credits and stock-based compensation expense that is not expected to generate a tax deduction, such as stock-based compensation expense on grants to foreign employees, offset by tax benefits from disqualifying dispositions. For additional information, see Note 9 to Consolidated Financial Statements.

Realization of our deferred tax assets is dependent primarily on the generation of future taxable income. In considering the need for a valuation allowance we consider our historical, as well as future projected taxable income along with other objectively verifiable evidence.

Comparison of the Years Ended December 31, 2009 and 2008

As a result of our 2009 Acquisitions, our 2009 consolidated results of operations include the results of Catapult and N2X from their respective acquisition dates. To assist the readers of our financial statements in reviewing our year over year consolidated operating results, we have estimated the impacts of the 2009 Acquisitions in the related statement of operations sections below.

Revenues. In 2009, total revenues increased 1.2% to $178.0 million from $175.9 million in 2008. As a result of our 2009 Acquisitions, revenues for 2009 included $24.1 million of revenue related to the 2009 Acquisitions. Revenues from products decreased to $142.9 million in 2009 from $146.8 million in 2008. Excluding the product revenues from our 2009 Acquisitions of approximately $19.2 million, the decrease in product revenue was primarily due to a $20.1 million decrease in shipments of our hardware products (primarily our Ethernet interface cards) in 2009 over 2008 and by a $2.3 million decrease in shipments of our software products (primarily our IxLoad and IxChariot software products) in 2009 over 2008. Excluding the service revenues from our 2009 Acquisitions of approximately $4.9 million, service revenues increased $1.2 million in 2009 compared to 2008 primarily due to a net increase in the ratable recognition of our PCS arrangements and extended warranty contracts. In 2009, total revenues from Cisco Systems, our largest account, decreased to $27.8 million, or 15.6% of our total revenue, from $36.9 million, or 21.0% of our total revenue, in 2008.

Cost of Revenues. As a percentage of total revenues, our total cost of revenues increased to 22.8% in 2009 from 20.9% in 2008. Our 2009 cost of revenues included approximately $5.3 million of cost of goods sold attributable to our 2009 Acquisitions. Excluding the cost of product revenues of approximately $4.4 million related to our 2009 Acquisitions, our cost of product revenues decreased to $32.3 million in 2009 from $32.4 million in 2008 primarily due to the decrease in the costs of product shipped of approximately $2.2 million attributable to the decline in product revenues, partially offset by higher royalty payments of $1.4 million and higher inventory related charges for slow moving and excess inventory. Excluding the cost of service revenues of approximately $844,000 related to our 2009 Acquisitions, our cost of service revenues decreased to $3.0 million in 2009 from $4.5 million in 2008 primarily due to a decline in technical support costs, including warranty expenses, of approximately $1.1 million.

Research and Development Expenses. In 2009, research and development expenses increased 9.8% to $54.0 million from $49.2 million in 2008. As a result of our 2009 Acquisitions, our research and development expenditures in 2009 included approximately $8.5 million related to the research and development activities of the acquired operations. Excluding the incremental research and development costs related to the 2009 Acquisitions, the decrease in research and development expenses in 2009 as compared to 2008 was primarily due to lower compensation and related employee costs, including travel, of $4.4 million. The decrease in compensation and related employee costs was primarily due to the elimination of our company-wide bonus plan in 2009, lower compensation due to the Ixia Restructuring announced in the second quarter of 2009 and favorable foreign currency exchange rates, particularly in Romania and India where the local currencies weakened against the U.S. Dollar in 2009 as compared to 2008. These expense decreases were partially offset by higher consulting costs of $1.2 million (primarily in India and the United States) in 2009 compared to 2008.

Sales and Marketing Expenses. In 2009, sales and marketing expenses increased 1.7% to $60.4 million from $59.4 million in 2008. As a result of our 2009 Acquisitions, our sales and marketing costs in 2009 included approximately $8.6 million related to these acquisitions. Excluding the incremental sales and marketing costs related to the 2009 Acquisitions, the decrease of $7.6 million was primarily due to lower compensation and related employee costs, including travel, of $5.0 million, lower facilities and depreciation costs of $1.3 million and lower training and marketing programs of $705,000. The decrease in compensation and related employee costs in 2009 as compared to the same period of 2008 was primarily due to lower

commissions related to the year over year decline in sales, the Ixia Restructuring announced in the second quarter of 2009 and the elimination of our company-wide bonus plan in 2009.

General and Administrative Expenses. In 2009, general and administrative expenses increased 10.0% to $28.1 million from $25.5 million in 2008. As a result of our 2009 Acquisitions, our general and administrative costs in 2009 included approximately $2.9 million related to these acquisitions. Excluding the incremental general and administrative costs related to the 2009 Acquisitions, the decrease of $316,000 was primarily due to lower compensation and related employee costs, including travel, of $986,000, lower recruiting fees of $559,000 and lower facilities and depreciation costs of $471,000, partially offset by higher legal fees and expenses of $1.5 million related primarily to litigation. The decrease in compensation and related employee costs in 2009 as compared to the same period of 2008 was primarily due to the elimination of our company-wide bonus plan in 2009.

Amortization of Intangible Assets. In 2009, amortization of intangible assets increased to $11.4 million from $5.7 million in 2008. The increase primarily related to the incremental amortization of intangibles related to our 2009 Acquisitions, partially offset by the completion of amortization periods for certain intangible assets.

Acquisition and Other Related Expenses. Acquisition related expenses for 2009 and 2008 were $6.2 million and $1.5 million, respectively. Acquisition related expenses incurred in 2009 increased over the same periods in 2008 primarily due to our acquisitions of Catapult in June 2009 and N2X in October 2009. As a result of our adoption of the new accounting guidance for business combinations on January 1, 2009, acquisition-related costs in 2009 were expensed rather than capitalized and treated as part of the applicable purchase price. Acquisition costs expensed in 2008 related to transactions that were not consummated as of December 31, 2008. For additional information, see Note 3 to Consolidated Financial Statements.

Restructuring. Restructuring expenses for 2009 were $4.6 million and consisted primarily of employee severance costs related to the Ixia Restructuring initiated during the second quarter of 2009 and the Catapult Restructuring initiated during the third quarter of 2009. There were no restructuring expenses incurred in 2008. The Ixia Restructuring included a net reduction in force of approximately 80 positions, which represented approximately 10% of our worldwide work force, including contractors, prior to the announcement of the restructuring. The Catapult Restructuring included a net reduction in force of approximately 45 positions, which represented approximately 4% of our worldwide work force, including contractors, prior to the announcement of the restructuring.

In January 2010, our management approved, committed to and initiated a plan to restructure our operations in light of our acquisition of N2X in the fourth quarter of 2010 ("N2X Restructuring"). The N2X Restructuring included a net reduction in force of approximately 80 positions, which represented approximately 7% of our worldwide work force, including contractors, at the end of the fourth quarter of 2009. During 2010, we recorded restructuring charges for severance and other related costs of $3.6 million on a pre-tax basis related to the N2X Restructuring.

Interest Income and Other, Net. Interest and other income, net decreased to $2.2 million in 2009 from $6.6 million in 2008. This decrease was primarily due to lower average cash and investment balances in the aggregate and lower effective yields in 2009 compared to 2008. The lower average cash and investment balance in the aggregate was primarily due to the payments for our 2009 Acquisitions.

Other-than-temporary Impairment on Investments. For 2009 and 2008, other-than-temporary impairments on investments were $2.8 million and $20.2 million, respectively. When, in the opinion of management, a decline in the fair value of an investment is considered to be other-than-temporary, such investment is written down to its fair value. During 2009, other-than-temporary impairments on investments included impairment charges of

$2.8 million (pre-tax) to earnings related to our illiquid auction rate securities ("ARS"). During 2008, other-than-temporary impairments on investments included impairment charges of $15.8 million (pre-tax) to earnings related to our ARS and an impairment charge of $4.4 million (pre-tax) to earnings related to our investments in bonds issued by Lehman Brothers Holdings, Inc. As of December 31, 2009, the estimated fair values of our ARS approximated $5.7 million. See Note 6 to Consolidated Financial Statements.

Income Tax Expense. Income tax expense increased to $16.4 million, or an effective rate of -59.0%, in 2009 from $21,000, or an effective rate of -0.1%, in 2008. The increase in our overall tax expense was primarily due to the detriment associated with recording a full valuation allowance against our net U.S. deferred tax assets.

Our effective tax rate differs from the federal statutory rate due to state taxes, significant permanent differences and the change in our valuation allowance on our net U.S. deferred tax assets. Significant permanent differences arise due to research and development credits and stock based compensation expense that is not expected to generate a tax deduction, such as stock compensation expense on grants to foreign employees, offset by tax benefits in the current period from disqualifying dispositions.

Realization of our deferred tax assets is dependent primarily on the generation of future taxable income. In considering the need for a valuation allowance we consider our historical, as well as future projected taxable income along with other objectively verifiable evidence.

During 2009, management evaluated the need for a valuation allowance against our net U.S. deferred tax assets and concluded that a full valuation allowance against our net U.S. deferred tax assets was warranted in the fourth quarter of 2009 due to, among other reasons, (i) the recently realized cumulative accounting losses sustained in the U.S., (ii) the recently completed three-year projections in which we expect to realize additional accounting losses in the U.S., (iii) the determination that we would be in a U.S. taxable loss position in 2009 and (iv) our uncertainty with respect to generating future U.S. taxable income in the near term given our recently completed U.S. projections and a number of inherent uncertainties such as the future level of U.S. tax deductions from our share-based awards. As a result, a non-cash income tax charge of $28.1 million was recorded to increase our valuation allowance in 2009. During 2008, we recorded an $8.1 million valuation allowance to fully offset the deferred tax assets primarily related to the unrealized loss recorded as a result of the impairment of certain marketable securities. See Note 9 to Consolidated Financial Statements.

Liquidity and Capital Resources

We have funded our operations with our cash balances, cash generated from operations and proceeds from our initial public offering, from our convertible debt offering and from stock option exercises. The following table sets forth our cash and short- and long-term investments as of December 31, 2010, 2009 and 2008 (in thousands):

	As of December 31,		
	2010	2009	2008
Cash and cash equivalents	$ 76,082	$ 15,061	$192,791
Short-term marketable securities	151,696	10,337	9,850
Long-term marketable securities	111,440	53,582	3,657
	$339,218	$ 78,980	$206,298

Our cash, cash equivalents and short- and long-term investments, when viewed as a whole, increased to $339.2 million as of December 31, 2010 from $79.0 million as of December 31, 2009 primarily due to (i) $194.0 million of net proceeds received from the issuance of convertible senior notes in December 2010, (ii) $50.4 million in net cash provided by our operating activities and (iii) $28.3 million cash generated from exercises of share-based awards. Our cash, cash equivalents and short- and long-term investments, when viewed as a whole, decreased to $79.0 million as of December 31, 2009 from $206.3 million as of December 31, 2008 primarily due to payments in connection with acquisitions, net of cash acquired, of $122.4 million and the repurchase of $8.4 million of our common stock pursuant to our stock buyback programs.

As of December 31, 2010, 2009 and 2008, we held investments in illiquid auction rate securities with estimated fair values of $5.3 million, $5.7 million and $3.2 million, respectively (See Note 6 to Consolidated Financial Statements).

The following table sets forth our summary cash flows for the years ended December 31, 2010, 2009 and 2008 (in thousands):

	Year Ended December 31,		
	2010	2009	2008
Cash provided by (used in) operating activities	$ 50,429	$ (4,725)	$ 24,335
Cash (used in) provided by investing activities	(213,789)	(168,005)	19,082
Cash provided by (used in) financing activities	224,381	(5,000)	(39,518)

Cash Flows from Operating Activities

Operating cash inflows are principally provided by cash collections on sales to our customers. Our primary uses of cash from operating activities are for personnel-related expenditures, product costs and facility-related payments. Going forward, our cash flows from operating activities will be impacted by (i) the extent to which we grow our customer sales, (ii) increase our headcount and enhance our infrastructure to generate additional business, develop new products and features and to support our growth, (iii) by our working capital management, and (iv) interest paid to service our convertible senior notes (See Note 2 to Consolidated Financial Statements).

Cash provided by operating activities was $50.4 million for the year ended December 31, 2010 compared to cash used in operating activities of $4.7 million for the year ended December 31, 2009. This increase in cash flow generated from operations was primarily due to better overall net operating results in 2010 as compared to 2009 as earnings increased by $55.4 million in 2010 when compared to 2009 driven by our 56% sales growth in 2010 over 2009. Our 2010 earnings growth over 2009 was also due to the $8.9 million receipt of settlement proceeds from a former investment manager in the first quarter of 2010 related to our previous purchase of certain investments in auction rate securities.

Cash used in operating activities was $4.7 million for the year ended December 31, 2009 compared to cash provided by operating activities of $24.3 million for the year ended December 31, 2008. This decline in cash flow generated from operations was primarily due to (i) a $14.3 million increase of net working capital changes in 2009 when compared to 2008 that adversely impacted cash flow due in part to an $11.8 million increase in accounts receivable as of December 31, 2009 when compared to December 31, 2008 related to an increased amount of shipments at the end of 2009 when compared to the end of 2008, and (ii) an increase

of approximately $9.0 million of restructuring and acquisition and other related costs in 2009 when compared to 2008 due to the acquisitions of Catapult and N2X, as well as the two restructuring programs implemented during 2009.

Cash Flows from Investing Activities

Our cash inflow from investing activities principally relate to proceeds from the sale and maturities of our investments in marketable securities. Our primary uses of cash from investing activities are for payments to acquire products, technologies and businesses, purchases of marketable security investments and capital expenditures to support our growth. Going forward, we expect our cash flows from investing activities to fluctuate based on the number of product, technology and/or business acquisitions we close using cash, if any, and the timing of our sales, maturities and purchases of marketable securities.

Cash used in investing activities was $213.8 million and $168.0 million for the years ended December 31, 2010 and 2009, respectively. This increase in cash flow used in investing activities was primarily due to (i) a $161.5 million increase in net purchases of marketable securities, as we invested the proceeds from the December 2010 issuance of our convertible senior notes, and (ii) a $6.8 million increase in capital expenditures due in part to meet the facility and equipment needs of our expanded workforce after our 2009 Acquisitions. These increases were partially offset by the $122.4 million in payments made in connection with our 2009 Acquisitions that did not recur.

Cash used in investing activities was $168.0 million for the year ended December 31, 2009 compared to cash provided by investing activities of $19.1million for the year ended December 31, 2008. This decline in cash flow provided by investing activities was primarily due to a $120.2 million increase in cash used to acquire businesses in 2009 when compared to 2008 due to the acquisitions of Catapult and N2X in 2009. In addition, during 2009, $37.2 million of cash was used for net purchases of marketable securities compared to $30.2 million of net proceeds from marketable securities in 2008.

Cash Flows from Financing Activities

Prior to December 2010, our cash inflow from financing activities over the past three years has principally related to proceeds from the exercise of stock options and employee stock purchase plan options. On December 7, 2010, we raised $194.0 million in net proceeds from the issuance of convertible senior notes. Our primary uses of cash from financing activities over the past three years related to the repurchase of our common stock pursuant to approved stock buyback plans. Going forward, we expect our cash flows from financing activities to fluctuate based on the number of exercises of share-based awards which is dependent on the performance of our stock price. If deemed appropriate and approved by our Board of Directors, we may raise additional capital through a debt or equity financing, refinance our existing debt or initiate further stock buyback programs.

Cash provided by financing activities was $224.4 million for the year ended December 31, 2010 compared to cash used in financing activities of $5.0 million for the year ended December 31, 2009. This increase in cash flow provided by financing activities was primarily due to (i) $194.0 million of net proceeds received from the issuance of senior convertible notes during December 2010, (ii) a $25.0 million increase in proceeds received from exercises of share-based awards and (iii) there being no stock repurchases in 2010 due to the expiration of our stock buyback plan in May 2009 as compared to stock repurchases of $8.4 million in 2009 under the stock buyback plan.

Cash used in financing activities was $5.0 million and $39.5 million for the years ended December 31, 2009 and 2008, respectively. This decline in cash flow used in financing activities was primarily due to a $35.2 million decline in stock repurchases in 2009 when compared to 2008.

We believe that our existing balances of cash and cash equivalents, investments and cash flows expected to be generated from our operations will be sufficient to satisfy our operating requirements for at least the next twelve months. Nonetheless, we may seek additional sources of capital as necessary or appropriate to fund acquisitions or to otherwise finance our growth or operations; however, there can be no assurance that such funds, if needed, will be available on favorable terms, if at all. In addition, our $200 million convertible senior notes have various default provisions, which could accelerate repayment and adversely impact our liquidity. Our access to the capital markets to raise funds, through the sale of equity or debt securities, is subject to various factors, including the conditions in the U.S. capital markets and the timely filing of our periodic reports with the Commission.

Financial Commitments

Our significant financial commitments at December 31, 2010 are as follows (in thousands):

	Total	Less than 1 year	1 – 3 years	3 – 5 years	More than 5 years
Operating leases (1)	$ 16,727	$ 6,919	$ 9,160	$ 648	$ –
Purchase obligations (2)	9,833	9,833	–	–	–
Convertible senior notes (Principal and Interest) (3)	230,000	6,000	12,000	212,000	–
	$ 256,560	$ 22,752	$ 21,160	$ 212,648	$ –

(1) See Note 10 Commitments and Contingencies as disclosed in the Notes to the Financial Statements.

(2) Purchase obligations in the table above consist of purchase orders issued to certain of our contract manufacturers in the normal course of business to purchase specified quantities of certain interface cards and chassis. It is not our intent, nor is it reasonably likely, that we would cancel these executed purchase orders.

(3) In December 2010, we issued $200.0 million in aggregate principal amount of 3.00% convertible senior notes that mature on December 15, 2015, if not converted. The interest is payable semi-annually on June 15 and December 15 of each year, beginning on June 15, 2011.

As of December 31, 2010, we had a net liability for uncertain tax positions of approximately $5.3 million, which may be payable by us in the future. We are not able to reasonably estimate the timing of the payments or the amount by which the liability for uncertain tax positions will increase or decrease over time; therefore, the liability of $5.3 million is excluded from the table above. See Note 9 to Consolidated Financial Statements.

Recent Accounting Pronouncements

See Note 1 to Consolidated Financial Statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Sensitivity

Investment Activities

The primary objective of our investment activities is to maintain the safety of principal and preserve liquidity while maximizing yields without significantly increasing risk. Some of the fixed rate securities that we have invested in may be subject to market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. We do not enter into investments for trading or speculative purposes. We maintain our portfolio of cash equivalents and investments in a variety of securities, including U.S. government and federal agency securities, corporate debt securities, auction rate securities and money market funds. Our cash equivalents and investments consist of both fixed and variable rate securities. We do not use any derivatives or similar instruments to manage our interest rate risk. Fixed-rate securities may have their fair market value adversely impacted due to a rise in interest rates. Our fixed rate securities are currently classified as available-for-sale securities. While we do not intend to sell these fixed rate securities prior to maturity based on a sudden change in market interest rates, should we choose to sell these securities in the future, our consolidated operating results or cash flows may be adversely affected. A smaller portion of our cash equivalents and investments portfolio consists of variable interest rate securities. Accordingly, we also have interest rate risk with these variable rate securities as the income produced may decrease if interest rates fall.

Convertible Senior Notes

On December 7, 2010, we closed our offering of $200.0 million aggregate principal amount of 3.00% convertible senior notes (the "Notes"). The Notes bear a fixed interest rate of 3.00% per year, payable semi-annually in arrears on June 15 and December 15 of each year, beginning on June 15, 2011. Our Notes are not subject to interest rate risk as the coupon rate is fixed.

Exchange Rate Sensitivity

The majority of our revenue and expenses are denominated in U.S. dollars. However, since we have sales, research and development, and other operations outside of the United States, we do incur operating expenses in foreign currencies, primarily the Japanese Yen, Romanian Lei, Indian Rupee, Chinese Yuan, Australian Dollar, Canadian Dollar, Euro and British Pound. If these currencies strengthen against the U.S. dollar, our costs reported in U.S. dollars will increase, which would adversely affect our operating expenses. Approximately 30% of our operating expenses are exposed to foreign currency movements, and historically, we have not entered into foreign currency forward contracts to hedge our operating expense exposure to foreign currencies, but we may do so in the future. We do utilize foreign currency forward contracts to hedge certain accounts receivable amounts that are denominated in Japanese Yen, Euros and British Pounds. These contracts are used to reduce our risk associated with exchange rate movements, as gains and losses on these contracts are intended to offset exchange losses and gains on underlying exposures. Changes in the fair value of these forward contracts are recorded immediately in earnings. We do not enter into these foreign exchange forward contracts for speculative or trading purposes and we do not expect net gains or losses on these derivative instruments to have a material impact on our results of operations or cash flows.

Item 8. Financial Statements and Supplementary Data

Our financial statements and supplementary data required by this Item are provided in the consolidated financial statements of the Company included in this Form 10-K as listed in Item 15(a) of this Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Based on our management's evaluation (with the participation of our Chief Executive Officer and Chief Financial Officer), as of the end of the period covered by this Annual Report, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")),were effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and our Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external purposes in accordance with U.S. generally accepted accounting principles ("GAAP"). Because of its inherent limitations, our internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

As of December 31, 2010, our management (with the participation of our Chief Executive Officer and our Chief Financial Officer) conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2010 based on criteria in *Internal Control —Integrated Framework* issued by the COSO.

The effectiveness of our internal control over financial reporting as of December 31, 2010 has been audited by PricewaterhouseCoopers LLP, our independent registered public accounting firm, as stated in its report which is included elsewhere herein.

Changes in Internal Control over Financial Reporting

There have not been any changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal quarter ended December 31, 2010 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and our Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting are or will be capable of preventing or detecting all errors and all fraud. Any controls, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls will be met. The design of controls must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all controls, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Certain information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 19, 2011, which information will appear under the captions entitled "Proposal 1 - Election of Directors," "Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance." The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2010.

The Registrant has adopted a Code of Ethics for its Chief Executive and Senior Financial Officers, a copy of which is included as Exhibit 14.1 to this Annual Report on Form 10-K.

Item 11. Executive Compensation

The information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 19, 2011, which information will appear under the captions "Proposal 1 - Election of Directors - Compensation of Directors," "Executive Compensation and Other Information," "Compensation Discussion and Analysis" and "Compensation Committee Report." The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2010.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 19, 2011, which information will appear under the captions "Common Stock Ownership of Principal Shareholders and Management" and "Executive Compensation and Other Information - Equity Compensation Plan Information." The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2010.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Any information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 19, 2011, which information will appear under the caption entitled "Certain Relationships and Related Transactions," and "Proposal 1 – Election of Directors." The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2010.

Item 14. Principal Accounting Fees and Services

The information required by this Item is incorporated herein by reference to information appearing in our definitive Proxy Statement for our Annual Meeting of Shareholders to be held on May 19, 2011, which information will appear under the caption "Proposal 5 - Ratification of Appointment of Independent Registered Public Accounting Firm." The Proxy Statement will be filed with the Commission within 120 days after our last fiscal year-end which was December 31, 2010.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) The following documents are filed as part of this Report:

(1) Consolidated Financial Statements

The consolidated financial statements listed in the accompanying Index to Consolidated Financial Statements are filed as part of this report.

(2) Financial Statement Schedule

The financial statement schedules have been omitted because they are not applicable or the information required to be set forth therein is included in the consolidated financial statements or notes thereto.

(3) Exhibits

2.1	Agreement and Plan of Merger dated as of May 11, 2009 among the Company, Catapult Communications Corporation and Josie Acquisition Company(1)
2.2	Asset Purchase Agreement, dated October 21, 2009, by and between the Company and Agilent Technologies, Inc. (2)
3.1	Amended and Restated Articles of Incorporation, as amended(3)
3.2	Bylaws, as amended(4)
4.1	Indenture dated as of December 7, 2010 between the Company and Wells Fargo Bank, National Association, as trustee, including the form of 3.00% Convertible Senior Notes due 2015 (included as Exhibit A to the Indenture)(5)
10.1*	Amended and Restated 1997 Equity Incentive Plan(6)
10.2*	Amended and Restated Non-Employee Director Stock Option Plan(7)
10.3*	2010 Employee Stock Purchase Plan(8)
10.4*	Officer Severance Plan(9), together with Amendment to the Officer Severance Plan(10)
10.5*	Ixia Officer Severance Plan (as Amended and Restated effective January 1, 2009)(11)
10.6*	Form of Indemnity Agreement between Ixia and its directors and executive officers(12)
10.7	Office Lease Agreement dated September 14, 2007 between MS LPC Malibu Property Holdings, LLC and Ixia(13)
10.7.1	First Amendment to Office Lease dated February 11, 2010, between MS LPC Malibu Property Holdings, LLC and Ixia
10.7.2	Second Amendment to Office Lease dated November 15, 2010, between MS LPC Malibu Property Holdings, LLC and Ixia
10.8	License, Distribution and Option Agreement, dated July 7, 2003, between NetIQ Corporation and Ixia(14)
10.9	First Amendment to License, Distribution and Option Agreement dated as of January 6, 2005 between the Company and NetIQ Corporation(15)
10.10	Second Amendment to License, Distribution and Option Agreement dated as of June 16, 2005 between the Company and NetIQ Corporation(16)(17)
10.12*	Compensation of Named Executive Officers and Chief Executive Officer effective April 1, 2010
10.13*	Summary of Compensation for the Company's Non-Employee Directors(18)
10.14*	Ixia 2010 Executive Officer Bonus Plan(19)
10.15*	Employment Offer Letter Agreement dated as of August 8, 2007 between the Company

	and Atul Bhatnagar(20)
10.16*	Amended and Restated Ixia 2008 Equity Incentive Plan (21)
10.17	Master Services Agreement dated as of January 26, 2009 between the Company and Plexus Services Corp and its affiliates and subsidiaries(22)
14.1	Code of Ethics for Chief Executive and Senior Financial Officers(23)
21.1	Subsidiaries of the Company
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
31.1	Certificate of Chief Executive Officer of Ixia pursuant to Rule 13a-14(a) under the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certificate of Chief Financial Officer of Ixia pursuant to Rule 13a-14(a) under the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certificate of Chief Executive Officer and Chief Financial Officer of Ixia pursuant to Rule 13a-14(b) under the Exchange Act and Section 906 of the Sarbanes-Oxley Act of 2002

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* Constitutes a management contract or compensatory plan or arrangement required to be filed as an exhibit to this Annual Report on Form 10-K.

(1) Incorporated by reference to Exhibit 2.1 to Ixia's Current Report on Form 8-K (File No. 000-31523), as filed with the Commission on May 12, 2009.

(2) Incorporated by reference to Exhibit 2.1 to Ixia's Current Report on Form 8-K (File No. 000-31523), as filed with the Commission on October 27, 2009.

(3) Incorporated by reference to Exhibit 3.1 to Amendment No. 1 to the Company's Registration Statement on Form S-1 (Reg. No. 333-42678) filed with the Commission on September 5, 2000.

(4) Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on November 16, 2007.

(5) Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on December 8, 2010.

(6) Incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-8 (Reg. No. 333-117969) filed with the Commission on August 5, 2004.

(7) Incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-8 (Reg. No. 333-117969) filed with the Commission on August 5, 2004.

(8) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on June 3, 2010.

(9) Incorporated by reference to Exhibit 10.4 to Amendment No. 1 to the Company's Registration Statement on Form S-1 (Reg. No. 333-42678) filed with the Commission on September 5, 2000.

(10) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on January 7, 2009.

(11) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on January 7, 2009.

(12) Incorporated by reference to Exhibit 10.5 to Amendment No. 1 to the Company's Registration Statement on Form S-1 (Reg. No. 333-42678) filed with the Commission on September 5, 2000.

(13) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on September 25, 2007.

(14) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on August 19, 2003.

(15) Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-31523) for the fiscal quarter ended June 30, 2005.

(16) Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-31523) for the fiscal quarter ended June 30, 2005.

(17) Confidential treatment has been requested with respect to a portion of this exhibit, which portion has been omitted and filed separately with the Commission.

(18) Incorporated by reference to Exhibit 10.17 to the Company's Annual Report on Form 10-K (File No. 000-31523) for the fiscal year ended December 31, 2006.

(19) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on April 27, 2010.

(20) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on September 4, 2007.

(21) Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 000-31523) filed with the Commission on June 3, 2010.

(22) Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10 Q (File No. 000 31523) for the fiscal quarter ended March 31, 2009.

(23) Incorporated by reference to Exhibit 14.1 to the Annual Report on Form 10-K (File No. 000-31523) for the fiscal year ended December 31, 2003.

(b) Exhibits

See the list of Exhibits under Item 15(a)(3) of this Annual Report on Form 10-K.

(c) Financial Statement Schedules

See the Schedule under Item 15(a)(2) of this Annual Report on Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: March 4, 2011

IXIA

/s/ ATUL BHATNAGAR
Atul Bhatnagar
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Name	Title	Date
/s/ ATUL BHATNAGAR Atul Bhatnagar	President, Chief Executive Officer and Director (Principal Executive Officer)	March 4, 2011
/s/ THOMAS B. MILLER Thomas B. Miller	Chief Financial Officer (Principal Financial and Accounting Officer)	March 4, 2011
/s/ ERROL GINSBERG Errol Ginsberg	Chief Innovation Officer and Chairman of the Board	March 4, 2011
/s/ JON F. RAGER Jon F. Rager	Director	March 4, 2011
/s/ GAIL HAMILTON Gail Hamilton	Director	March 4, 2011
/s/ JONATHAN FRAM Jonathan Fram	Director	March 4, 2011
/s/ LAURENT ASSCHER Laurent Asscher	Director	March 4, 2011

IXIA

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Report of Independent Registered Public Accounting Firm

To Board of Directors and Stockholders of Ixia:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, shareholders' equity and cash flows present fairly, in all material respects, the financial position of Ixia and its subsidiaries at December 31, 2010 and 2009, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2010 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Los Angeles, California
March 4, 2011

IXIA
Consolidated Balance Sheets
(in thousands)

	December 31, 2010	December 31, 2009
Assets		
Current assets:		
Cash and cash equivalents	$ 76,082	$ 15,061
Short-term investments in marketable securities	151,696	10,337
Accounts receivable, net	67,838	55,765
Inventories	28,965	14,541
Prepaid expenses and other current assets	12,647	9,727
Total current assets	337,228	105,431
Investments in marketable securities	111,440	53,582
Property and equipment, net	22,745	18,693
Intangible assets, net	52,778	69,132
Goodwill	59,384	60,121
Other assets	6,308	2,129
Total assets	$ 589,883	$ 309,088
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ 9,924	$ 6,136
Accrued expenses	33,778	21,253
Deferred revenues	37,505	29,842
Income taxes payable	1,648	1,263
Total current liabilities	82,855	58,494
Deferred revenues	9,170	7,309
Other liabilities	6,378	6,620
Convertible senior notes	200,000	—
Total liabilities	298,403	72,423
Commitments and contingencies (Note 10)		
Shareholders' equity:		
Preferred stock, without par value; 1,000 shares authorized and none outstanding	—	—
Common stock, without par value; 200,000 shares authorized at December 31, 2010 and 2009; 67,613 and 63,062 shares issued and outstanding as of December 31, 2010 and 2009, respectively	115,590	87,283
Additional paid-in capital	133,249	118,754
Retained earnings	40,187	28,979
Accumulated other comprehensive income	2,454	1,649
Total shareholders' equity	291,480	236,665
Total liabilities and shareholders' equity	$ 589,883	$ 309,088

The accompanying notes are an integral part of these consolidated financial statements

IXIA
Consolidated Statements of Operations
(in thousands, except per share data)

	Year Ended December 31,		
	2010	2009	2008
Revenues:			
Products	$ 227,880	$ 142,871	$ 146,802
Services	48,935	35,123	29,065
Total revenues	276,815	177,994	175,867
Costs and operating expenses: [1]			
Cost of revenues - products	54,378	36,722	32,411
Cost of revenues - services	6,327	3,859	4,475
Research and development	72,488	53,977	49,167
Sales and marketing	79,986	60,374	59,374
General and administrative	35,142	28,061	25,502
Amortization of intangible assets	17,545	11,391	5,664
Acquisition and other related	2,991	6,179	1,479
Restructuring	3,587	4,637	—
Total costs and operating expenses	272,444	205,200	178,072
Income (loss) from operations	4,371	(27,206)	(2,205)
Interest income and other, net	10,970	2,160	6,574
Interest expense	(480)	—	—
Other-than-temporary impairment on investments	—	(2,761)	(20,243)
Income (loss) before income taxes	14,861	(27,807)	(15,874)
Income tax expense	3,653	16,396	21
Net income (loss)	$ 11,208	$ (44,203)	$ (15,895)
Earnings (loss) per share:			
Basic	$ 0.17	$ (0.70)	$ (0.24)
Diluted	$ 0.17	$ (0.70)	$ (0.24)
Weighted average number of common and common equivalent shares outstanding:			
Basic	65,157	62,710	65,087
Diluted	67,769	62,710	65,087

[1] Stock-based compensation included in:			
Cost of revenues - products	$ 524	$ 478	$ 513
Cost of revenues - services	198	182	195
Research and development	5,195	4,491	4,166
Sales and marketing	3,592	2,989	3,411
General and administrative	3,406	2,395	2,360

The accompanying notes are an integral part of these consolidated financial statements

IXIA
Consolidated Statements of Shareholders' Equity
(in thousands)

	Common Stock		Additional Paid-In	Retained	Accumulated Other Comprehensive	
	Shares	Amount	Capital	Earnings	Income (loss)	Total
Balance as of December 31, 2007	68,171	$ 132,092	$ 98,157	$ 89,077	$ (2,826)	$ 316,500
Net loss				(15,895)		(15,895)
Change in unrealized gains and losses on investments, net of tax					(1,680)	(1,680)
Reclassification adjustment for investment losses recognized in net loss, net of tax					4,191	4,191
Cumulative translation adjustment					61	61
Comprehensive loss						(13,323)
Shares issued pursuant to stock incentive plans and employee stock purchase plan options	1,029	3,897				3,897
Repurchase of shares pursuant to stock buyback programs	(5,809)	(43,603)				(43,603)
Stock-based compensation			10,645			10,645
Stock award tax shortfall			(920)			(920)
Balance as of December 31, 2008	63,391	92,386	107,882	73,182	(254)	273,196
Net loss				(44,203)		(44,203)
Change in unrealized gains and losses on investments, net of tax					1,959	1,959
Cumulative translation adjustment					(56)	(56)
Comprehensive loss						(42,300)
Shares issued pursuant to stock incentive plans and employee stock purchase plan options	1,294	3,321				3,321
Repurchase of shares pursuant to stock buyback programs	(1,623)	(8,424)				(8,424)
Stock-based compensation			10,535			10,535
Stock award tax benefit			337			337
Balance as of December 31, 2009	63,062	87,283	118,754	28,979	1,649	236,665
Net income				11,208		11,208
Change in unrealized gains and losses on investments, net of tax					314	314
Cumulative translation adjustment					491	491
Comprehensive income						12,013
Shares issued pursuant to stock incentive plans and employee stock purchase plan options	4,551	28,307				28,307
Stock-based compensation			12,915			12,915
Stock award tax benefit			1,580			1,580
Balance as of December 31, 2010	67,613	$ 115,590	$ 133,249	$ 40,187	$ 2,454	$ 291,480

The accompanying notes are an integral part of these consolidated financial statements

IXIA
Consolidated Statements of Cash Flows
(in thousands)

	Year Ended December 31,		
	2010	2009	2008
Cash flows from operating activities:			
Net income (loss)	$ 11,208	$ (44,203)	$ (15,895)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation	11,295	10,195	11,527
Amortization of intangible assets	17,545	11,391	5,664
Impairment on investments	—	2,761	20,243
Stock-based compensation	12,915	10,535	10,645
Deferred income taxes	(65)	22,955	(2,455)
Tax benefit (shortfall) from stock award transactions	1,580	337	(920)
Excess tax benefits from stock-based compensation	(2,074)	(103)	(188)
Changes in operating assets and liabilities, net of effect of acquisitions:			
Accounts receivable, net	(12,073)	(11,819)	(1,596)
Inventories	(14,424)	5,606	(2,235)
Prepaid expenses and other current assets	(1,640)	(2,589)	(1,596)
Other assets	541	1,560	(1,599)
Accounts payable	3,388	(240)	2,255
Accrued expenses	12,700	(6,494)	(167)
Deferred revenues	9,524	361	(248)
Income taxes payable and other liabilities	9	(4,978)	900
Net cash provided by (used in) operating activities	50,429	(4,725)	24,335
Cash flows from investing activities:			
Purchases of property and equipment	(14,857)	(8,025)	(8,540)
Purchases of available-for-sale securities	(267,919)	(262,704)	—
Proceeds from available-for-sale securities	69,216	225,529	2,001
Purchases of held-to-maturity securities	—	—	(8,924)
Proceeds from held-to-maturity securities	—	—	37,104
Purchases of other intangible assets	(441)	(362)	(314)
Proceeds (payments) in connection with acquisitions, net of cash acquired	212	(122,443)	(2,245)
Net cash (used in) provided by investing activities	(213,789)	(168,005)	19,082
Cash flows from financing activities:			
Proceeds from issuance of convertible senior notes	200,000	—	—
Debt issuance costs	(6,000)	—	—
Proceeds from exercise of stock options and employee stock purchase plan options	28,307	3,321	3,897
Repurchase of common stock	—	(8,424)	(43,603)
Excess tax benefits from stock-based compensation	2,074	103	188
Net cash provided by (used) in financing activities	224,381	(5,000)	(39,518)
Net increase (decrease) in cash and cash equivalents	61,021	(177,730)	3,899
Cash and cash equivalents at beginning of year	15,061	192,791	188,892
Cash and cash equivalents at end of year	$ 76,082	$ 15,061	$ 192,791
Supplemental disclosure of cash flow information:			
Cash paid during the year for:			
Income taxes	$ 2,076	$ 1,326	$ 5,443

The accompanying notes are an integral part of these consolidated financial statements

IXIA
Notes to Consolidated Financial Statements

1. Business and Summary of Significant Accounting Policies

Business

We are a leading provider of converged test systems and services for wireless and wired infrastructures and services. Our hardware and software products allow our customers to test and measure the performance, functionality, service quality and conformance of wireless and wired Internet Protocol (IP) equipment and networks, and the applications that run over them. Our solutions generate, capture, characterize and analyze high volumes of realistic network and application traffic, identifying problems, assessing performance, ensuring functionality and interoperability, and verifying conformance to industry specifications. We offer hardware platforms with interchangeable media interfaces, utilizing a common set of applications, Application Programming Interfaces (APIs) and automation tools that allow our customers to create integrated, easy-to-use automated test environments. The networks that our systems analyze primarily include Ethernet networks operating at speeds of up to 100 gigabits per second and wireless networks that carry data traffic over optical fiber, electrical cable and airwaves. We also offer hardware platforms and equipment that test wireless equipment, especially those associated with 3G (third generation), 4G (fourth generation) and Long-Term Evolution (LTE) networks. Customers also use our suite of software applications to test and verify web, Internet, security and business applications.

Use of Estimates

In the normal course of preparing financial statements in conformity with accounting principles generally accepted in the United States, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Consolidation

All subsidiaries are consolidated as they are 100% owned by us. All significant intercompany transactions and accounts are eliminated in consolidation.

Cash and Cash Equivalents

We consider all highly liquid investments with a maturity of three months or less at the date of purchase to be cash equivalents. Cash and cash equivalents are carried at cost, which approximates fair value. We generally place funds that are in excess of current needs in high credit quality instruments such as money market funds. There are no restrictions on the use of cash and investments.

Fair Value of Financial Instruments

Our financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and other liabilities are carried at cost, which approximates their fair values because of the short-term maturity of these instruments and the relative stability of interest rates.

We utilize foreign currency forward contracts to hedge certain accounts receivable amounts that are denominated in Japanese Yen. These contracts are used to reduce the risk associated with exchange rate movements, as gains and losses on these contracts are intended to offset exchange losses and gains on underlying exposures. Changes in the fair value of these forward contracts are recorded immediately in earnings. We do not enter into foreign exchange forward contracts for speculative or trading purposes. To date, net gains and losses on the above transactions have not been significant. As of December 31, 2010, we did not have any significant foreign currency forward contracts outstanding.

Investments in Marketable Securities

We determine the appropriate classification of investments in marketable securities at the time of purchase and reevaluate such determination at each balance sheet date. Accretion and amortization of purchase discounts and premiums are included in interest income and other, net. Available-for-sale securities are stated at fair value. The net unrealized gains or losses on available-for-sale securities are reported as a separate component of accumulated other comprehensive income or loss, net of tax. The specific identification method is used to compute realized gains and losses on our marketable securities. In 2010, we had gross realized gains of $1.1 million (principally attributable to the sale in the fourth quarter of 2010 of certain of our auction rate securities that were previously written-off resulting in proceeds of approximately $1.0 million) and gross realized losses of $70,000. Gross realized gains and gross realized losses on our marketable securities were not significant for the years ended December 31, 2009 and 2008.

As of December 31, 2010 and 2009, our available-for-sale securities consisted of U.S. government and government agency debt securities, corporate debt securities and auction rate securities, and had a weighted contractual maturity of 1.19 and 1.24 years, respectively.

We periodically review our marketable securities for impairment. If we conclude that any of our investments are impaired, we determine whether such impairment is "other-than-temporary." Factors we consider to make such a determination include, among others, the severity of the impairment, the reason for the decline in value and the potential recovery period. In April 2009, we adopted accounting guidance which amended the other-than-temporary impairment model for debt securities. Under the accounting guidance, declines in the fair value of held-to-maturity and available-for-sale debt securities below their cost that are deemed to be other-than-temporary are reflected in earnings to the extent the impairment is related to credit losses. The amount of the impairment related to other factors is recognized in other comprehensive income.

During 2009 and 2008, we recorded an unrealized other-than-temporary impairment charge of $2.8 million (pre-tax) and $20.2 million (pre-tax), respectively to earnings related to our auction rate securities and our investments in bonds issued by Lehman Brothers Holdings, Inc. (See Note 6 for additional information).

It is possible that we could recognize future impairment charges on our auction rate securities or our other investment securities we currently own if future events, new information or the passage of time cause us to determine that a decline in our carrying value is other-than-temporary. We will continue to review and analyze these securities for triggering events each reporting period.

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is based on our best estimate of the amount of probable credit losses in existing accounts receivable. We review the allowance for doubtful accounts monthly and provisions are made upon a specific review of all significant past due receivables. For those receivables not specifically reviewed, provisions are provided at a general rate that is determined based on historical write-off experience, our assessment of current

customer information and other relevant data. Account balances are charged off against the allowance when we believe it is probable the receivable will not be recovered. We do not have any off-balance-sheet credit exposure related to our customers.

Inventories

Inventories are goods held for sale in the normal course of business. Inventories are stated at the lower of cost (first-in, first-out) or market. The inventory balance is segregated between raw materials, work in process ("WIP") and finished goods. Raw materials are low level components, many of which are purchased from vendors, WIP is partially assembled products and finished goods are products that are ready to be shipped to end customers. Consideration is given to inventory shipped and received near the end of a period and the transaction is recorded when transfer of title occurs. We evaluate inventory for obsolescence and adjust to net realizable value based on inventory that is obsolete or in excess of current demand.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation of our computer software and equipment is computed using the straight-line method based upon the estimated useful lives of the applicable assets, ranging from two to five years. Leasehold improvements are amortized over the lesser of the lease term or the estimated useful lives of the improvements. Useful lives are evaluated regularly by management in order to determine recoverability in light of current technological conditions. Property and equipment also includes the cost of our products used for research and development and sales and marketing activities, including product demonstrations for potential customers. Repairs and maintenance are charged to expense as incurred while renewals and improvements are capitalized. Upon the sale or retirement of property and equipment, the accounts are relieved of the cost and the related accumulated depreciation, with any resulting gain or loss included in the statements of operations.

Goodwill, Purchased Intangible and Other Long-Lived Assets

Goodwill is recorded as the difference, if any, between the aggregate consideration paid for an acquisition and the fair value of the acquired net tangible and intangible assets. Although goodwill is not amortized, we review our goodwill for impairment annually, or more frequently, if events or changes in circumstances warrant a review. We completed our annual impairment test of our single reporting unit in the fourth quarter of 2010 and determined that there was no impairment.

Acquired intangible assets with finite lives, including purchased technology and customer relationships, are amortized over their estimated useful lives and reflected in the Amortization of Intangible Assets line item on our statements of operations. Our acquired intangible assets are reviewed for impairment whenever an impairment indicator exists. We continually monitor events or changes in circumstances that could indicate that the carrying amounts of our long-lived assets, including our intangible assets, may not be recoverable. When such events or changes in circumstances occur, we assess recoverability by determining whether the carrying value of such assets will be recovered through the undiscounted expected future cash flows. If the future undiscounted cash flows are less than the carrying amount of these assets, we recognize an impairment loss based on the excess of the carrying amount over the fair value of the assets. Fair value is determined using a discounted cash flow analysis that involves the use of significant estimates and assumptions, some of which may be based in part on historical experience, forecasted information and discount rates. No such impairment charges were recorded during the years ended December 31, 2010, 2009 and 2008.

Litigation

We are currently involved in certain legal proceedings. We accrue for losses when the loss is deemed probable and the liability can reasonably be estimated. Where a liability is probable and there is a range of estimated loss with no best estimate in the range, we record the minimum estimated liability related to the claim. As additional information becomes available, we assess the potential liability related to our pending litigation and revise our estimates. See Note 10 for additional information.

Product Warranty

We generally provide an initial standard warranty (generally for 90-day or 12-month periods) on our hardware products after product shipment and accrue for estimated future warranty costs based on actual historical experience and other relevant data, as appropriate, at the time product revenue is recognized. All product warranty expenses are reflected within cost of sales in the accompanying consolidated statements of operations. Accrued product warranty costs are included as a component of accrued expenses in the accompanying consolidated balance sheets.

Activity in the product warranty liability account for the years presented is as follows (in thousands):

	December 31, 2010	December 31, 2009	December 31, 2008
Balance at beginning of year	$ 501	$ 933	$ 577
Current year provision	841	533	619
Expenditures	(645)	(544)	(263)
Adjustments relating to pre-existing warranties	—	(421)	—
Balance at end of year	$ 697	$ 501	$ 933

Revenue Recognition

Our revenues are principally derived from the sale and support of our test systems. Product revenues primarily consist of sales of our hardware and software products. Our service revenues primarily consist of the provision of post contract customer support and maintenance ("PCS") related to the initial period provided with the product purchase (generally for 90-day or 12-month periods) and separately purchased extended PCS contracts, and to our implied PCS obligations. Service revenues also include separately purchased extended hardware warranty support for certain of our products, training and other professional services. PCS on our software products includes unspecified when and if available software upgrades and customer technical support services. In some instances our software products may be installed and operated independently from our hardware products. At other times, our software products are installed on and work with our hardware products to enhance the functionality of the overall test system. As our software is generally more than incidental to the sale of our test systems, we recognize revenue by applying software revenue recognition guidance.

Our test systems are generally fully functional at the time of shipment and do not require us to perform any significant production, modification, customization or installation after shipment. As such, revenue from hardware and software product sales to customers, including distributors, is recognized upon shipment provided that (i) evidence of an arrangement exists, which is typically in the form of a customer purchase order; (ii) delivery has occurred (i.e., risks and rewards of ownership have passed to the customer); (iii) the sales price is fixed or determinable; and (iv) collection is deemed probable.

When sales arrangements involve multiple elements, or multiple products, and we have vendor-specific objective evidence ("VSOE") of fair value for each element in the arrangement, we recognize revenue based on the relative fair value of all elements within the arrangement. We determine VSOE based on sales prices charged to customers when the same element is sold separately or based upon stated substantive PCS renewal rates for certain arrangements. Many of our products, such as our software products, typically include an initial period (generally 90-day or 12-month periods) of free PCS, which is not sold separately. Accordingly, we are unable to establish VSOE for these products.

In cases where VSOE only exists for the undelivered elements such as PCS, we apply the residual method to recognize revenue. Under the residual method, the total arrangement fee is allocated first to the undelivered elements, typically PCS, based on their VSOE, and the residual portion of the fee is allocated to the delivered elements, typically our hardware and software products, and is recognized as revenue assuming all other revenue recognition criteria as described above have been met.

If VSOE cannot be determined for all undelivered elements of an arrangement, we defer revenue until the earlier of (i) the delivery of all elements or (ii) the establishment of VSOE for all undelivered elements, provided that if the only undelivered element is PCS or a service, the total arrangement fee is recognized as revenue over the PCS or service term.

Services revenues from our initial and separately purchased extended PCS arrangements (generally offered for 12-month periods) are recognized ratably over the contractual coverage period. In addition, for implied PCS obligations, we defer revenues from product sales and allocate these amounts to PCS revenues to account for the circumstances in which we provide PCS after the expiration of the customer's contractual PCS period. Deferred revenues for these implied PCS obligations are recognized ratably over the implied PCS period, which is typically based on the expected economic life of our software products of four years. To the extent we determine that implied PCS is no longer being provided after the expiration of the customer's contractual PCS period, the remaining deferred revenue balance related to the implied PCS obligation is reversed and recognized as revenue in the period of cessation of the implied PCS obligation.

Revenues from our separately purchased extended hardware warranty arrangements are recognized ratably over the contractual coverage period. We recognize revenues from training and other professional services at the time the services are provided or completed, as applicable.

We use distributors to complement our direct sales and marketing efforts in certain international markets. Due to the broad range of features and options available with our hardware and software products, distributors generally do not stock our products and typically place orders with us after receiving an order from an end customer. These distributors receive business terms of sale generally similar to those received by our other customers.

Cost of Revenues

Our cost of revenues related to the sale of our hardware and software products includes materials, payments to third party contract manufacturers, royalties, and salaries and other expenses related to our manufacturing and supply operations, technical support and professional service personnel. We outsource the majority of our manufacturing operations, and we conduct supply chain management, quality assurance, documentation control, shipping and some final assembly and testing at our facility in Calabasas, California and/or in Penang, Malaysia. Accordingly, a significant portion of our cost of revenues related to our products consists of payments to our contract manufacturers. Cost of revenues related to the provision of services includes salaries and other expenses associated with technical support services, professional services and the warranty cost of hardware that is replaced or repaired during the warranty coverage period. Cost of revenues does not include the

amortization of purchased technology related to our acquisitions of certain businesses, product lines and technologies of $12.8 million, $9.2 million and $4.8 million for the years ended December 31, 2010, 2009 and 2008, respectively, which are included within our Amortization of Intangible Assets line item on our consolidated statements of operations.

Research and Development

Research and development expenses consist primarily of salaries and other personnel costs related to the design, development, testing and enhancement of our products. Costs related to research and development activities, including those incurred to establish the technological feasibility of a software product, are expensed as incurred. If technological feasibility is established, all development costs incurred until general product release are subject to capitalization. To date, the establishment of technological feasibility of our products and general release have substantially coincided. As a result, we have not capitalized any development costs.

Software Developed for Internal Use

We capitalize costs of software, consulting services, hardware and payroll-related costs incurred to purchase or develop internal-use software. We expense costs incurred during preliminary project assessment, research and development, re-engineering, training and application maintenance phases. To date, internal costs incurred to develop software for internal use have not been significant.

Advertising

Advertising costs are expensed as incurred. Advertising costs were $1.1 million, $1.0 million and $1.0 million for the years ended December 31, 2010, 2009 and 2008, respectively.

Stock-Based Compensation

Share-based payments, including grants of stock options, restricted stock units and employee stock purchase rights, are required to be recognized in the financial statements based on the estimated fair values for accounting purposes on the grant date. We use the Black-Scholes option pricing model to estimate the fair value for accounting purposes of share-based awards. The determination of the fair value of share-based awards utilizing the Black-Scholes model is affected by our stock price and a number of assumptions, including expected volatility, expected life and risk-free interest rate. The expected life and expected volatility are estimated based on historical data. The risk-free interest rate assumption is based on observed interest rates appropriate for the terms of our share-based awards. Stock-based compensation expense recognized in our consolidated financial statements is based on awards that are ultimately expected to vest. The amount of stock-based compensation expense is reduced for estimated forfeitures based on historical experience as well as future expectations. Forfeitures are required to be estimated at the time of grant and revised, if necessary, in subsequent periods if estimated and actual forfeitures differ from these initial estimates. We evaluate the assumptions used to value share-based awards on a periodic basis. If factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. If there are any modifications or cancellations of the underlying unvested share-based awards, we may be required to accelerate, increase or cancel any remaining unrecognized stock-based compensation expense. We attribute the value of stock-based compensation to expense based on the graded, or accelerated multiple-option, approach.

We have outstanding share-based awards that have performance-based vesting conditions. Awards with performance-based vesting conditions require the achievement of certain financial or other performance criteria as a condition to the vesting. We recognize the estimated fair value of performance-based awards, net of

estimated forfeitures, as stock-based compensation expense over the performance period, using graded approach, based upon our determination of whether it is probable that the performance targets will be achieved. At each reporting period, we reassess the probability of achieving the performance criteria and the performance period required to meet those targets. Determining whether the performance criteria will be achieved involves judgment, and the estimate of stock-based compensation expense may be revised periodically based on changes in the probability of achieving the performance criteria. Revisions are reflected in the period in which the estimate is changed. If performance goals are not met, no stock-based compensation expense is recognized, and, to the extent stock-based compensation was previously recognized, such stock-based compensation is reversed.

Income Taxes

We account for income taxes using the liability method. Deferred taxes are determined based on the differences between the financial statement and tax bases of assets and liabilities, using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

We recognize, in our consolidated financial statements, the impact of tax positions that are more likely than not to be sustained upon examination based on the technical merits of the positions.

Earnings (Loss) Per Share

Basic earnings (loss) per share is computed using the weighted-average number of common shares outstanding during the period. Diluted earnings per share is computed using the weighted-average number of common shares and dilutive potential common shares outstanding during the period. Dilutive potential common shares primarily consist of shares underlying our convertible senior notes, employee stock options and restricted stock units. See Note 13 for additional information.

Foreign Currency Translation and Transactions

Assets and liabilities of non-U.S. subsidiaries that operate in a local currency environment are translated to U.S. Dollars at exchange rates in effect at the balance sheet date, with the resulting translation adjustments included as a separate component in accumulated other comprehensive income (loss). Income and expense accounts are translated at average exchange rates during the year. Where the U.S. Dollar is the functional currency, certain balance sheet and income statement accounts are remeasured at historical exchange rates and translation adjustments from the remeasurement of the local currency amounts to U.S. Dollars are included in interest income and other, net. In 2010, we had a net foreign currency loss of $1.0 million attributable to our foreign subsidiaries, and foreign currency gains and losses were not significant for the years ended December 31, 2009 and 2008. Foreign currency gains and losses are included in interest income and other, net.

Comprehensive Income

Comprehensive income (loss) includes all changes in equity (net assets) during a period from non-owner sources. Accumulated other comprehensive income (loss) includes unrealized gains and losses on investments and foreign currency translation adjustments.

Segments

Operating segments are defined as components of an enterprise engaged in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker

("CODM") of the enterprise to make decisions about resources to be allocated to the segment and to assess its performance. Our CODM is our Chief Executive Officer who reviews operating budgets and results presented on a consolidated basis for the purposes of allocating resources and evaluating financial performance. Accordingly, we have determined that we operated within one separately reportable business segment as of, and for the years ended, December 31, 2010, 2009 and 2008. Future changes to our organizational structure or our business, or changes in the way our CODM manages our business, may result in changes to our reportable segments.

Recent Accounting Pronouncements

In October 2009, the Financial Accounting Standards Board ("FASB") issued authoritative guidance for the accounting of multiple-deliverable revenue arrangements, which establishes the accounting and reporting guidance for arrangements including multiple revenue-generating activities. This guidance provides amendments to the criteria for separating deliverables, and measuring and allocating arrangement consideration to one or more units of accounting. The amendments also establish a selling price hierarchy for determining the selling price of a deliverable. Significantly enhanced disclosures are also required to provide information about a vendor's multiple-deliverable revenue arrangements, including information about the nature and terms, significant deliverables, and its performance within arrangements. This guidance also requires providing information about the significant judgments made and changes to those judgments and about how the application of the relative selling-price method affects the timing or amount of revenue recognition. This guidance is effective prospectively for revenue arrangements entered into or materially modified in the fiscal years beginning on or after June 15, 2010 or on a retrospective basis. Early application is permitted.

In October 2009, the FASB issued authoritative guidance for the accounting of certain revenue arrangements that include software elements, which changes the accounting model for revenue arrangements that include both tangible products and software elements that are "essential to the functionality," and scopes these products out of current software revenue accounting guidance. The new guidance includes factors to help companies determine the software elements that are considered "essential to the functionality." The amendments will now subject software-enabled products to other revenue guidance and disclosure requirements, such as guidance surrounding revenue arrangements with multiple deliverables. The amendments are effective prospectively for revenue arrangements entered into or materially modified in the fiscal years beginning on or after June 15, 2010 or on a retrospective basis. Early application is permitted.

We have adopted the above guidance on revenue recognition in the first quarter of 2011, and had we adopted this guidance in the first quarter of 2010, we estimate that our 2010 total revenues would have increased by less than one percent.

In January 2010, the FASB issued authoritative guidance for the accounting of fair value measurements and disclosures, which amends the disclosure requirements, related to recurring and nonrecurring fair value measurements. The guidance requires new disclosures on the transfers of assets and liabilities between Level 1 (quoted prices in active market for identical assets or liabilities) and Level 2 (significant other observable inputs) of the fair value measurement hierarchy, including the reasons and the timing of the transfers. Additionally, the guidance requires a roll forward of activities on purchases, sales, issuance, and settlements of the assets and liabilities measured using significant unobservable inputs (Level 3 fair value measurements). The guidance became effective for us with the reporting period beginning January 1, 2010, except for the disclosure on the roll forward activities for Level 3 fair value measurements, which will become effective for us with the reporting period beginning January 1, 2011. Adoption of this new guidance required additional disclosures that did not have a material impact on our consolidated financial position, results of operations and cash flows.

2. Convertible Senior Notes

On December 7, 2010, we issued $200.0 million in aggregate principal amount of 3.00% Convertible Senior Notes due December 15, 2015 unless earlier repurchased or converted (the "Notes"). The unsecured Notes were offered and sold only to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended (the "Securities Act"). The Notes are governed by the terms of an indenture agreement (the "Indenture") dated December 7, 2010, which was previously filed with the Securities and Exchange Commission (the "SEC") on December 8, 2010.

The Notes bear interest at a rate of 3.00% per year, payable semiannually in arrears on June 15 and December 15 of each year, beginning on June 15, 2011. We may in certain instances be required to pay additional interest if the Notes are not freely tradable by the holders thereof (other than our affiliates) beginning six months after the date of issuance and in connection with events of default relating to our failure to comply with our reporting obligations to the trustee and the SEC.

Debt issuance costs were approximately $6.0 million, which were capitalized to deferred issuance costs and are being amortized to interest expense over the five year term of the Notes.

The Notes are convertible at any time prior to the close of business on the third business day immediately preceding the maturity date at the holder's option, into shares of our common stock at an initial conversion rate of 51.4536 shares per $1,000 principal amount of Notes, which represents an initial conversion price of approximately $19.43 per share. The conversion rate is subject to adjustment for certain events that occur prior to maturity, such as a change in control transaction.

We may not redeem the Notes prior to the maturity date. If a fundamental change (such as a change in control event or if our common stock ceases to be listed or quoted on any of the New York Stock Exchange, the Nasdaq Global Select Market or the Nasdaq Global Market or any of their respective successors) occurs prior to the maturity date, holders may require us to repurchase for cash all or part of their Notes at a repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The Indenture provides for customary events of default (subject in certain cases to grace and cure periods) including, without limitation, (i) the failure to pay amounts due under the Notes, (ii) the failure to deliver the shares of our common stock due upon conversion of any Note, (iii) our failure to comply with other agreements contained in the Indenture or in the Notes, (iv) payment defaults on, or acceleration of, other indebtedness, (v) the failure to pay certain judgments, and (vi) certain events of bankruptcy, insolvency or reorganization with respect to the Company. An event of default under the Indenture (other than an event of default related to certain events of bankruptcy, insolvency or reorganization) will allow either the trustee or the holders of at least 25% in aggregate principal amount of the then outstanding Notes to cause the acceleration of the Notes. An event of default related to certain events of bankruptcy, insolvency or reorganization with respect to the Company will automatically cause the acceleration of the Notes.

As of December 31, 2010, the estimated fair value of our $200.0 million principal convertible senior notes approximated $222.0 million. The estimated fair value of the Notes was determined based on the market price of the Notes as of December 31, 2010.

3. Acquisitions

On January 1, 2009, we adopted the new accounting guidance for accounting for business combinations, which established principles and requirements for how the acquirer of a business recognizes, measures and discloses in its financial statements the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree. The new accounting guidance for business combinations also requires that transaction costs be expensed as incurred. Prior to adoption of the new accounting guidance, transactions costs were recorded as part of the purchase price. The guidance required prospective application for all acquisitions after January 1, 2009.

We acquired Catapult Communications Corporation ("Catapult") on June 23, 2009 and Agilent Technologies, Inc.'s ("Agilent") N2X Data Network Testing Product Line business ("N2X") on October 30, 2009 and have included the results of these acquisitions in our consolidated results of operations since the acquisition dates.

Catapult Communications Corporation

The aggregate consideration totaled $106.6 million and consisted of (i) $104.6 million paid for the outstanding shares of common stock of Catapult and (ii) $2.0 million paid to holders of options to purchase Catapult common stock that were cancelled in connection with the acquisition and that had exercise prices lower than the per share purchase price. For the years ended December 31, 2010, 2009 and 2008, acquisition and other related costs related to the Catapult transaction, including integration activities, were $1.1 million, $4.0 million and $741,000, respectively. These acquisition related costs have been expensed as incurred, and have been included within the Acquisition and other related expenses line item on our consolidated statements of operations. The acquisition was funded from our existing cash and cash equivalents.

The following table summarizes the allocation of the purchase price to the estimated fair values of the assets acquired and liabilities assumed at the date of the Catapult acquisition (in thousands):

Cash and cash equivalents	$ 28,190
Short-term investments in marketable securities	8,638
Accounts receivable	3,815
Inventories	3,950
Other current assets	3,331
Long-term investments in marketable securities	4,366
Deferred income taxes (non-current)	2,490
Other non-current assets	2,108
Identifiable intangible assets	48,790
Goodwill	22,466
Total assets acquired	128,144
Accounts payable and accrued expenses	(9,116)
Deferred revenues	(5,900)
Other liabilities (non-current)	(6,570)
Net assets acquired	$ 106,558

The identifiable intangible assets of $48.8 million consist of $26.7 million of acquired technology, $13.4 million of customer relationships, $6.1 million of service agreements, $1.0 million related to a non-compete agreement and $1.6 million of other identifiable intangible assets. These intangible assets are amortized using a

straight-line method over their expected useful lives ranging from three to six years. The goodwill recorded in connection with this transaction is not deductible for income tax purposes.

Agilent Technologies' N2X Data Networks Product Line

We completed our acquisition from Agilent Technologies, Inc. ("Agilent") of its N2X Data Network Testing Product Line business ("N2X") for $42.8 million in cash and the assumption of certain liabilities of N2X. The aggregate purchase price was funded from our existing cash and cash equivalents. In return for the consideration paid, we acquired certain assets and liabilities of N2X, including inventory, accounts receivables, fixed assets, accounts payable, customer relationships, certain intellectual property rights, and other assets. The assembled workforce of N2X was comprised of approximately 200 individuals engaged primarily in research and development and sales activities. As part of the transaction, we also entered into a Transition Services Agreement with Agilent whereby Agilent assisted in the operation of certain portions of N2X for the first several months of 2010 as we worked to transition the employees and operations to Ixia. For the year ended December 31, 2010 and 2009, acquisition and other related costs related to this transaction totaled $1.9 million and $2.2 million, respectively. These acquisition and other related costs have been expensed as incurred, and have been included within the Acquisition Related expenses line item on our consolidated statements of operations.

The following table summarizes the allocation of the purchase price to the estimated fair values of the assets acquired and liabilities assumed at the date of the N2X acquisition (in thousands):

Accounts receivable	$	6,130
Inventories		1,231
Property and equipment		1,439
Identifiable intangible assets		21,800
Goodwill		20,190
Total assets acquired		50,790
Accounts payable and accrued expenses		(2,757)
Deferred revenues		(5,223)
Net assets acquired	$	42,810

During the fourth quarter of 2010, we were reimbursed by Agilent for certain employee related liabilities in the amount of $737,000. As a result, the purchase price was reduced from $43.5 million to $42.8 million.

The identifiable intangible assets of $21.8 million consist of $10.4 million of acquired technology, $10.0 million of customer relationships, $0.4 million related to a non-compete agreement and $1.0 million related to order backlog. These intangible assets are amortized using a straight-line method over their expected economic lives ranging from six months to six years. We currently estimate that approximately $8.2 million of the goodwill recorded in connection with this transaction will be tax deductible for income tax purposes.

Pro Forma Results

The following table summarizes the unaudited proforma total revenues and net loss of the combined entities had the acquisitions of Catapult and N2X occurred on January 1, 2009 (in thousands):

	Year Ended December 31, 2009 (Proforma)
Total revenues	$ 229,978
Net loss	(67,625)

The combined results in the table above have been prepared for comparative purposes only and include acquisition related adjustments for, among others items, amortization of identifiable intangible assets and reductions in revenues related to the estimated fair value adjustment to deferred revenues. The combined results do not purport to be indicative of the results of operations which would have resulted had the acquisition been effective at the beginning of the applicable periods noted above, or the future results of operations of the combined entities.

4. Restructuring Costs

During the first quarter of 2010, our management approved, committed to and initiated a plan to restructure our operations in light of our acquisition of N2X (the "N2X Restructuring"). The N2X Restructuring included a net reduction in force of approximately 80 positions, which represented approximately 7% of our worldwide work force, including contractors, at the beginning of the first quarter of 2010. The restructuring was completed during the first quarter of 2010.

During the third quarter of 2009, our management approved, committed to and initiated a plan to restructure our operations in light of our acquisition of Catapult ("Catapult Restructuring"). The Catapult Restructuring included a net reduction in force of approximately 45 positions, which represented approximately 4% of our worldwide work force, including contractors, at the beginning of the third quarter of 2009. The restructuring was substantially completed during the fourth quarter of 2009.

During the second quarter of 2009 and prior to the acquisition of Catapult, our management approved, committed to and initiated a plan to restructure our operations ("Ixia Restructuring"). The Ixia Restructuring included a net reduction in force of approximately 80 positions, which represented approximately 10% of our worldwide work force, including contractors, prior to the June 2009 announcement of the restructuring. The restructuring was substantially completed during the third quarter of 2009.

Activity related to our restructuring plans is as follows (in thousands):

	Total	N2X Restructuring	Catapult Restructuring	Ixia Restructuring
Accrual at January 1, 2009	$ —	$ —	$ —	$ —
Charges	4,637	—	3,517	1,120
Payments	(3,662)	—	(2,584)	(1,078)
Non-cash items	(96)	—	(96)	—
Accrual at December 31, 2009	$ 879	$ —	$ 837	$ 42
Charges	3,587	3,538	49	—
Payments	(4,466)	(3,538)	(886)	(42)
Accrual at December 31, 2010	$ —	$ —	$ —	$ —

5. Concentrations

Credit Risk

Financial instruments that subject us to concentrations of credit risk consist primarily of cash and cash equivalents, investments and trade accounts receivable. We maintain our cash and cash equivalents with reputable financial institutions, and at times, cash balances may be in excess of FDIC insurance limits. We extend differing levels of credit to customers, typically do not require collateral, and maintain reserves for potential credit losses based upon the expected collectability of accounts receivable.

Significant Customer

For the years ended December 31, 2010, 2009 and 2008, only one customer comprised more than 10% of total revenues as follows (in thousands, except percentages):

	Year Ended December 31,		
	2010	2009	2008
Amount of total revenues	$ 37,508	$ 27,792	$ 36,857
As a percentage of total revenues	13.5%	15.6%	21.0%

As of December 31, 2010 and 2009, we had receivable balances from this customer approximating 6.5% and 14.2%, respectively, of total accounts receivable. As of December 31, 2010, we had a receivable balance from a second significant customer that approximated 14.6% of total accounts receivable, compared to approximately 14.2% of total accounts receivable as of December 31, 2009.

International Data

For the years ended December 31, 2010, 2009 and 2008, total international revenues based on customer location consisted of the following (in thousands, except percentages):

	Year Ended December 31,		
	2010	2009	2008
Amount of total revenues	$ 136,032	$ 76,325	$ 63,045
As a percentage of total revenues	49.1%	42.9%	35.8%

As of December 31, 2010 and 2009, our property and equipment were geographically located as follows (in thousands):

	As of December 31,	
	2010	2009
United States	$ 11,235	$ 10,874
Romania	2,286	2,647
India	3,268	2,506
Other	5,956	2,666
	$ 22,745	$ 18,693

Sources of Supply

We outsource the manufacture, assembly and testing of printed circuit board assemblies, certain interface cards and certain chassis to a limited number of third party contract manufacturers and assembly companies.

We cannot be certain that we will be able to effectively manage or retain our contract manufacturers, or that these contract manufacturers will continue to operate as going concerns or to meet our future requirements for timely delivery of products of sufficient quality and quantity. We and our contract manufacturers currently buy some key components of our products from a limited number of suppliers, which are manufactured by a limited number of companies. Although we believe that other contract manufacturers and suppliers could provide similar services and components on comparable terms, a change in one of our key contract manufacturers or suppliers could cause a delay in manufacturing, additional cost inefficiencies and a possible loss of sales, which could adversely affect our consolidated operating results.

6. Selected Balance Sheet Data

Accounts Receivable, Net

Accounts receivable, net consisted of the following (in thousands):

	December 31, 2010	December 31, 2009
Trade accounts receivable	$ 68,911	$ 56,419
Allowance for doubtful accounts	(1,073)	(654)
	$ 67,838	$ 55,765

Activity in the allowance for doubtful accounts during the years presented is as follows (in thousands):

	December 31, 2010	December 31, 2009	December 31, 2008
Balance at beginning of year	$ 654	$ 764	$ 614
Charged to cost and expenses	519	372	300
Reversal of cost and expenses	—	—	—
Deductions	(100)	(482)	(150)
Balance at end of year	$ 1,073	$ 654	$ 764

Investments in Marketable Securities

Investments in marketable securities as of December 31, 2010 consisted of the following (in thousands):

	Amortized Cost	Fair Value
Available-for-sale – short-term:		
U.S. government and agency debt securities	$ 123,495	$ 123,619
Corporate debt securities	28,057	28,077
	151,552	151,696
Available-for-sale – long-term:		
U.S. government and agency debt securities	55,572	55,584
Corporate debt securities	49,861	50,605
Auction rate securities	2,975	5,251
	108,408	111,440
	$ 259,960	$ 263,136

Investments in marketable securities as of December 31, 2009 consisted of the following (in thousands):

	Amortized Cost	Fair Value
Available-for-sale – short-term:		
U.S. government and agency debt securities	$ 5,711	$ 5,713
Corporate debt securities	4,584	4,624
	10,295	10,337
Available-for-sale – long-term:		
U.S. government and agency debt securities	34,534	34,673
Corporate debt securities	12,605	13,236
Auction rate securities	3,823	5,673
	50,962	53,582
	$ 61,257	$ 63,919

During 2009 and 2008, we recorded an unrealized other-than-temporary impairment charge of $2.8 million (pre-tax) and $20.2 million (pre-tax), respectively, to earnings related to our auction rate securities and our investments in bonds issued by Lehman Brothers Holdings, Inc.

During the first quarter of 2010, we entered into an $8.9 million favorable legal settlement with a former investment manager attributable to our auction rate securities that were substantially written down in 2009 and 2008. As part of the settlement, we retained the auction rate securities at issue, which had an aggregate par value of $19.0 million. During the fourth quarter of 2010, we sold certain of our auction rate securities that were previously written-off and received proceeds of approximately $1.0 million. The settlement and sales proceeds were recorded to the interest income and other, net line item within our consolidated statement of operations.

As of December 31, 2010, we currently hold illiquid auction rate securities with an estimated fair value of $5.3 million ($6.5 million at par value or original cost). Based on the general lack of liquidity for our auction rate securities portfolio as of December 31, 2010, we continue to classify these investments as long-term on our consolidated balance sheet.

Inventories

Inventories consisted of the following (in thousands):

	December 31, 2010	December 31, 2009
Raw materials	$ 8,173	$ 3,674
Work in process	7,745	4,731
Finished goods	13,047	6,136
	$ 28,965	$ 14,541

Property and Equipment, Net

Property and equipment, net consisted of the following (dollars in thousands):

	Useful Life (in years)	December 31, 2010	December 31, 2009
Computer equipment	3	$ 11,356	$ 10,178
Computer software	3-5	11,944	9,725
Demonstration equipment	2	17,437	13,382
Development equipment	5	19,756	16,872
Furniture and other equipment	5	17,196	16,751
Leasehold improvements	1-5	8,799	6,645
		86,488	73,553
Accumulated depreciation		(63,743)	(54,860)
		$ 22,745	$ 18,693

Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	December 31, 2010	December 31, 2009
Accrued bonuses	$ 9,928	$ 915
Accrued vacation	5,395	4,990
Accrued payroll	4,814	3,457
Accrued commissions	2,633	1,203
Accrued legal and professional fees	2,377	2,395
Accrued property and sales tax payable	1,174	734
Employee stock purchase plan payroll deductions	1,057	689
Deferred rent	985	412
Accrued royalties	794	727
Accrued warranty	697	501
Accrued travel	363	349
Due to third parties for technology and certain assets	150	949
Other	3,411	3,932
	$ 33,778	$ 21,253

7. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for an asset or liability in an orderly transaction between market participants at the measurement date. The hierarchy below lists three levels of fair value based on the extent to which inputs used in measuring fair value are observable in the market. We categorize each of our fair value measurements in one of these three levels based on the lowest level input that is significant to the fair value measurement in its entirety. This hierarchy prioritizes the inputs into three broad levels as follows:

Level 1. Observable inputs such as quoted prices in active markets;

Level 2. Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and

Level 3. Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Financial assets carried at fair value as of December 31, 2010 and 2009 are classified in the table below in one of the three categories described above (in thousands):

	December 31, 2010				December 31, 2009			
	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents:[1]								
Money market funds	$ 6,037	$ 6,037	$ –	$ –	$ 241	$ 241	$ –	$ –
U.S. Treasury, government and agency debt securities	30,419	–	30,419	–	–	–	–	–
Corporate debt securities	9,997	–	9,997	–	–	–	–	–
Short-term investments:[1]								
U.S. Treasury, government and agency debt securities	123,619	–	123,619	–	5,713	–	5,713	–
Corporate debt securities	28,077	–	28,077	–	4,624	–	4,624	–
Long-term investments:								
U.S. Treasury, government and agency debt securities	55,584	–	55,584	–	34,673	–	34,673	–
Corporate debt securities	50,605	–	50,605	–	13,236	–	13,236	–
Auction rate securities [2]	5,251	–	–	5,251	5,673	–	–	5,673
Total financial assets	$ 309,589	$ 6,037	$ 298,301	$ 5,251	$ 64,160	$ 241	$ 58,246	$ 5,673

(1) To estimate the fair value of our money market funds, U.S. government and agency debt securities, and corporate debt securities, we use the estimated fair value per our investment brokerage/custodial statements. To the extent deemed necessary, we may also obtain non-binding market quotes to corroborate the estimated fair values reflected in our investment brokerage/custodial statements.

(2) Given the disruption in the auction process, there is no longer an actively quoted market price for these securities. Accordingly, we utilized models to estimate the fair values of these auction rate securities based on, among other items: (i) the underlying structure of each security; (ii) the present value of future principal, interest and/or dividend payments discounted at the appropriate rate considering the market rate and conditions; (iii) consideration of the probabilities of default, auction failure, or repurchase at par for each period; and (iv) credit quality and estimates of the recovery rates in the event of default for each security. These estimated fair values could change significantly based on, among other events: (i) a further deterioration in market conditions for these securities; (ii) further declines in the credit quality of our auction rate securities or of the issuers of our auction rate securities; or (iii) a cessation of dividend payments or default on interest or principal payments by the issuer of the securities.

The following table summarizes the activity for the years ended December 31, 2010 and 2009 for those financial assets (primarily our auction rate securities) where fair value measurements are estimated utilizing Level 3 inputs (in thousands):

	Year Ended December 31,	
	2010	2009
Beginning balance	$ 5,673	$ 3,211
Unrealized gain recorded in other comprehensive income	421	1,849
Unrealized loss recorded in earnings (See Note 6)	–	(2,761)
Settlements	(843)	(992)
Additions from Catapult acquisition (See Note 3)	–	4,366
Ending balance	$ 5,251	$ 5,673
Unrealized losses recorded in earnings for Level 3 assets still held at December 31	$ –	$ (2,761)

8. Goodwill and Other Intangible Assets

The following table presents 2010 details of our total purchased intangible assets (in thousands):

	Weighted Average Useful Life (in years)	Gross	Accumulated Amortization	Net
Goodwill		$ 59,384	$ –	$ 59,384
Other intangible assets:				
Technology	5.4	$ 71,492	$ (43,883)	$ 27,609
Customer relationships	5.9	24,910	(6,843)	18,067
Service agreements	4.7	6,770	(2,456)	4,314
Non-compete	3.8	2,338	(1,359)	979
Trademark	4.7	1,576	(1,133)	443
Workforce	4.0	395	(395)	–
Other	0.7	4,424	(3,058)	1,366
		$ 111,905	$ (59,127)	$ 52,778

The following table presents 2009 details of our total purchased intangible assets (in thousands):

	Weighted Average Useful Life (in years)	Gross	Accumulated Amortization	Net
Goodwill		$ 60,121	$ —	$ 60,121
Other intangible assets:				
Technology	5.4	$ 70,742	$ (33,031)	$ 37,711
Customer relationships	5.9	24,910	(2,943)	21,967
Service agreements	4.7	6,770	(1,144)	5,626
Non-compete	3.8	2,338	(1,059)	1,279
Trademark	4.7	1,576	(783)	793
Workforce	4.0	395	(395)	—
Other	0.8	4,038	(2,282)	1,756
		$ 110,769	$ (41,637)	$ 69,132

The estimated future amortization expense of purchased intangible assets as of December 31, 2010 is as follows (in thousands):

2011	$ 14,731
2012	14,242
2013	13,620
2014	7,783
2015	2,171
Thereafter	231
	$ 52,778

9. Income Taxes

The components of income (loss) before income taxes were (in thousands):

	Year Ended December 31,		
	2010	2009	2008
U.S.	$ 2,518	$ (33,246)	$ (19,992)
Foreign	12,343	5,439	4,118
	$ 14,861	$ (27,807)	$ (15,874)

Income tax expense consisted of the following (in thousands):

	Year Ended December 31,		
	2010	2009	2008
Current:			
Federal	$ 697	$ (3,549)	$ 856
State	409	670	594
Foreign	2,613	1,692	1,025
Deferred:			
Federal	211	17,112	(1,171)
State	38	558	(1,418)
Foreign	(315)	(87)	135
Income tax expense	$ 3,653	$ 16,396	$ 21

The net effective income tax rate differed from the federal statutory income tax rate as follows (dollars in thousands):

	Year Ended December 31,		
	2010	2009	2008
Federal statutory expense	$ 5,203	$ (9,733)	$ (5,556)
State taxes, net of federal benefit	291	(2,017)	(1,393)
Research and development credits	(1,356)	(1,292)	(813)
Stock-based compensation	936	633	543
Foreign tax rate differential	(2,022)	(298)	(282)
Acquisition related costs	—	702	—
Valuation allowance	328	28,078	7,942
Other	273	323	(420)
Income tax expense	$ 3,653	$ 16,396	$ 21
Net effective income tax rate	24.6%	(59.0)%	(0.1)%

The primary components of temporary differences that gave rise to deferred taxes were as follows (in thousands):

	December 31, 2010	December 31, 2009
Deferred tax assets:		
Allowance for doubtful accounts	$ 274	$ 307
Research and development credit carryforward	13,679	10,732
Foreign tax credit carryforward	1,418	1,418
Deferred revenue	2,895	3,078
Stock-based compensation	6,949	8,635
Inventory adjustments	3,679	2,796

Net operating loss carryforward	5,557	6,035
Unrealized loss on investments	4,054	7,913
Accrued liabilities and other	3,314	2,986
	41,819	43,900
Valuation allowance	(37,694)	(36,150)
	4,125	7,750
Deferred tax liabilities:		
Depreciation and amortization	(4,330)	(8,020)
Net deferred tax liabilities	$ (205)	$ (270)

The realizability of deferred income tax assets is based on a more likely than not standard. If it is determined that it is more likely than not that deferred income tax assets will not be realized, a valuation allowance must be established against the deferred income tax assets.

Realization of our deferred tax assets is dependent primarily on the generation of future taxable income. In considering the need for a valuation allowance we consider our historical, as well as, future projected taxable income along with other positive and negative evidence in assessing the realizability of our deferred tax assets.

During 2010 and 2009, management evaluated the need for a full valuation allowance of $37.7 million and $36.2 million respectively, against our net U.S. deferred tax assets and concluded that a full valuation allowance against our net U.S. deferred tax assets was warranted due to, among other reasons, (i) the recently realized cumulative accounting losses sustained in the U.S., (ii) the taxable losses incurred in the U.S. in 2010 and 2009 and (iii) our uncertainty with respect to generating future U.S. taxable income in the near term given our recently completed U.S. projections and a number of inherent uncertainties such as the future level of U.S. tax deductions from our share-based awards.

For the years ended December 31, 2010, 2009 and 2008, we recorded changes in our valuation allowance of $1.5 million, $28.1 million and $8.1 million, respectively.

As of December 31, 2010, we have gross federal and state research and development credit carryforwards of approximately $9.3 million and $14.3 million, respectively. The federal carryovers begin to expire 2021, while the state carryovers have an indefinite carryover period.

As of December 31, 2010, we have gross federal foreign tax credit carryforwards of approximately $1.4 million which begin to expire 2013.

At December 31, 2010, we have gross federal and state net operating loss ("NOLs") carryforwards of approximately $18.6 million and $24.6 million, respectively. The federal NOLs expire beginning 2022, and the state NOLs begin to expire 2012. Section 382 of the Internal Revenue Code imposes an annual limitation on the utilization of net operating loss carryforwards related to acquired corporations based on a statutory rate of return (usually the "applicable federal funds rate" as defined in the Internal Revenue Code) and the value of the corporation at the time of a "change in ownership" as defined by Section 382. We estimate that our annual limitation under Section 382 of the Internal Revenue Code is approximately $5.1 million.

Cumulative undistributed earnings of foreign subsidiaries for which no deferred income taxes have been provided approximated $56.8 million and $48.7 million at December 31, 2010 and December 31, 2009, respectively. Deferred income taxes on these earnings have not been provided as these amounts are considered to be permanently undistributed to the parent corporation.

At December 31, 2010, we had gross unrecognized tax benefits of approximately $12.3 million. Of this total, approximately $5.3 million (net of the federal benefit on state issues) would affect our effective tax rate if recognized. We classify liabilities for unrecognized tax benefits for which we do not anticipate payment or receipt of cash within one year in noncurrent other liabilities.

We recognize interest and penalties related to uncertain tax positions in income tax expense. During the years ended December 31, 2010, 2009, and 2008, we recognized approximately $43,000, $101,000, and $25,000, net of federal benefit, of interest within our statements of operations. We had accrued interest, net of federal benefit, of $1.4 million and $1.3 million at December 31, 2010 and December 31, 2009, respectively. We file income tax returns in the U.S. federal jurisdiction and in various state and foreign jurisdictions. With few minor exceptions, we are no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities in material jurisdictions for the tax years ended prior to 2006.

A reconciliation of the beginning and ending amounts of gross unrecognized tax benefits is as follows (in thousands):

	2010	2009	2008
Unrecognized Tax Benefits – beginning balance	$ 10,629	$ 4,320	$ 4,367
Acquired unrecognized tax benefits	—	5,655	—
Gross increases – Tax positions taken in prior period	243	6	18
Gross decreases – Tax positions taken in prior period	(70)	—	(13)
Gross increases – Tax positions taken in current period	1,868	878	617
Lapse of statute of limitations	(367)	(230)	(669)
Unrecognized Tax Benefits – ending balance	$ 12,303	$ 10,629	$ 4,320

At December 31, 2010, we expect approximately $1.1 million in reductions to our recorded liability for unrecognized tax benefits to occur over the next 12 months.

10. Commitments and Contingencies

We lease our facilities under noncancelable operating leases for varying periods through May 2015, excluding options to renew. The following are the future minimum commitments under these leases (in thousands):

Year Ending December 31,	
2011	$ 6,919
2012	6,210
2013	2,950
2014	458
2015	190
Thereafter	—
	$ 16,727

Rent expense for the years ended December 31, 2010, 2009 and 2008 was approximately $8.4 million, $6.5 million and $6.1 million, respectively.

Litigation

IneoQuest Technologies, Inc. vs. Ixia. In November 2008, IneoQuest filed a complaint against Ixia in the United States District Court for the Central District of California. The complaint alleges that Ixia makes and sells products that infringe a patent owned by IneoQuest, and that Ixia misappropriated IneoQuest's trade secrets, in addition to numerous other related claims. The patent at issue allegedly relates to a system and method for analyzing the performance of multiple transportation streams of streaming media in packet-based networks. IneoQuest seeks a permanent injunction enjoining Ixia from infringing the patent at issue and from using IneoQuest's trade secrets and confidential information, unspecified general and exemplary damages, and attorneys' fees and costs.

In January 2009, Ixia filed an answer and counterclaim to IneoQuest's complaint denying IneoQuest's claims and raising several affirmative defenses. Ixia has also asserted a counterclaim against IneoQuest seeking declaratory relief that Ixia has not infringed the IneoQuest patent and that such patent is invalid. In April 2009, Ixia filed an amended answer and counterclaim to IneoQuest's complaint in which Ixia asserted that IneoQuest has infringed four patents owned by Ixia. Although the Company cannot predict the outcome of this matter, Ixia believes that it has strong defenses to IneoQuest's claims and is defending the action vigorously. The parties commenced discovery in this matter in the 2009 second quarter. The parties filed a Joint Claim Construction brief on November 30, 2009. On July 27, 2010, the Court issued a claim construction ruling relating to certain terms within the claims of IneoQuest's patent and ordered the parties to further brief claim construction issues related to Ixia's four asserted patents. Fact discovery is set to conclude 90 days after the issuance of the claim construction ruling related to Ixia's four asserted patents. Expert discovery is set to conclude 150 days after the issuance of the claim construction ruling. As yet, a trial date has not been set.

Tucana Telecom NV vs. Catapult. On May 22, 2007, the Antwerp Court of Appeal heard an appeal by Tucana Telecom NV, a Belgian company, of the previous dismissal by the Antwerp Commercial Court of an action by Tucana against Catapult. Tucana had sought damages of 10.4 million Euros (approximately $13.8 million as of December 31, 2010) for the alleged improper termination in 2002 by Catapult of Tucana's distribution agreement with Catapult. On June 19, 2007, the Antwerp Court of Appeal confirmed the Commercial Court's dismissal of Tucana's action and assessed the costs of the appeal against Tucana. On July 22, 2008, Catapult was notified by its Belgian counsel that Tucana had appealed the judgment of the Antwerp Court of Appeal to the Belgian Supreme Court. In a decision dated January 14, 2010, the Belgium Supreme Court set aside the decision of the Antwerp Court of Appeal and remanded the matter for trial to the Ghent Court of Appeal. Catapult's Belgian counsel was informed by Tucana's counsel on January 19, 2011 that Tucana has sent out for service a writ scheduling an introductory hearing before the Ghent Court of Appeals. Catapult's counsel was informed that Tucana now asserts that it is entitled to additional compensation of approximately 2.7 million Euros (approximately $3.6 million as of December 31, 2010). Once Catapult is served and learns the proposed date for the introductory hearing, a briefing schedule will be established for the exchange of trial briefs.

In June 2010, Catapult filed a complaint against Tucana in the Superior Court of the State of California, County of Los Angeles, seeking declaratory and injunctive relief and damages for breach of the distribution agreement. Catapult filed its First Amended Complaint on September 8, 2010 to address a statute of limitations issue raised by Tucana's initial response. Catapult seeks a declaration that the distribution agreement is a valid and enforceable agreement, and that the distribution agreement's mandatory forum selection and choice of law provisions are enforceable and require that the litigation of any dispute involving the agreement be brought in a court located in the County of Los Angeles. Catapult also seeks an order permanently enjoining Tucana from prosecuting any claims arising out of Tucana's distribution relationship with Catapult in any judicial forum outside the County of Los Angeles. Catapult also seeks compensatory damages of not less than $200,000 for damages suffered by Catapult arising out of Tucana's breach of the distribution agreement. Tucana filed a demurrer to the

First Amended Complaint on October 12, 2010 seeking dismissal of the action based on the statute of limitations and the doctrine of laches. Catapult filed its opposition to the demurrer on November 23, 2010. The hearing on the demurrer has been scheduled by the Court for April 18, 2011. While awaiting the hearing on the demurrer, Catapult has begun discovery in the California proceeding by requesting Tucana to produce documents relevant to Tucana's underlying claims. Tucana has not yet responded to that request.

Catapult believes that it properly terminated any contract it had with Tucana and that Tucana is not entitled to any damages in this matter. Catapult has defended the action vigorously to date and will continue to do so. Catapult may be able to seek indemnification from Tekelec for any damages assessed against Catapult in this matter under the terms of the Asset Purchase Agreement that Catapult entered into with Tekelec, although there is no assurance that such indemnification would be available. On March 30, 2010, Tekelec's legal counsel in Belgium informed Catapult's Belgian counsel that its client is considering intervening voluntarily in the Ghent appeal proceedings but that no final decision has been taken in this respect. It is not possible to determine the amount of any loss that might be incurred in this matter.

We are not aware of any other pending legal proceedings than the matters mentioned above that, individually or in the aggregate, would have a material adverse effect on our business, results of operations or financial position. We may in the future be party to litigation arising in the ordinary course of business, including claims that we allegedly infringe upon third party trademarks or other intellectual property rights. Such claims, even if without merit, could result in the expenditure of significant financial and managerial resources.

Indemnifications

In the normal course of business, we provide certain indemnifications, commitments and guarantees of varying scope to customers, including against claims of intellectual property infringement made by third parties arising from the use of our products. We also have certain obligations to indemnify our officers, directors and employees for certain events or occurrences while the officer, director or employee is or was serving at our request in such capacity. The duration of these indemnifications, commitments and guarantees varies and in certain cases, is indefinite. Many of these indemnifications, commitments and guarantees do not provide for any limitation of the maximum potential future payments that we could be obligated to make. However, our director and officer insurance policy may enable us to recover a portion of any future payments related to our officer, director or employee indemnifications. Historically, costs related to these indemnifications, commitments and guarantees have not been significant and accordingly, we believe the estimated fair value of these indemnifications, commitments and guarantees are not material. With the exception of the product warranty accrual (see Note 1), no liabilities have been recorded for these indemnifications, commitments and guarantees.

11. Shareholders' Equity

Stock Award Plans

Our Amended and Restated 1997 Equity and Incentive Plan, as amended (the "1997 Plan"), provides for the issuance of share-based awards to our eligible employees and consultants. The share-based awards may include incentive stock options ("ISO"), nonstatutory stock options, restricted stock units ("RSU") or restricted stock awards. Options become exercisable over a vesting period as determined by the Board of Directors and expire over terms not exceeding 10 years from the date of grant. The exercise price for options granted under the 1997 Plan may not be granted at less than 100% of the fair market value of our Common Stock on the date of grant (110% for ISOs granted to an employee who owns more than 10% of the voting shares of the outstanding stock). Options generally vest over a four-year period. In the event the holder ceases to be employed by us, all unvested options are forfeited and all vested options may be exercised within a period of up to 30 days after the

optionee's termination for cause, up to three months after termination other than for cause or as a result of death or disability, or up to six months after termination as a result of disability or death. The 1997 Plan terminated in May 2008 and as such, no shares are available for future grant. As of December 31, 2010, 2.1 million awards remained outstanding under the 1997 Plan.

Our 2008 Equity Incentive Plan, as amended (the "2008 Plan"), provides for the issuance of share-based awards to our eligible employees, directors and consultants. The share-based awards may include ISOs, nonstatutory stock options, stock appreciation rights, restricted stock units ("RSU") or restricted stock awards. Options become exercisable over a vesting period as determined by the Board of Directors and expire over terms not exceeding 10 years from the date of grant. The exercise price for options granted under the 2008 Plan may not be granted at less than 100% of the fair market value of our Common Stock on the date of grant (110% for ISOs granted to an employee who owns more than 10% of the voting shares of the outstanding stock). Options generally vest over a four-year period. In the event the holder ceases to be employed by us, all unvested options are forfeited and all vested options may be exercised within a period of up to 90 days after termination other than (i) for termination for cause for which the vested options are forfeited on the termination date or (ii) as a result of death or disability for which vested options may be exercised for up to 180 days after termination. The 2008 Plan will terminate in May 2018, unless terminated sooner by the Board of Directors. In May 2010, the 2008 Plan was amended to add our non-employee directors to the categories of persons to whom equity incentive awards may be granted under the 2008 Plan. As of December 31, 2010, we have reserved 11.6 million shares of our Common Stock for issuance under the 2008 Plan, 2.3 million shares of which were available for future grant as of such date.

Our Amended and Restated Non-Employee Director Equity Incentive Plan (the "Director Plan") provided for the issuance of share-based awards to our non-employee directors. The Director Plan terminated in September 2010. Upon the termination of the Director Plan, share-based awards will now be granted to our non-employee directors under the 2008 Plan.

The following table summarizes stock option activity for the year ended December 31, 2010 (in thousands, except per share and contractual life data):

	Number of Options	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding as of December 31, 2009	9,227	$ 7.98	3.74	$ 5,534
Granted	2,299	$ 9.01		
Exercised	(3,243)	$ 7.61		
Forfeited/canceled	(1,011)	$ 9.24		
Outstanding as of December 31, 2010	7,272	$ 8.29	4.18	$ 61,772
Vested and expected to vest as of December 31, 2010	6,946	$ 8.30	4.08	$ 58,949
Exercisable as of December 31, 2010	3,532	$ 8.59	2.66	$ 28,973

Excluding the effects of the incremental gross stock-based compensation related to the Stock Option Exchange Program in August of 2008 discussed below, the weighted average grant-date fair value of options granted for the years ended December 31, 2010, 2009 and 2008 was $3.19, $2.15 and $2.96 per share, respectively. The total intrinsic value of options exercised during the years ended December 31, 2010, 2009 and 2008 was $14.2 million, $1.4 million and $1.7 million, respectively. As of December 31, 2010, the remaining unrecognized compensation expense related to stock options is expected to be recognized over a weighted average period of 1.45 years.

The following table summarizes RSU activity for the year ended December 31, 2010 (in thousands, except per share data):

	Number of Awards	Weighted Average Grant Date Fair Value Per Share
Outstanding as of December 31, 2009	2,084	$ 6.53
Awarded	605	$ 11.81
Released	(741)	$ 6.99
Forfeited/canceled	(173)	$ 6.91
Outstanding as of December 31, 2010	1,775	$ 8.10

The weighted average remaining contractual life and expense recognition period of the outstanding RSUs as of December 31, 2010 was 1.45 years.

Employee Stock Purchase Plan

The employee stock purchase plan (the "2000 Purchase Plan") was adopted and approved in September 2000. The 2000 Purchase Plan became effective upon the closing of our initial public offering in October 2000 and was amended in May 2003 and in April 2006. The 2000 Purchase Plan permits eligible employees to purchase Common Stock, subject to limitations as set forth in the 2000 Purchase Plan, through payroll deductions which may not exceed the lesser of 15% of an employee's compensation or $21,250 per annum. The 2000 Purchase Plan is implemented in a series of consecutive, overlapping 24-month offering periods, with each offering period consisting of four six-month purchase periods. Offering periods begin on the first trading day on or after May 1 and November 1 of each year. During each 24-month offering period under the 2000 Purchase Plan, participants accumulate payroll deductions which on the last trading day of each six-month purchase period within the offering period are applied toward the purchase of shares of our Common Stock at a purchase price equal to 85% of the lower of (i) the fair market value of a share of our Common Stock as of the first trading day of the 24-month offering period and (ii) the fair market value of a share of Common Stock on the last trading day of the six-month purchase period. The 2000 Purchase Plan expired in September 2010. The last offering period under the 2000 Purchase Plan commenced on May 1, 2010 and will end on April 30, 2012. We had reserved a total of 4.5 million shares of Common Stock for issuance under the 2000 Purchase Plan, 568,000 shares of which are available for future issuance for the existing offering periods. For the years ended December 31, 2010 and 2009, 567,000 and 559,000 shares, respectively, were issued under the 2000 Purchase Plan.

During the second quarter of 2010, our shareholders approved the 2010 Employee Stock Purchase Plan (the "2010 Purchase Plan"). The 2010 Purchase Plan replaced the Plan (i.e., no new 24-month offering periods will be offered under the 2000 Purchase Plan, although the open offering periods prior to the September 2010 expiration will continue until the applicable 24-month offering periods end). We have reserved a total of 500,000 shares of Common Stock for issuance under the 2010 Purchase Plan, together with the potential for an annual increase in the number of shares reserved under the 2010 Purchase Plan on May 1 of each year. The 2010 Purchase Plan is implemented in a series of consecutive, overlapping 24-month offering periods, with each offering period consisting of four six-month purchase periods. Offering periods begin on the first trading day on or after May 1 and November 1 of each year. The first 24-month offering period under the 2010 Purchase Plan began on November 1, 2010 and is scheduled to end on October 31, 2012. The 2010 Purchase Plan will terminate in March 2020, unless it is earlier terminated by the Board of Directors.

Stock-Based Compensation Expense

We calculated the estimated fair value for accounting purposes of each share-based award on the respective dates of grant using the Black-Scholes option-pricing model using the following weighted average assumptions:

	Year Ended December 31,		
	2010	2009	2008
Expected lives (in years)	3.6	3.6	4.0
Risk-free interest rates	1.6%	1.7%	2.4%
Dividend yield	0.0%	0.0%	0.0%
Expected volatility	46.1%	46.5%	48.2%

The aggregate balance of gross unrecognized stock-based compensation to be expensed in the years 2011 through 2014 related to unvested share-based awards as of December 31, 2010 was approximately $18.0 million.

Option Exchange Program

During the second quarter of 2008, our shareholders approved a Stock Option Exchange Program (the "Program"), which allowed current employees, other than executive officers and members of our Board of Directors, to exchange certain underwater options for fewer new options. On August 7, 2008, we completed the Program by canceling 3.7 million old options and granting 2.6 million new options. The canceled old options had per share exercise prices ranging from $9.30 to $21.50, and the new options were granted with an exercise price of $8.58 per share, the closing price of our common stock on August 7, 2008 as reported on the Nasdaq Global Select Market. The new options have vesting schedules ranging from approximately one to four years and have contractual terms ranging from approximately three to six years. The additional gross stock-based compensation expense of $3.1 million related to this Program will be recognized over the vesting periods of one to four years from the date of grant of the new options.

Stock Buyback Programs

We announced a six-month stock buyback program in November 2008 to repurchase up to $25 million of our common stock. This program expired in May 2009 and was in addition to the $50 million repurchase program, which was announced in August 2007 and completed in June 2008. From January 1, 2009 through the May 2009 expiration date, we repurchased 1.6 million shares of our common stock for $8.4 million, or approximately $5.19 per share. During 2008, we repurchased 5.8 million shares of our common stock for $43.6 million, or approximately $7.51 per share. These repurchased shares remain authorized, but are no longer issued and outstanding.

Accumulated Other Comprehensive Income

The following table summarizes, as of each balance sheet date, the components of our accumulated other comprehensive income, net of income taxes (in thousands):

	December 31,	
	2010	2009
Unrealized gains on marketable securities	$ 1,941	$ 1,627
Foreign currency translation gains	513	22
Total accumulated other comprehensive income	$ 2,454	$ 1,649

12. Retirement Plan

We provide a 401(k) Retirement Plan (the "Plan") to eligible employees who may authorize contributions up to IRS annual deferral limits to be invested in employee elected investment funds. As determined annually by the Board of Directors, we may contribute matching funds of 50% of the employee contributions up to $2,500. These matching contributions vest based on the employee's years of service with us. For the years ended December 31, 2010, 2009 and 2008, we expensed and made contributions to the Plan in the amount of approximately $820,000, $70,000 and $741,000, respectively. The matching of employee 401(k) contributions was suspended in January 2009 and reinstated in January 2010.

13. Earnings Per Share

The following table sets forth the computation of basic and diluted earnings (loss) per share for the periods indicated (in thousands, except per share data):

	Year Ended December 31,		
	2010	2009	2008
Basic Presentation			
Numerator for basic earnings (loss) per share:			
Net income (loss)	$ 11,208	$ (44,203)	$ (15,895)
Denominator for basic earnings (loss) per share:			
Weighted average common shares outstanding	65,157	62,710	65,087
Basic (loss) earnings per share	$ 0.17	$ (0.70)	$ (0.24)
Diluted Presentation			
Numerator for diluted earnings (loss) per share:			
Net income (loss)	$ 11,208	$ (44,203)	$ (15,895)
Interest expense on convertible senior notes, net of tax	–	–	–
Net income (loss) used for diluted earnings (loss) per share	$ 11,208	$ (44,203)	$ (15,895)
Denominator for dilutive earnings (loss) per share:			
Weighted average common shares outstanding	65,157	62,710	65,087
Effect of dilutive securities:			
Stock options and other share-based awards	2,612	–	–
Convertible senior notes	–	–	–
Dilutive potential common shares	67,769	62,710	65,087
Diluted earnings(loss) per share	$ 0.17	$ (0.70)	$ (0.24)

The diluted earnings per share computation for the year ended December 31, 2010 excludes (i) the weighted average number of shares underlying our outstanding convertible senior notes, of 676,000, as they are considered anti-dilutive because the related interest expense on a per common share "if converted" basis exceeds basic earnings per share, and (ii) the weighted average number of shares underlying our employee stock options and other share-based awards of 1.4 million shares, which were anti-dilutive because, in general, the exercise price of these awards exceeded the average closing price per share of our common stock during 2010. The diluted earnings per share computations for the years ended December 31, 2009 and 2008, exclude employee stock options and other share-based awards to purchase or otherwise acquire 10.5 million and 7.0 million shares, respectively, which were anti-dilutive because of our net loss position.

14. Quarterly Financial Summary (Unaudited)

	Three Months Ended							
	Dec. 31 2010[1]	Sep. 30 2010	Jun. 30 2010	Mar. 31 2010[1]	Dec. 31 2009	Sep. 30 2009	Jun. 30 2009	Mar. 31 2009
	(in thousands, except per share data)							
Statement of Operations Data:								
Total revenues	$77,780	$70,890	$66,104	$62,041	$56,091	$46,374	$38,405	$37,124
Total cost of revenues[2]	19,420	18,126	19,184	16,798	15,820	14,324	9,983	9,674
Gross profit	58,360	52,764	46,920	45,243	40,271	32,050	28,422	27,450
Income (loss) before income taxes	8,392	5,918	(986)	1,537	(6,470)	(9,388)	(5,906)	(6,043)
Net income (loss)[3]	5,826	4,874	(361)	869	(31,335)	(6,223)	(2,654)	(3,991)
Earnings (loss) per share:								
Basic	$ 0.09	$ 0.07	$ (0.01)	$ 0.01	$ (0.50)	$ (0.10)	$ (0.04)	$ (0.06)
Diluted	$ 0.08	$ 0.07	$ (0.01)	$ 0.01	$ (0.50)	$ (0.10)	$ (0.04)	$ (0.06)

[1] In the first and fourth quarters of 2010, we recorded $8.9 million and $1.0 million, respectively, to interest income and other, net related to (i) settlement proceeds received during the 2010 first quarter for claims asserted by us against our former investment manager for damages and losses relating to our previous investments in auction rate securities with an aggregate par value of $19.0 million, and (ii) proceeds received during the 2010 fourth quarter for the sale of certain of our auction rate securities that were previously written-off.

[2] For the quarters ended December 31, 2010, September 30, 2010, June 30, 2010, March 31, 2010, December 31, 2009, September 30, 2009, June 30, 2009, March 31, 2009, total cost of revenues include charges related to amortization of intangible assets of $2.7 million, $2.4 million, $3.9 million, $3.8 million, $3.8 million, $3.0 million, $1.2 million and $1.2 million, respectively.

[3] In the fourth quarter of 2009, our income tax expense includes a $27.6 million charge related primarily to the establishment of a valuation allowance against our net U.S. deferred tax assets.

EXHIBIT INDEX

Exhibit No.	Description
21.1	Subsidiaries of the Registrant
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer of Ixia pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer of Ixia pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certifications of Chief Executive Officer and Chief Financial Officer of Ixia pursuant to Rule 13a-14(b) under the Exchange Act and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Exhibit 21.1

Subsidiaries of the Registrant

Name of Subsidiary *	State or Other Jurisdiction of Incorporation or Organization
Catapult Communications Corporation	Nevada
S.C. Ixia SRL	Romania
Ixia Technologies Private Limited	India
Catapult Communications Corporation Subsidiaries:	
Ixia Technologies International Limited (formerly Catapult Communications International Limited)	Ireland
Ixia Communications Kabushiki Kaisha (formerly Catapult Communications Kabushiki Kaisha)	Japan
Ixia Technologies International Limited Subsidiaries:	
Ixia Australia Pty. Ltd.	Australia
Ixia Communications Canada Limited	Canada
Ixia Technologies Europe Limited (formerly Catapult Communications Limited)	United Kingdom
Ixia Technologies (Shanghai) Company Limited (formerly Catapult Communications (China) Corporation Limited)	China
IxiaCom Technologies Sdn. Bhd.	Malaysia

* The subsidiaries of the Registrant do not do business under any name other than as listed above.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-48814, 333-66382, 333-107818, 333-117969, 333-151764, 333-162322 and 333-167628) of Ixia of our report dated March 4, 2011 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Los Angeles, California
March 4, 2011

Certification of Chief Executive Officer of Ixia pursuant to Rule 13a-14(a) under the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Atul Bhatnagar, certify that:

1. I have reviewed this Annual Report on Form 10-K of Ixia;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 4, 2011

/s/ ATUL BHATNAGAR
Atul Bhatnagar
President and Chief Executive Officer

Exhibit 31.2

Certification of Chief Financial Officer of Ixia pursuant to
Rule 13a-14(a) under the Exchange Act,
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Thomas B. Miller, certify that:

1. I have reviewed this Annual Report on Form 10-K of Ixia;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 4, 2011

/s/ THOMAS B. MILLER
Thomas B. Miller
Chief Financial Officer

Certifications of Chief Executive Officer and Chief Financial Officer of Ixia Pursuant to Rule 13a-14(b) under the Exchange Act and 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Ixia (the "Company") on Form 10-K for the period ended December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Atul Bhatnagar, President and Chief Executive Officer of the Company, and Thomas B. Miller, Chief Financial Officer of the Company, certify, to the best of our knowledge, pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 4, 2011

/s/Atul Bhatnagar
Atul Bhatnagar
President and Chief Executive Officer

Date: March 4, 2011

/s/Thomas B. Miller
Thomas B. Miller
Chief Financial Officer

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Directors and Officers

Board of Directors

Errol Ginsberg
Chairman of the Board and
Chief Innovation Officer
Ixia

Laurent Asscher
President and
Chief Executive Officer
Airtek Capital Group, S.A.

Atul Bhatnagar
President and
Chief Executive Officer
Ixia

Jonathan Fram
Acting Chief Executive Officer
Nularis

Gail E. Hamilton
Retired Executive Vice President
Symantec

Jon F. Rager
Private Investor

Officers

Atul Bhatnagar
President and
Chief Executive Officer

Tom Miller
Chief Financial Officer

Errol Ginsberg
Chief Innovation Officer

Victor Alston
Senior Vice President
Product Development

Ronald W. Buckly
Senior Vice President
Corporate Affairs and
General Counsel

Alan Grahame
Senior Vice President
Worldwide Sales

Walker H. Colston, II
Vice President
Global Customer Delight

Raymond de Graaf
Vice President
Operations

Jim Smith
Vice President
Marketing

Chris Williams
Vice President
Human Resources

Corporate Information

Independent Accountants
PricewaterhouseCoopers LLP
Los Angeles, California

Legal Counsel
Bryan Cave LLP
Los Angeles, California

Transfer Agent
Computershare Trust Company, N.A.
P.O. Box 43070
Providence, Rhode Island 02940-3070
800.962.4284

Corporate Headquarters
Ixia
26601 West Agoura Road
Calabasas, California 91302
818.871.1800

Common Stock
The Company's common stock is quoted on the Nasdaq Global Select Market under the symbol XXIA.

Web Site
Additional information about the Company is available on its web site at www.ixiacom.com.

Report on Form 10-K
A copy of the Company's Annual Report on Form 10-K for the year ended December 31, 2010, is available, without charge, upon written request to Investor Relations, Ixia, 26601 W. Agoura Road, Calabasas, California 91302 or via the Internet at www.ixiacom.com.

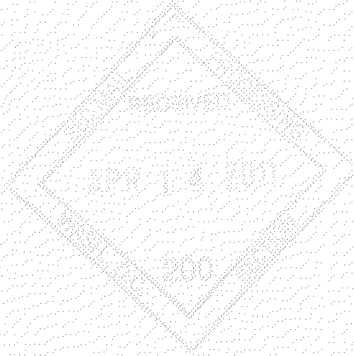
Annual Meeting of Shareholders
9:00 AM, Thursday
May 19, 2011
Renaissance Hotel
30100 Agoura Road
Agoura Hills, California 91301

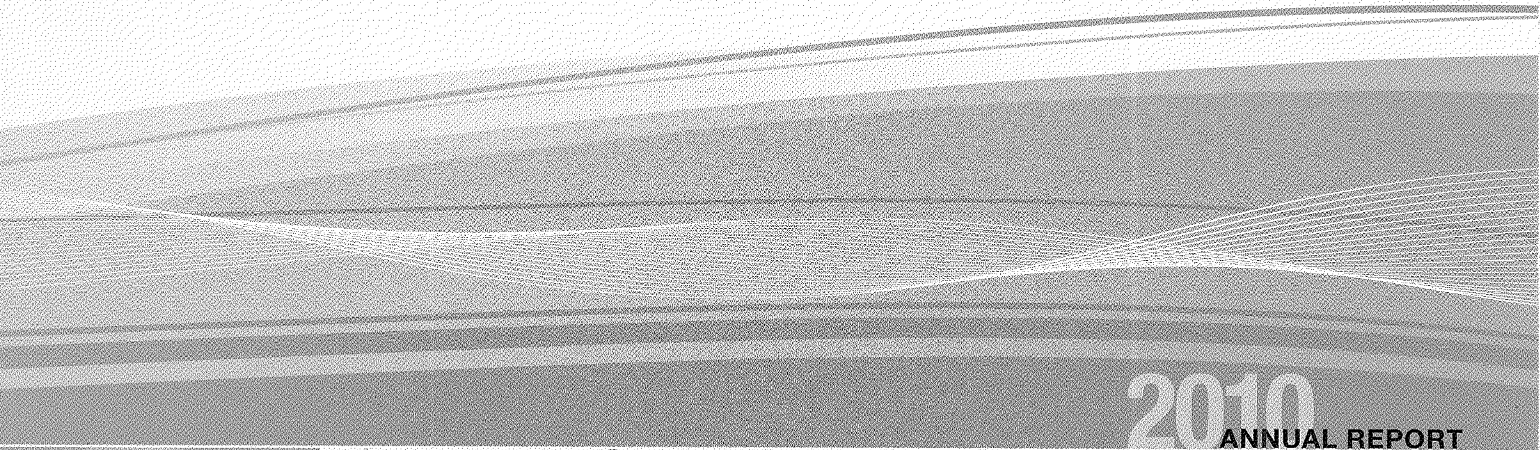
Phone 877-FOR-IXIA
International+818-871-1800
www.ixiacom.com

11007019

CHART®

GTLS: GAS TO LIQUID SYSTEMS





CATCHING THE GLOBAL ENERGY WAVE

THE GLOBAL TIDE IS TURNING TO NATURAL GAS

Cleaner burning, in ample supply, with lower emissions and less costly than oil, natural gas is fast becoming the world's preferred energy source. Global demand is expected to rise by 25% by 2020, while demand for liquid natural gas (LNG) is set to surge by 40%. Chart Industries is exceptionally well positioned to benefit from this new energy wave.

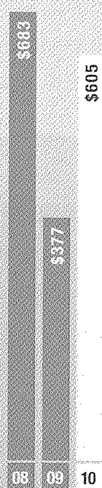
Chart is a leading global manufacturer of highly engineered equipment used in the production, storage and end-use of hydrocarbon and industrial gases. Chart's products are used throughout the liquid gas supply chain for purification, liquefaction, distribution, storage and end-use applications, the largest portion of which are energy-related. Other major end-use markets include chemical production, metal fabrication, food and beverage, and biomedical. Chart has domestic operations across the United States and a significant international presence in Asia, Australia and Europe.

FINANCIAL **HIGHLIGHTS**

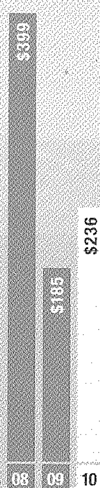
(Dollars in millions)	2010	2009	2008
	Years Ended December 31,		
Net Sales	**$ 555.5**	$ 597.5	$ 753.1
Gross Profit	**165.3**	201.9	239.4
Gross Profit Margin	**29.8%**	33.8%	31.8%
Operating Income [1]	**$ 47.5**	$ 94.3	$ 133.4
Operating Margin	**8.6%**	15.8%	17.7%
Net Income [1,2]	**$ 20.2**	$ 61.0	$ 78.9
OTHER FINANCIAL INFORMATION			
Cash and Short-Term Investments	**$ 165.1**	$ 211.2	$ 154.4
Total Assets	**954.8**	926.5	909.4
Long-Term Debt	**224.9**	243.2	243.2
Orders	**604.5**	377.4	682.6
Backlog	**236.4**	185.1	398.8

[1] Included in 2008 is a $6.5 million benefit for the reversal of contingent liabilities related to an insolvent former subsidiary offset by $4.9 million in customer settlement and facility shutdown costs.

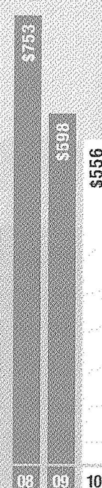
[2] Included in 2010 and 2009 are gains on acquisition of the Covidien oxygen therapy business of $1.1 million and $7.0 million, respectively.



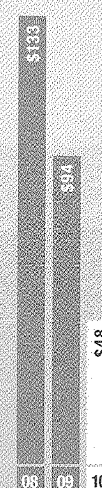
ORDERS
(In millions)



BACKLOG
(In millions)



NET SALES
(In millions)



OPERATING INCOME
(In millions)

This annual report contains forward-looking statements. These statements are based on certain assumptions and management's current knowledge. Accordingly, we caution you not to unduly rely on forward-looking statements, which speak only as of the date of this annual report. We intend these statements to be covered by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The words "expects," "anticipates," "believes," "may," "should," "projects," "forecasts," "will," and similar expressions are intended to identify forward-looking statements. We caution you that forward-looking statements involve risks and uncertainties that could cause actual results to vary from those statements. For a discussion of these risks see "Item 1A – Risk Factors" in the Company's Annual Report on Form 10-K included herein. The Company undertakes no obligation to update any forward-looking statement.

TO MY FELLOW SHAREHOLDERS

A primary driver for Chart Industries' growth and earnings is global demand for hydrocarbons and industrial gases. Increased global trade coupled with the dramatic growth of many developing economies drives demand for more hydrocarbon energy consumption and increased use of industrial gases.

As the world recovers from the debt crisis of 2008, the developing economies have quickly reverted to their earlier growth trend line. The OECD countries have experienced a muted recovery; however, we see clear signs that these economies are also re-establishing their pre-2008 growth rates.

Over the past 24 months, the world's leaders have come to realize that there is no easy solution to reducing carbon emissions and improving the environment while providing the energy to fuel a growing global economy. It will take decades, not years, to achieve a transition to carbon-free energy sources. Natural gas is increasingly being recognized as a cost-effective bridge to the future, a bridge that will be longer than we envisioned a few years ago.

Natural gas is increasing its share of the global energy mix due to ample supply, a growing cost advantage over petroleum, lower carbon emissions, and greater efficiency for power generation. In just the coming decade, global demand for gas is expected to rise 25%, while liquid natural gas (LNG) surges by 40%. Transitioning to this new energy era will require large expenditures for the kind of equipment Chart manufactures.

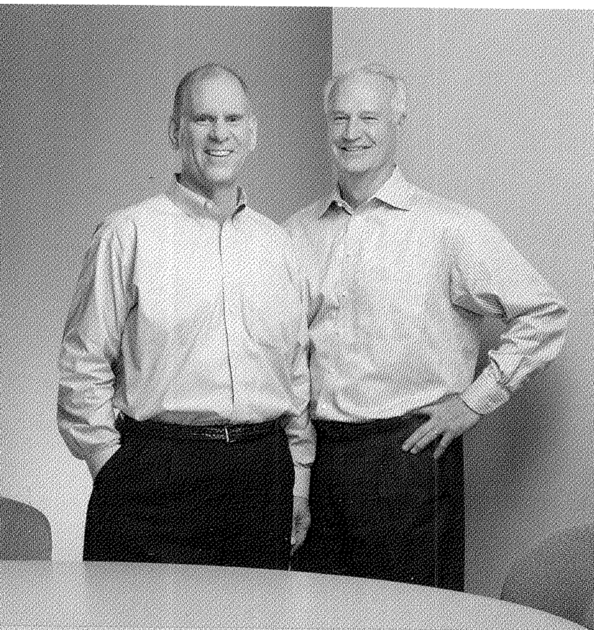
Chart has never been better positioned to take advantage of so many opportunities across the natural gas and LNG supply chain. We have the right structure, resources and capabilities to capture a substantial increase in demand around the world and convert it into solid and profitable business without significant capital expenditures much beyond our normal range. Moreover, these diverse natural gas and other hydrocarbon opportunities are complemented by Chart's solid and growing presence in the industrial gas and biomedical fields.

A RETURN TO GROWTH

As we anticipated, while orders improved through 2010, sales and profit lagged. Financial results improved in the second half of the year as we recovered from the dearth of longer lead time capital goods orders in the second half of 2008 and 2009, and our markets began to improve. Fourth quarter 2010 orders were 24% higher than the third quarter 2010 and the highest since the second quarter of 2008.

Signaling the return of large project work, early in 2011 our Energy and Chemicals ("E&C") business was awarded a contract worth in excess of $90 million to provide the process design and proprietary equipment for a world-scale nitrogen rejection facility in Qatar as part of a significant natural gas project. This followed a $20 million order in the third quarter of 2010 for brazed aluminum heat exchangers, cold boxes and Core-in-Kettle® exchangers for a natural gas liquids recovery plant in Saudi Arabia.

Annual sales in 2010 declined 7% from 2009 to $556 million. The decline was concentrated in our E&C segment. Both Distribution & Storage ("D&S") and BioMedical reported higher sales. We ended the year with $165 million in cash, $113 million available on our revolving credit facility, and net debt of just $60 million.



Michael F. Biehl, Executive Vice President, Chief Financial Officer and Treasurer

Samuel F. Thomas, Chairman, Chief Executive Officer and President

ACQUISITIONS, INVESTMENTS AND FINANCING

Acquisitions continue to be an important part of our growth strategy. We completed three in 2010, including SeQual, a manufacturer of portable medical oxygen concentrators. Combined, acquisitions completed in the last two years contributed approximately $60 million to 2010 revenues and significantly strengthened our product offerings, technology portfolio and design engineering capabilities.

During the year we began operations at our new 40,000-square-foot D&S repair facility in Reno, Nevada, and made good progress in consolidating the November 2009 Covidien liquid oxygen therapy acquisition. With the Covidien and SeQual acquisitions, BioMedical should be a $200 million business in 2011. While it does not have the rapid growth potential of the E&C and D&S segments, it shares the same cryogenic technology base and its relative stability counterbalances the cyclical E&C business.

We were pleased to complete a new five-year, $200 million revolving credit facility last year. This extended our debt maturity into 2015, increased our liquidity, and should reduce future interest expense.

LOOKING AHEAD

Here are the major market opportunities we see ahead:

China and Other Emerging Markets

Natural gas consumption in China is expected to double over the next four years and triple over the decade. The country is investing aggressively in LNG infrastructure, including transport and storage equipment, import terminals, fueling stations, and LNG-fueled trucks, ships and off-road equipment. Chart is a major supplier for most of these applications, as well as the industrial gas facilities that are essential to China's burgeoning industrial complex. Similar trends are playing out in India, South America and elsewhere.

LNG Projects

Our opportunities extend well beyond the large-scale LNG projects that attract the most attention. Historically, only these multi-billion-dollar projects were considered economically feasible. Now, improvements pioneered by Chart in the economics of small- and mid-scale LNG facilities enable formerly stranded or uneconomic gas fields to be brought to market. Chart is a leader in supplying key technology and components for these small- and mid-scale projects.

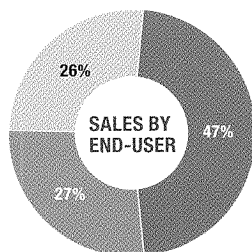
Natural Gas Processing

Significant development in the technology and economics of unconventional gas, particularly shale gas, and the ability to produce high natural gas liquids (NGL) content, are driving natural gas processing activity where Chart's products play key roles. Less costly than conventional petroleum, these NGL byproducts are in demand for use as feedstock to petroleum refineries and in the petrochemical market. When petrochemical plants convert to natural gas-based feedstock, installation of the kind of equipment we provide is often required.

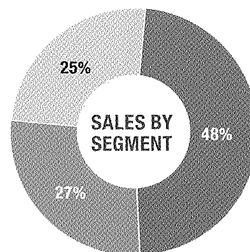
The recent contract awards in Saudi Arabia and Qatar are good examples of NGL projects. Future demand will be driven by the rapid development of liquids-rich shale gas fields in the United States and around the world. Shale and other unconventional gas is an important part of China's energy strategy. They are counting on it to meet 8-12% of forecasted domestic demand for natural gas by 2020. And in a remarkable turnaround spurred by shale gas, dormant U.S. LNG import terminals are looking at opportunities to export LNG. Converting these terminals to export LNG would require the type of equipment that Chart manufactures and we are currently working with two terminals on the design phase.

Virtual LNG Pipelines

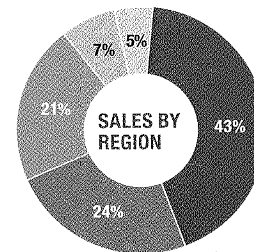
Where gas deposits are located closer to end-markets but no pipeline infrastructure exists and new construction is not economically feasible, our LNG distribution and storage equipment enable virtual pipelines that deliver natural gas cost effectively without pipeline infrastructure. Chart was an innovator in this concept in northern Europe and we are currently experiencing strong growth from this type of opportunity in China and Latin America.



● Energy
● BioMedical
● General Industrial



● Distribution and Storage
● BioMedical
● Energy and Chemicals



● U.S.
● Europe
● Asia
● Americas (Non-U.S.)
● Rest of World

Natural Gas Vehicles

There is growing acceptance around the world of LNG and compressed natural gas (CNG) as alternative transportation fuel. While we don't envision that penetration to go beyond 10-15% of total consumption, commodity traders understand that commodity prices are set on the margin, providing the opportunity to both utilize a cleaner fuel while also mitigating oil price pressure.

Conversion to greener, cheaper LNG and CNG is underway, most rapidly in China. Spurred by government incentives, LNG is projected to capture at least 10% of China's heavy-duty vehicle usage by 2015. To achieve that goal, China will need to add 1.3 million new LNG-powered vehicles and build 500-800 LNG fueling stations. While we face domestic competition for this business, Chart is uniquely qualified to provide all of the equipment needed for LNG fleets and fuel stations.

This trend is not just about truck fleets in China. We are also receiving LNG equipment orders for marine vessels from Asia, Europe and South America. The United States has been slow to adopt LNG, but conversion is economically feasible at the current spread between oil and natural gas and would be accelerated considerably if Congress passes energy legislation that includes incentives for natural gas.

Industrial Gas

World demand for industrial gases, which is also ramping up again, is forecast to increase 8% annually to $52 billion by 2014. Chart is well positioned to serve customers in developing markets, where growth rates should be higher. We also expect to benefit from our expanded aftermarket business, adding to the solid industrial gas core of our business.

BioMedical

Higher global health care spending and aging demographics, especially in emerging markets, are the prime drivers of our oxygen therapy and our biological storage systems businesses. Recent acquisitions have enhanced our growth prospects by giving us critical mass, broadening our respiratory product line, and adding to our technology portfolio.

THE STARS ARE ALIGNING

This is an exciting time for Chart Industries. As one analyst said, "The stars are aligning." We expect the steady recovery of 2010 to continue in 2011. We are well positioned to take advantage of the opportunities before us. Chart is a clear leader in all of our primary markets. We have the proprietary technology, engineering expertise, a presence in the right places around the globe, and a reputation for quality and service. Our financial strength enables us to continue to pursue accretive acquisitions and organic growth opportunities.

We will continue to improve our business through effective planning, dedication to excellence, and strict adherence to shareholder value creation and the principles of good corporate governance. I would like to thank our investors, employees, customers and suppliers for their support, and I look forward to reporting on our progress during the year.

Sincerely,

Samuel F. Thomas
Chairman, Chief Executive Officer and President
March 28, 2011

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2010

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File No. 1-11442

CHART INDUSTRIES, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**34-1712937**
(State or Other Jurisdiction of Incorporation or Organization)	*(IRS Employer Identification No.)*
One Infinity Corporate Centre Drive, Suite 300, Garfield Heights, Ohio	**44125-5370**
(Address of Principal Executive Offices)	*(Zip Code)*

Registrant's telephone number, including area code: (440) 753-1490

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $0.01	**The NASDAQ Stock Market LLC**

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐	Accelerated filer ☒
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting common equity held by non-affiliates computed by reference to the price of $15.58 per share at which the common equity was last sold, as of the last business day of the registrant's most recently completed second fiscal quarter, was $440,266,729.

As of February 15, 2011, there were 28,884,838 outstanding shares of the Company's common stock, par value $0.01 per share.

Documents Incorporated by Reference

Portions of the following document are incorporated by reference into Part III of this Annual Report on Form 10-K: the definitive Proxy Statement to be used in connection with the Registrant's Annual Meeting of Stockholders to be held on May 26, 2011 (the "2011 Proxy Statement").

Except as otherwise stated, the information contained in this Annual Report on Form 10-K is as of December 31, 2010.

PART I

Item 1. ***Business.***

THE COMPANY

Overview

Chart Industries, Inc., a Delaware corporation incorporated in 1992 (the "Company," "Chart" or "we"), is a leading independent global manufacturer of highly engineered equipment used in the production, storage and end-use of hydrocarbon and industrial gases, based on our sales and the estimated sales of our competitors. We supply engineered equipment used throughout the global liquid gas supply chain. The largest portion of end-use applications for our products is energy-related, accounting for approximately 47% of sales and 49% of orders in 2010, and 71% of backlog at December 31, 2010. We are a leading manufacturer of standard and engineered equipment primarily used for low-temperature and cryogenic applications. We have developed an expertise in cryogenic systems and equipment, which operate at low temperatures sometimes approaching absolute zero (0 kelvin; -273° Centigrade; -459° Fahrenheit). The majority of our products, including vacuum insulated containment vessels, heat exchangers, cold boxes and other cryogenic components, are used throughout the liquid gas supply chain for the purification, liquefaction, distribution, storage and end-use of hydrocarbon and industrial gases.

Our primary customers are large, multinational producers and distributors of hydrocarbon and industrial gases and their suppliers. We sell our products and services to more than 2,000 customers worldwide. We have developed long-standing relationships with leading companies in the gas production, gas distribution, gas processing, liquefied natural gas or LNG, chemical and industrial gas industries, including Air Products, Praxair, Airgas, Air Liquide, The Linde Group or Linde, JGC Corporation or JGC, Bechtel Corporation, Jacobs Engineering Group, Inc. or Jacobs, ExxonMobil, British Petroleum or BP, ConocoPhillips, Saudi Aramco, Shaw Stone & Webster, ABB Lummus, Uhde, CTCI Corporation or CTCI, Toyo, Samsung, Technip, Daelim, and Energy World Corporation or EWC, many of whom have been purchasing our products for over 20 years.

We have attained this position by capitalizing on our low-cost global manufacturing footprint, technical expertise and know-how, broad product offering, reputation for quality, and by focusing on attractive, growing markets. We have an established sales and customer support presence across the globe and low cost manufacturing operations in the United States, Central Europe and China. For the years ended December 31, 2010, 2009, and 2008, we generated sales of $555.5 million, $597.5 million, and $753.1 million, respectively.

The following charts show the proportion of our revenues generated by each operating segment as well as our estimate of the proportion of revenue generated by end-user for the year ended December 31, 2010.

Segments and Products

We operate in three segments: (i) Energy & Chemicals or E&C, (ii) Distribution and Storage or D&S and (iii) BioMedical. While each segment manufactures and markets different cryogenic equipment and systems to distinct end-users, they all share a reliance on our heat transfer and low temperature storage know-how and

expertise. The E&C and D&S segments manufacture products used primarily in energy-related and general industrial applications, such as the separation, liquefaction, distribution and storage of hydrocarbon and industrial gases. Through our BioMedical segment, we supply cryogenic and other equipment used in the storage and distribution of biological materials and oxygen, used primarily in the medical, biological research and animal breeding industries. Further information about these segments is located in Note K to the Company's consolidated financial statements included in Item 8 of this Annual Report on Form 10-K.

Energy and Chemicals Segment

Our principal products within the E&C segment, which accounted for 25% of sales for the year ended December 31, 2010, are focused on engineered equipment and systems for the energy and chemicals markets, primarily heat exchangers, Core-in-Kettles®, cold boxes, process systems and LNG vacuum insulated pipe. These products are used by major natural gas, petrochemical processing and industrial gas companies in the production of their products. Our products in the E&C segment include the following:

Heat Exchangers and Core-in-Kettles®

We are a leading designer and manufacturer of cryogenic brazed aluminum and air cooled heat exchangers. Using technology pioneered by us, our brazed aluminum heat exchangers are incorporated into assemblies and cold boxes to facilitate the progressive cooling and liquefaction of air or hydrocarbon mixtures for the subsequent recovery or purification of component gases. In hydrocarbon processing industries, our brazed aluminum heat exchangers allow producers to obtain purified hydrocarbon by-products, such as methane, ethane, propane and ethylene, which are commercially marketable for various industrial or residential uses. In the industrial gas market, our brazed aluminum heat exchangers are used to obtain high purity atmospheric gases, such as oxygen, nitrogen and argon, which have diverse industrial applications.

Our air cooled heat exchangers are used in multiple markets to cool fluids to allow for further processing or to provide condensing of fluids, including hydrocarbon, petrochemical, natural gas processing, and power generation. Our compact Core-in-Kettle® heat exchangers are designed to replace shell-and-tube exchangers, offering significantly more heat transfer surface per unit volume and greatly improving the efficiency of chillers, vaporizers, reboilers and condensers in hydrocarbon applications including ethylene, propylene and LNG. Brazed aluminum and air cooled heat exchangers are engineered to the customer's requirements and range in price from $20,000 to $2.5 million or more depending on the scope and complexity of the project.

Our heat exchanger demand is primarily driven by activity in the LNG and natural gas segments of the hydrocarbon processing market, as well as the Asian industrial gas market. Other key global drivers involve developing Gas to Liquids, or GTL, and clean coal processes including Coal to Liquids, or CTL, and Integrated Gasification and Combined Cycle, or IGCC, power projects. In the future, management believes that continuing efforts by petroleum producing countries to better utilize stranded natural gas and previously flared gases, as well as efforts to broaden their industrial base, and the developing clean coal initiatives globally present a promising source of demand for our heat exchangers and cold box systems. In addition, demand for heat exchangers and cold boxes in developed countries is expected to continue as firms upgrade their facilities for greater efficiency and regulatory compliance.

Our principal competitors for brazed aluminum heat exchangers are Linde, Sumitomo, Kobe and Fives, and we face competition from a variety of competitors for air cooled heat exchangers. Management believes we are the only producer of large brazed aluminum heat exchangers in the United States and are a leader in the global cryogenic heat exchanger market. Major customers for our heat exchangers in the industrial gas market include Air Liquide, Air Products, Praxair, Hangyang, Kaifeng Air Separation and Sichuan Air Separation. In the hydrocarbon processing market, major customers and end-users include BP, ExxonMobil, Saudi Aramco, ConocoPhillips and contractors such as JGC, Bechtel, Jacobs, Kellogg Brown Root or KBR, Technip, ABB Lummus, Toyo, The Shaw Group and Samsung.

Cold Boxes

We are a leading designer and fabricator of cold boxes. Cold boxes are highly engineered systems used to significantly reduce the temperature of gas mixtures to the point where component gases liquefy and can be separated and purified for further use in multiple industrial, scientific and commercial applications. In the hydrocarbon processing market, our cold box systems are used in natural gas processing and in the petrochemical industry. In the industrial gas market, cold boxes are used to separate air into its major atmospheric components, including nitrogen, oxygen and argon, where the gases are used in a diverse range of applications such as metal production and heat treating, enhanced oil and gas production, coal gasification, chemical and oil refining, the quick-freezing of food, wastewater treatment and industrial welding. The construction of a cold box generally consists of one or more brazed aluminum heat exchangers and other equipment packaged in a "box" consisting of a structural metal frame encasing a complex system of piping, valves and instrumentation. Cold boxes, which are designed and fabricated to order, sell in the price range of $1 million to $20 million, with the majority of cold boxes priced between $1 million and $5 million.

We have a number of competitors for fabrication of cold boxes, including Linde, Air Products, Praxair, Air Liquide and many smaller fabrication-only facilities around the world. Principal customers and end-users for our cold boxes include ABB Lummus, BP, Bechtel, Saudi Aramco, Jacobs, JGC, Technip, Toyo, The Shaw Group, Samsung and KBR.

Process Systems

We are a leader in the design and manufacturing of highly engineered hydrocarbon process systems specifically for those markets requiring cryogenic processing technology. These "Concept-to-Reality" process systems incorporate many of Chart's core products, including brazed aluminum heat exchangers, Core-in-Kettles®, cold boxes, vessels, pipe work and air cooled heat exchangers. These systems, which are custom engineered and manufactured to order, typically sell in the price range of $5 million to over $100 million, depending on the scope and complexity of the project, with the majority of the systems priced between $5 million and $25 million.

Our principal markets include LNG, nitrogen rejection, ammonia purification, propane dehydrogenation or PDH, HYCO/hydrogen recovery, and Ryan-Holmes CO_2 bulk removal technology for enhanced oil recovery and CO_2 sequestration.

We have a number of competitors for our process systems including Linde, Air Products, and other smaller engineering, procurement and construction, or EPC, firms to whom we also act as a supplier of equipment including heat exchangers and cold boxes. Principal customers and end-users for our process systems include EWC, ABB Lummus, ExxonMobil, Jacobs, and the Shaw Group, CTCI, Samsung, Uhde and KBR.

LNG Vacuum Insulated Pipe

This product line consists of vacuum insulated pipe, or VIP, used for LNG transportation within both export and import terminals. LNG VIP is fabricated to order with projects varying in size from $500,000 to $25 million. Our competitors in the LNG VIP market include Technip and ITP. In general, our customers are the major EPC firms, such as Technip and Bechtel. LNG VIP competes directly with mechanically insulated pipe which takes longer to install and requires higher maintenance over its life.

Distribution and Storage Segment

Through our D&S segment, which accounted for 48% of our sales for the year ended December 31, 2010, we are a leading supplier of cryogenic equipment to the global bulk and packaged industrial gas markets. Demand for the products supplied by this segment is driven primarily by the significant installed base of users of

cryogenic liquids as well as new applications and distribution technologies for cryogenic liquids. Our products span the entire spectrum of the industrial gas market from small customers requiring cryogenic packaged gases to large users requiring custom engineered cryogenic storage systems. Our products in the D&S segment include the following:

Cryogenic Bulk Storage Systems

We are a leading supplier of cryogenic bulk storage systems of various sizes ranging from 500 gallons to 250,000 gallons. Using sophisticated vacuum insulation systems placed between inner and outer vessels, these bulk storage systems are able to store and transport liquefied industrial gases and hydrocarbon gases at temperatures from -100° Fahrenheit to temperatures nearing absolute zero. End use customers for our cryogenic storage tanks include industrial gas producers and distributors, chemical producers, manufacturers of electrical components, health care organizations, food processors and businesses in the oil and natural gas industries. Prices for our cryogenic bulk storage systems range from $10,000 to $1 million. Global industrial gas producers and distributors, including Air Products, Air Liquide, Linde, Airgas, Praxair and Messer, are significant customers for our cryogenic bulk storage systems. On a worldwide basis, we compete primarily with Taylor-Wharton International or Taylor-Wharton in this product area. In the European and Asian markets, we compete with several suppliers owned by the global industrial gas producers as well as independent regional suppliers.

Cryogenic Packaged Gas Systems

We are a leading supplier of cryogenic packaged gas systems of various sizes ranging from 160 liters to 3,000 liters. Cryogenic liquid cylinders are used extensively in the packaged gas industry to allow smaller quantities of liquid to be easily delivered to the customers of industrial gas distributors on a full-for-empty or fill-on-site basis. Principal customers for our liquid cylinders are the same global industrial gas producers and the North American industrial gas distributors who purchase our cryogenic bulk storage systems. We compete on a worldwide basis primarily with Taylor-Wharton in this product area. We have developed two technologies in the packaged gas product area: ORCA Micro-Bulk systems and Tri-fecta® Laser Gas assist systems. ORCA Micro-Bulk systems bring the ease of use and distribution economics of bulk gas supply to customers formerly supplied by high pressure or cryogenic liquid cylinders. The ORCA Micro-Bulk system is the substantial market leader in this growing product line. The Tri-fecta® Laser Gas assist system was developed to meet the "assist gas" performance requirements for new high powered lasers being used in the metal fabrication industry.

Cryogenic Systems and Components

Our line of cryogenic components, including VIP, engineered bulk gas installations, specialty liquid nitrogen, or LN2, end-use equipment and cryogenic flow meters are recognized in the market for their reliability, quality and performance. These products are sold to industrial gas producers, as well as to a diverse group of distributors, resellers and end users. We compete with a number of suppliers of cryogenic systems and components, including Acme Cryogenics, Vacuum Barrier Corporation and others. Additionally, in 2010 we completed the acquisition of Cryotech which is a manufacturer of LN2 dosing systems for food and beverage packaging applications located in San Jose, California. Cryotech expands our expertise in LN2 end use applications and distributes its products globally.

LNG Applications

We supply cryogenic solutions for the storage, distribution, vaporization, and application of LNG. LNG may be utilized as a primary source of heat or power at industrial or residential complexes located away from a natural gas pipeline. LNG may also be used for peak shaving or as a backup supply at remote locations. We refer to this as a "Virtual Pipeline" as the natural gas pipeline is replaced with cryogenic distribution to deliver the gas to the end user. We supply cryogenic trailers, bulk storage tanks, tap-off facilities, and vaporization equipment specially configured for LNG into Virtual Pipeline applications. LNG may also be used as a fuel to power

vehicles or ships. LNG vehicle fueling applications consist of LNG and liquid/compressed natural gas refueling systems for centrally fueled fleets of vehicles powered by natural gas, such as fleets operated by metropolitan transportation authorities, refuse haulers and heavy-duty truck fleets. We sell LNG applications around the world from all D&S facilities to numerous end users, energy companies, and gas distributors. Competition for LNG applications is based primarily on product design, customer support and service, dependability and price. Our competitors tend to be regionally focused or product specific while Chart is able to supply a broad range of solutions required by LNG applications.

Beverage Liquid CO_2 Systems

This product line consists primarily of vacuum insulated, bulk liquid CO_2 containers used for beverage carbonation in restaurants, convenience stores and cinemas, in sizes ranging from 100 pounds to 750 pounds of liquid CO_2 storage. We also manufacture and market non-insulated, bulk fountain syrup containers for side-by-side installation with our CO_2 systems. Our beverage systems are sold to national restaurant chains, soft drink companies and CO_2 distributors. Our primary competitors for bulk liquid CO_2 beverage delivery systems are Taylor-Wharton and other producers of high-pressure gaseous CO_2 cylinders.

Cryogenic Services

We operate locations in the United States and Europe providing installation, service, repair and maintenance of cryogenic products including storage tanks, liquid cylinders, cryogenic trailers, cryogenic pumps, cryogenic flow meters and VIP. In 2010, we opened a comprehensive service facility in McCarran, Nevada that allows us to provide a full range of repair services for equipment located west of the Rocky Mountains.

BioMedical Segment

The BioMedical segment, which accounted for 27% of our sales for the year ended December 31, 2010, consists of various product lines built around our core competencies in cryogenics, but with a focus on the respiratory and biological users of the liquids and gases instead of the large producers and distributors of cryogenic liquids. Our products in the BioMedical segment include the following:

Respiratory Products

Our respiratory oxygen product line is comprised of a range of medical respiratory products, including liquid oxygen systems and ambulatory oxygen systems, both of which are used primarily for the in-home supplemental oxygen treatment of patients with chronic obstructive pulmonary diseases, such as bronchitis, emphysema and asthma. We further expanded our respiratory product offering in 2010 by acquiring SeQual Technologies, Inc., which designs, manufactures, and services portable oxygen concentrators, stationary concentrators, and emergency medical products.

Individuals for whom supplemental oxygen is prescribed generally receive an oxygen system from a home healthcare provider, medical equipment dealer, or gas supplier. The provider or physician usually selects which type of oxygen system to recommend to its customers: liquid oxygen systems, oxygen concentrators or high-pressure oxygen cylinders. Of these modalities, physicians generally believe that liquid oxygen offers greater long-term therapeutic benefits by providing the option of increased patient ambulation.

We believe that competition for liquid oxygen systems is based primarily upon product quality, performance, reliability, ease-of-use and price, and we focus our marketing strategies on these considerations. Furthermore, competition also includes the impact of other modalities including concentrators, homefill and cylinders in the broader respiratory market.

Biological Storage Systems

This product line consists of vacuum insulated containment vessels for the storage of biological materials. The primary markets for this product line include medical laboratories, biotech/pharmaceutical, research facilities, blood and tissue banks, veterinary laboratories, large-scale repositories and artificial insemination, particularly in the beef and dairy industry.

The significant competitors for biological storage systems include a few large companies worldwide, such as Taylor-Wharton, Air Liquide and Ind-Burma Petroleum Company, or IBP. These products are sold through multiple channels of distribution specifically applicable to each market sector. The distribution channels range from highly specialized cryogenic storage systems providers to general supply and catalogue distribution operations to breeding service providers. Historically, competition in this field has been focused on design, reliability and price. Alternatives to vacuum insulated containment vessels include mechanical, electrically powered refrigeration.

Engineering and Product Development

Our engineering and product development activities are focused primarily on developing new and improved solutions and equipment for the users of cryogenic liquids. Our engineering, technical and marketing employees actively assist customers in specifying their needs and in determining appropriate products to meet those needs. Portions of our engineering expenditures typically are charged to customers, either as separate items or as components of product cost.

Competition

We believe we can compete effectively around the world and that we are a leading competitor in our markets. Competition is based primarily on performance and the ability to provide the design, engineering and manufacturing capabilities required in a timely and cost-efficient manner. Contracts are usually awarded on a competitive bid basis. Quality, technical expertise and timeliness of delivery are the principal competitive factors within the industry. Price and terms of sale are also important competitive factors. Because independent third-party prepared market share data is not available, it is difficult to know for certain our exact position in our markets, although we believe we rank among the leaders in each of the markets we serve. We base our statements about industry and market positions on our reviews of annual reports and published investor presentations of our competitors and augment this data with information received by marketing consultants conducting competition interviews and our sales force and field contacts.

Marketing

We market our products and services throughout the world primarily through direct sales personnel and independent sales representatives and distributors. The technical and custom design nature of our products requires a professional, highly trained sales force. While each salesperson and sales representative is expected to develop a highly specialized knowledge of one product or group of products within one of our segments, each salesperson and certain sales representatives are able to sell many products from different segments to a single customer. We use independent sales representatives and distributors to market our products and services in certain foreign countries and in certain North American markets. These independent sales representatives supplement our direct sales force in dealing with language and cultural matters. Our domestic and foreign independent sales representatives earn commissions on sales, which vary by product type.

Backlog

The dollar amount of our backlog as of December 31, 2010, 2009 and 2008 was $236.4 million, $185.1 million and $398.8 million, respectively. Backlog is comprised of the portion of firm signed purchase orders or other written contractual commitments received from customers that we have not recognized as revenue under the percentage of completion method or based upon shipment. Backlog can be significantly affected by the

timing of orders for large products, particularly in the E&C segment, and the amount of backlog at December 31, 2010 described above is not necessarily indicative of future backlog levels or the rate at which backlog will be recognized as sales. Orders included in our backlog may include customary cancellation provisions under which the customer could cancel all or part of the order, potentially subject to the payment of certain costs and/or penalties. For further information about our backlog, including backlog by segment, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Customers

We sell our products primarily to gas producers, distributors and end-users across the industrial gas, hydrocarbon and chemical processing industries in countries throughout the world. Sales to our top ten customers accounted for 38%, 47% and 48% of consolidated sales in 2010, 2009 and 2008, respectively. No single customer exceeded 10% of consolidated sales in 2010. Our sales to particular customers fluctuate from period to period, but the global producers and distributors of hydrocarbon and industrial gases and their suppliers tend to be a consistently large source of revenue for us. Our supply contracts are generally contracts for "requirements" only. While our customers may be obligated to purchase a certain percentage of their supplies from us, there are generally no minimum requirements. Also, many of our contracts may be cancelled on as little as one month's notice. To minimize credit risk from trade receivables, we review the financial condition of potential customers in relation to established credit requirements before sales credit is extended and monitor the financial condition of customers to help ensure timely collections and to minimize losses. In addition, for certain domestic and foreign customers, particularly in the E&C segment, we require advance payments, letters of credit and other such guarantees of payment. Certain customers also require us to issue letters of credit or performance bonds, particularly in instances where advance payments are involved, as a condition of placing the order. We believe our relationships with our customers are generally good.

Intellectual Property

Although we have a number of patents, trademarks and licenses related to our business, no one of them or related group of them is considered by us to be of such importance that its expiration or termination would have a material adverse effect on our business. In general, we depend upon technological capabilities, manufacturing quality control and application of know-how, rather than patents or other proprietary rights, in the conduct of our business.

Raw Materials and Suppliers

We manufacture most of the products we sell. The raw materials used in manufacturing include aluminum products (including sheets, bars, plate and piping), stainless steel products (including sheets, plates, heads and piping), palladium oxide, carbon steel products (including sheets, plates and heads), valves and gauges and fabricated metal components. Most raw materials are available from multiple sources of supply. We believe our relationships with our raw material suppliers and other vendors are generally good. Raw material prices have remained fairly stable during 2010, but we expect them to increase somewhat during 2011 as global markets continue to improve. Subject to certain risks related to our suppliers as discussed under Item 1A. "Risk Factors," we foresee no acute shortages of any raw materials that would have a material adverse effect on our operations.

Employees

As of January 31, 2011, we had 3,013 employees, including 1,735 domestic employees and 1,278 international employees. These employees consisted of 1,271 salaried, 216 bargaining unit hourly and 1,526 non-bargaining unit hourly.

We are a party to one collective bargaining agreement with the International Association of Machinists and Aerospace Workers covering 216 employees at our La Crosse, Wisconsin heat exchanger facility. On February 6, 2010, we entered into a new three-year agreement to replace the previous agreement, which expired at that time.

Environmental Matters

Our operations have historically included and currently include the handling and use of hazardous and other regulated substances, such as various cleaning fluids used to remove grease from metal, that are subject to federal, state and local environmental laws and regulations. These regulations impose limitations on the discharge of pollutants into the soil, air and water, and establish standards for their handling, management, use, storage and disposal. We monitor and review our procedures and policies for compliance with environmental laws and regulations. Our management is familiar with these regulations and supports an ongoing program to maintain our adherence to required standards.

We are involved with environmental compliance, investigation, monitoring and remediation activities at certain of our owned or formerly owned manufacturing facilities and at one owned facility that is leased to a third party. We believe that we are currently in substantial compliance with all known environmental regulations. We accrue for certain environmental remediation-related activities for which commitments or remediation plans have been developed or for which costs can be reasonably estimated. These estimates are determined based upon currently available facts regarding each facility. Actual costs incurred may vary from these estimates due to the inherent uncertainties involved. Future expenditures relating to these environmental remediation efforts are expected to be made over the next 17 years as ongoing costs of remediation programs. Although we believe we have adequately provided for the cost of all known environmental conditions, additional contamination, the outcome of disputed matters or changes in regulatory posture could result in more costly remediation measures than budgeted, or those we believe are adequate or required by existing law. We believe that any additional liability in excess of amounts accrued which may result from the resolution of such matters will not have a material adverse effect on our financial position, liquidity, cash flows or results of operations.

Available Information

Additional information about the Company is available at http://www.chartindustries.com. On the Investor Relations page of the website, the public may obtain free copies of the Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable following the time that they are filed with, or furnished to, the Securities and Exchange Commission ("SEC"). Additionally, the Company has posted its Code of Ethical Business Conduct and Officer Code of Ethics on its website, which are also available free of charge to any shareholder interested in obtaining a copy. This Form 10-K and reports filed with the SEC are also accessible through the SEC's website at www.sec.gov.

Item 1A. ***Risk Factors.***

Investing in our common stock involves risk. You should carefully consider the risks described below as well as the other information contained in this Annual Report on Form 10-K in evaluating your investment in us. If any of the following risks actually occur, our business, financial condition, operating results or cash flows could be harmed materially. Additional risks, uncertainties and other factors that are not currently known to us or that we believe are not currently material may also adversely affect our business, financial condition, operating results or cash flows. In any of these cases, you may lose all or part of your investment in us.

Risks Related to our Business

The markets we serve are subject to cyclical demand and vulnerable to economic downturn, which could harm our business and make it difficult to project long-term performance.

Demand for our products depends in large part upon the level of capital and maintenance expenditures by many of our customers and end users, in particular those customers in the global hydrocarbon and industrial gas markets. These customers' expenditures historically have been cyclical in nature and vulnerable to economic downturns. Decreased capital and maintenance spending by these customers could have a material adverse effect on the demand for our products and our business, financial condition and results of operations. In addition, this historically cyclical demand limits our ability to make accurate long-term predictions about the performance of our company. Even if demand starts to improve, it is difficult to predict whether any improvement represents a long-term improving trend or the extent or timing of improvement. There can be no assurance that historically improving cycles are representative of future actual demand.

While we experienced growth in demand from 2003 until mid-2008 in the global hydrocarbon and industrial gas markets, we experienced a significant decline in orders from mid-2008 until mid-2009. While there has been some recent improvement in orders for some of our businesses, we cannot predict whether business performance may be better or worse in the future.

The loss of, or significant reduction or delay in, purchases by our largest customers could reduce our revenues and profitability.

A small number of customers has accounted for a substantial portion of our historical net sales. For example, sales to our top ten customers accounted for 38%, 47% and 48% of consolidated sales in 2010, 2009 and 2008, respectively. We expect that a limited number of customers will continue to represent a substantial portion of our sales for the foreseeable future. While our sales to particular customers fluctuate from period to period, the global producers and distributors of hydrocarbon and industrial gases and their suppliers tend to be a consistently large source of revenue for us.

The loss of any of our major customers or a decrease or delay in orders or anticipated spending by such customers could materially reduce our revenues and profitability. Our largest customers could also engage in business combinations, which could increase their size, reduce their demand for our products as they recognize synergies or rationalize assets and increase or decrease the portion of our total sales concentration to any single customer.

Decreases in energy prices may decrease demand for some of our products and cause downward pressure on the prices we charge, which could harm our business, financial condition and results of operations.

A significant amount of our sales are to customers in the energy production and supply industry. We estimate that 47% of our revenue for the year ended December 31, 2010 was generated by end-users in the energy industry. Accordingly, demand for a significant portion of our products depends upon the level of capital expenditure by companies in the oil and gas industry, which depends, in part, on energy prices. While some applications for our products could see greater demand if prices for natural gas remain relatively low compared

to oil prices, a sustained decline in energy prices and a resultant downturn in energy production activities could negatively affect the capital expenditures of our customers. Any significant decline in the capital expenditures of our customers, whether due to a decrease in the market price of energy or otherwise, may decrease demand for our products and cause downward pressure on the prices we charge. Accordingly, if there is a downturn in the energy production and supply industry, our business, financial condition and results of operations could be adversely affected.

Governmental energy policies could change, or expected changes could fail to materialize, which could adversely affect our business or prospects.

Energy policy can develop rapidly in the markets we serve, including the United States. Within the last few years, significant developments have taken place, primarily in international markets that we serve with respect to energy policy and related regulations. We anticipate that energy policy will continue to be an important regulatory priority globally as well as on a national, state and local level. As energy policy continues to evolve, the existing rules and incentives that impact the energy-related segments of our business may change. It is difficult, if not impossible, to predict whether changes in energy policy might occur in the future and the timing of potential changes and their impact on our business. The elimination or reduction of favorable policies for our energy-related business, or the failure of expected policies that would benefit our business to be adopted, could negatively impact our revenues and profitability. For example, China's 12th Five-Year Plan promotes the use of natural gas, and our business prospects in China could be harmed if China changed that policy. Likewise, if the United States does not adopt a law such as the proposed Natural Gas Act, we would not benefit from any resultant expansion of the LNG infrastructure in the United States.

We may be unable to compete successfully in the highly competitive markets in which we operate.

Although many of our products serve niche markets, a number of our direct and indirect competitors in these markets are major corporations, some of which have substantially greater technical, financial and marketing resources than Chart, and other competitors enter these markets from time to time. Any increase in competition may cause us to lose market share or compel us to reduce prices to remain competitive, which could result in reduced sales and earnings. Companies, or their divisions, that operate in our industry include Air Products, Kobe, Linde, Nordon, Sumitomo, CVA and Taylor-Wharton. Additionally, we compete with several suppliers owned by global industrial gas producers and many smaller fabrication-only facilities around the world. Increased competition with these companies could prevent the institution of price increases or could require price reductions or increased spending on research and development, and marketing and sales, any of which could materially reduce our revenues, profitability or both. Moreover, during an industry downturn, competition in some of the product lines we serve increases as a result of over-capacity, which may result in downward pricing pressure. Further, customers who typically outsource their need for cryogenic systems to us may use their excess capacity to produce such systems themselves. We also compete in the sale of a limited number of products with certain of our major customers. If we are unable to compete successfully, our results of operations, cash flows and financial condition could be negatively affected.

A downturn in economic and financial conditions has had and may have in the future a negative effect on our business, financial condition and results of operations.

The global economic and financial market crisis in 2008 and 2009 caused a general tightening in the credit markets, lower levels of liquidity, increases in the rates of default and bankruptcy, and reduced corporate profits and capital spending, all of which had a negative effect on our business, results of operations and financial condition. Demand for our products depends in large part upon the level of capital and maintenance expenditures by many of our customers and end users. While general economic conditions improved throughout 2010, a downturn in economic conditions may reduce the willingness or ability of our customers and prospective customers to commit funds to purchase our products and services, and may reduce their ability to pay for our products and services after purchase. Similarly, our suppliers may not be able to supply us with needed raw materials or components on a timely basis, may increase prices or go out of business, which could result in our

inability to meet customer demand, or fulfill our contractual obligations or could affect our gross margins. See "We depend on the availability of certain key suppliers; if we experience difficulty with a supplier, we may have difficulty finding alternative sources of supply" below. We cannot predict the timing or duration of negative market conditions. If the economy or markets in which we operate deteriorate or financial markets weaken, our business, financial condition and results of operations could be adversely impacted.

Our exposure to fixed-price contracts, including exposure to fixed pricing on long-term customer contracts, could negatively impact our financial results.

A substantial portion of our sales has historically been derived from fixed-price contracts for large system projects, which may involve long-term fixed price commitments to customers which are sometimes difficult to execute. We have experienced difficulties in executing large contracts of this kind in the past, including cost overruns, storm damage, supplier failures and customer disputes. While we believe our contract management processes are strong, our staff reduction initiatives during the recent downturn increase the risk that our future execution on fixed-priced contracts could result in future difficulties.

To the extent that any of our fixed-price contracts are delayed, our subcontractors fail to perform, contract counterparties successfully assert claims against us, the original cost estimates in these or other contracts prove to be inaccurate or the contracts do not permit us to pass increased costs on to our customers, profitability from a particular contract may decrease or project losses may be incurred, which, in turn, could decrease our revenues and overall profitability. The uncertainties associated with our fixed-price contracts make it more difficult to predict our future results and exacerbate the risk that our results will not match expectations, which has happened in the past.

We depend on the availability of certain key suppliers; if we experience difficulty with a supplier, we may have difficulty finding alternative sources of supply.

The cost, quality and availability of raw materials and certain specialty metals used to manufacture our products are critical to our success. The materials and components we use to manufacture our products are sometimes custom made and may be available only from a few suppliers, and the lead times required to obtain these materials and components can often be significant. We rely on sole suppliers or a limited number of suppliers for some of these materials, including special grades of aluminum used in our brazed aluminum heat exchangers. While we have not historically encountered problems with availability, this does not mean that we will continue to have timely access to adequate supplies of essential materials and components in the future or that supplies of these materials and components will be available on satisfactory terms when needed. If our vendors for these materials and components are unable to meet our requirements, fail to make shipments in a timely manner or ship defective materials or components, we could experience a shortage or delay in supply or fail to meet our contractual requirements, which would adversely affect our results of operations and negatively impact our cash flow and profitability.

Our backlog is subject to modification or termination of orders, which could negatively impact our sales.

Our backlog is comprised of the portion of firm signed purchase orders or other written contractual commitments received from customers that we have not recognized as revenue. The dollar amount of backlog as of December 31, 2010 was $236.4 million. Our backlog can be significantly affected by the timing of orders for large products, particularly in our E&C segment, and the amount of our backlog at December 31, 2010 is not necessarily indicative of future backlog levels or the rate at which backlog will be recognized as sales. Although historically the amount of modifications and terminations of our orders has not been material compared to our total contract volume and is partially offset by cancellation penalties, customers can, and sometimes do, terminate or modify these orders. We cannot predict whether cancellations will accelerate or diminish in the future. Cancellations of purchase orders or reductions of product quantities in existing contracts could substantially and materially reduce our backlog and, consequently, our future sales. Our failure to replace canceled or reduced backlog could negatively impact our sales and results of operations.

Health care reform or other changes in government and other third-party payor reimbursement levels and practices could negatively impact our revenues and profitability.

Our acquisitions of Covidien's oxygen therapy business and SeQual Technologies Inc., among others, have significantly increased the size and impact on our financial results of our respiratory products business in our BioMedical segment. Many of our BioMedical segment's customers are reimbursed for products and services by third-party payors, such as government programs, including Medicare and Medicaid, private insurance plans and managed care programs in the U.S, and by similar programs and entities in the other countries in which we operate or sell our equipment. If third-party payors deny coverage, make the reimbursement process or documentation requirements more uncertain or reduce levels of reimbursement, it could negatively affect our revenues and profitability.

In March 2010, significant reforms to the healthcare system were adopted in the United States. The new law includes provisions that, among other things, reduce and/or limit Medicare reimbursement, require all individuals to have health insurance (with limited exceptions) and impose new and/or increased taxes. Specifically, the law imposes a 2.3% excise tax on U.S. sales of most medical devices beginning in 2013 which will impact certain of our BioMedical sales. Various healthcare reform proposals have also emerged at the state level. The new law and these proposals could impact the demand for our products or the prices at which we sell our products. In addition, the excise tax could increase our cost of doing business. The impact of this law and these proposals could have a material adverse effect on our business, results of operations and/or financial condition.

As a global business, we are exposed to economic, political and other risks in different countries which could materially reduce our revenues, profitability or cash flows, or materially increase our liabilities.

Since we manufacture and sell our products worldwide, our business is subject to risks associated with doing business internationally. In 2010, 2009 and 2008, 57%, 59% and 65%, respectively, of our sales were made in international markets. Our future results could be harmed by a variety of factors, including:

- changes in foreign currency exchange rates;
- exchange controls and currency restrictions;
- changes in a specific country's or region's political, social or economic conditions, particularly in emerging markets;
- civil unrest, turmoil or outbreak of disease in any of the countries in which we operate or sell our products;
- tariffs, other trade protection measures and import or export licensing requirements;
- potentially negative consequences from changes in U.S. and international tax laws;
- difficulty in staffing and managing geographically widespread operations;
- differing labor regulations;
- requirements relating to withholding taxes on remittances and other payments by subsidiaries;
- different regulatory regimes controlling the protection of our intellectual property;
- restrictions on our ability to own or operate subsidiaries, make investments or acquire new businesses in these jurisdictions;
- restrictions on our ability to repatriate dividends from our foreign subsidiaries;
- difficulty in collecting international accounts receivable;
- difficulty in enforcement of contractual obligations under non-U.S. law;
- transportation delays or interruptions;
- changes in regulatory requirements; and
- the burden of complying with multiple and potentially conflicting laws.

Our international operations and sales also expose us to different local political and business risks and challenges. For example, we are faced with potential difficulties in staffing and managing local operations and we have to design local solutions to manage credit and legal risks of local customers and distributors. In addition, because some of our international sales are to suppliers that perform work for foreign governments, we are subject to the political risks associated with foreign government projects. For example, certain foreign governments may require suppliers for a project to obtain products solely from local manufacturers or may prohibit the use of products manufactured in certain countries.

International growth and expansion into emerging markets, such as China, Central and Eastern Europe, India, the Middle East and Latin America, may cause us difficulty due to greater regulatory barriers than in the United States, the necessity of adapting to new regulatory systems, problems related to entering new markets with different economic, social and political systems and conditions, and significant competition from the primary participants in these markets, some of which may have substantially greater resources than us. For example, unstable political conditions or civil unrest, including the recent political instability in North Africa and the Middle East and any expansion of that unrest, could negatively impact our order levels and sales in a region or our ability to collect receivables from customers or operate or execute projects in a region.

Our international operations also depend upon favorable trade relations between the United States and those foreign countries in which our customers and suppliers have operations. A protectionist trade environment in either the United States or those foreign countries in which we do business or sell products, such as a change in the current tariff structures, export compliance, government subsidies or other trade policies, may adversely affect our ability to sell our products or do business in foreign markets. Our overall success as a global business depends, in part, upon our ability to succeed in differing economic, social and political conditions. We may not succeed in developing and implementing policies and strategies to counter the foregoing factors effectively in each location where we do business and the foregoing factors may cause a reduction in our revenues, profitability or cash flows, or cause an increase in our liabilities.

Fluctuations in exchange and interest rates may affect our operating results and impact our financial condition.

Fluctuations in the value of the U.S. dollar may increase or decrease our sales or earnings. Because our consolidated financial results are reported in U.S. dollars, if we generate sales or earnings in other currencies, the translation of those results into U.S. dollars can result in a significant increase or decrease in the amount of those sales or earnings. We also bid for certain foreign projects in U.S. dollars or euros. If the U.S. dollar or euro strengthens relative to the value of the local currency, we may be less competitive on those projects. In addition, our debt service requirements are primarily in U.S. dollars and a portion of our cash flow is generated in euros or other foreign currencies. Significant changes in the value of the foreign currencies relative to the U.S. dollar could impair our cash flow and financial condition.

In addition, fluctuations in currencies relative to the U.S. dollar may make it more difficult to perform period-to-period comparisons of our reported results of operations. For purposes of accounting, the assets and liabilities of our foreign operations, where the local currency is the functional currency, are translated using period-end exchange rates, and the revenues and expenses of our foreign operations are translated using average exchange rates during each period.

In addition to currency translation risks, we incur currency transaction risk whenever we or one of our subsidiaries enters into either a purchase or a sales transaction using a currency other than the functional currency of the transacting entity. Given the volatility of exchange rates, we may not be able to effectively manage our currency and/or translation risks. Volatility in currency exchange rates may decrease our revenues and profitability and impair our financial condition. We have purchased and may continue to purchase foreign currency forward buy and sell contracts to manage the risk of adverse currency fluctuations and if the contracts are inconsistent with currency trends we could experience exposure related to foreign currency fluctuations.

We are also exposed to general interest rate risk. If interest rates increase, our interest expense could increase significantly, affecting earnings and reducing cash flow available for working capital, capital expenditures, acquisitions, and other purposes. In addition, changes by any rating agency to our outlook or credit ratings could increase our cost of borrowing.

We may fail to successfully acquire or integrate companies that provide complementary products or technologies.

A component of our business strategy is the acquisition of businesses that complement our existing products and services. Such a strategy involves the potential risks inherent in assessing the value, strengths, weaknesses, contingent or other liabilities and potential profitability of acquisition candidates and in integrating the operations of acquired companies. In addition, any acquisitions of foreign business may increase our exposure to risks inherent in doing business outside the United States.

From time to time, we may have acquisition discussions with potential target companies both domestically and internationally. If a large acquisition opportunity arises and we proceed, a substantial portion of our cash and surplus borrowing capacity could be used for the acquisition or we may seek additional debt or equity financing.

Potential acquisition opportunities become available to us from time to time, and we engage periodically in discussions or negotiations relating to potential acquisitions, including acquisitions that may be material in size or scope to our business. Any acquisition may or may not occur and, if an acquisition does occur, it may not be successful in enhancing our business for one or more of the following reasons:

- Any business acquired may not be integrated successfully and may not prove profitable;
- The price we pay for any business acquired may overstate the value of that business or otherwise be too high;
- Liabilities we take on through the acquisition may prove to be higher than we expected;
- We may fail to achieve acquisition synergies; or
- The focus on the integration of operations of acquired entities may divert management's attention from the day-to-day operation of our businesses.

Inherent in any future acquisition is the risk of transitioning company cultures and facilities. The failure to efficiently and effectively achieve such transitions could increase our costs and decrease our profitability.

We are subject to potential insolvency or financial distress of third parties.

We are exposed to the risk that third parties to various arrangements who owe us money or goods and services, or who purchase goods and services from us, will not be able to perform their obligations or continue to place orders due to insolvency or financial distress. If third parties fail to perform their obligations under arrangements with us, we may be forced to replace the underlying commitment at current or above market prices or on other terms that are less favorable to us or we may have to write off receivables in the case of customer failures to pay. If this happens, whether as a result of the insolvency or financial distress of a third party or otherwise, we may incur losses, or our results of operations, financial position or liquidity could otherwise be adversely affected.

If we are unable to effectively control our costs while maintaining our customer relationships and core resources, our business, results of operations and financial condition could be adversely affected.

It is critical for us to appropriately align our cost structure with prevailing market conditions, to minimize the effect of economic fluctuation on our operations, and in particular, to continue to maintain our customer relationships, core resources and manufacturing capacity while protecting profitability and cash flow. If we are

unable to align our cost structure in response to prevailing economic conditions on a timely basis, or if implementation or failure to implement any cost structure adjustments has an adverse impact on our business or prospects, then our financial condition, results of operations and cash flows may be negatively affected.

If we are unable to successfully manage our planned operational expansions, it may place a significant strain on our management and administrative resources and lead to increased costs and reduced profitability.

We expect to continue to expand our operations, particularly in China, Europe and the United States in markets where we perceive the opportunity for profitable expansion. Our ability to operate our business successfully and implement our strategies depends, in part, on our ability to allocate our resources optimally in each of our facilities in order to maintain efficient operations as we expand. Ineffective management of our growth could cause manufacturing inefficiencies, increase our operating costs, place significant strain on our management and administrative resources and prevent us from implementing our business plan.

For example, we have invested or plan to invest approximately $15-20 million in new capital expenditures in 2011 related to the expected growth of selective parts of each of BioMedical, E&C and D&S segments. If we fail to implement these projects in a timely and effective manner, we may lose the opportunity to obtain some customer orders. Even if we effectively implement these projects, the orders needed to support the capital expenditure may not be obtained, may be delayed, or may be less than expected, which may result in sales or profitability at lower levels than anticipated. For example, while we invested significantly in the expansion of our E&C segment in recent years, we experienced delay in some of the orders initially anticipated to support the cold box portion of that expansion, which resulted in the underutilization of some of our capacity. In addition, potential cost overruns, delays or unanticipated problems in any capital expansion could make the expansion more costly than originally predicted or cause us to miss windows of opportunity.

Difficulties in implementing a new Enterprise Resource Planning system could disrupt our business.

Since 2009 we have been implementing a new Enterprise Resource Planning, or “ERP,” system worldwide. Primarily as a result of the complexities and business process changes associated with this implementation, there can be no assurance that we will not experience disruptions or inefficiencies in our business operations as a result of this new system implementation, the final phases of which are scheduled to be completed in 2011.

If we lose our senior management or other key employees, our business may be adversely affected.

Our ability to successfully operate and grow our business and implement our strategies is largely dependent on the efforts, abilities and services of our senior management and other key employees. Our future success will also depend on, among other factors, our ability to attract and retain qualified personnel, such as engineers and other skilled labor, either through direct hiring or the acquisition of other businesses employing such professionals. Our products, many of which are highly engineered, represent specialized applications of cryogenic or low temperature technologies and know-how, and many of the markets we serve represent niche markets for these specialized applications. Accordingly, we rely heavily on engineers, salespersons, business unit leaders, senior management and other key employees who have experience in these specialized applications and are knowledgeable about these niche markets, our products, and our company. Additionally, we may modify our management structure from time to time or substantially reduce our overall workforce as we did in certain sectors of our business during the recent economic downturn, which may create marketing, operational and other business risks. The loss of the services of these senior managers or other key employees or the failure to attract or retain other qualified personnel could reduce the competitiveness of our business or otherwise impair our business prospects.

Fluctuations in the prices and availability of raw materials could negatively impact our financial results.

The pricing and availability of raw materials for use in our businesses can be volatile due to numerous factors beyond our control, including general, domestic and international economic conditions, labor costs,

production levels, competition, consumer demand, import duties and tariffs and currency exchange rates. This volatility can significantly affect the availability and cost of raw materials for us, and may, therefore, increase the short-term or long-term costs of raw materials.

The commodity metals we use, including aluminum and stainless steel, have experienced significant fluctuations in price in recent years. Prices rose quickly in the period prior to the recent global economic downturn, subsequently declined during the economic downturn, and more recently have been increasing again. On average, over half of our cost of sales has historically been represented by the cost of commodities metals. We have generally been able to recover the cost increases through price increases to our customers; however, during periods of rising prices of raw materials, we may not always be able to pass increases on to our customers. Conversely, when raw material prices decline, customer demands for lower prices could result in lower sale prices and, to the extent we have existing inventory, lower margins. As a result, fluctuations in raw material prices could result in lower revenues and profitability.

Due to the nature of our business and products, we may be liable for damages based on product liability and warranty claims.

Due to the high pressures and low temperatures at which many of our products are used, the inherent risks associated with concentrated industrial and hydrocarbon gases, and the fact that some of our products are relied upon by our customers or end users in their facilities or operations, or are manufactured for relatively broad industrial, transportation or consumer use, we face an inherent risk of exposure to claims in the event that the failure, use or misuse of our products results, or is alleged to result, in death, bodily injury, property damage or economic loss. We believe that we meet or exceed existing professional specification standards recognized or required in the industries in which we operate. We are subject to claims from time to time, some of which are substantial but none of which historically have had a material adverse effect on our financial condition or results of operations, and we may be subject to claims in the future. Although we currently maintain product liability coverage, which we believe is adequate for the continued operation of our business, such insurance may become difficult to obtain or be unobtainable in the future on terms acceptable to us, it includes customary exclusions and conditions, it may not cover certain specialized applications, such as aerospace-related applications, and it generally does not cover warranty claims. A successful product liability claim or series of claims against us, including one or more consumer claims purporting to constitute class actions or claims resulting from extraordinary loss events, in excess of or outside our insurance coverage or a significant warranty claim or series of claims against us could materially decrease our liquidity, impair our financial condition and adversely affect our results of operations.

Some of our products are subject to regulation by the U.S. Food and Drug Administration and other governmental authorities.

Some of our products are subject to regulation by the U.S. Food and Drug Administration and other national, supranational, federal and state governmental authorities. It can be costly and time consuming to obtain regulatory approvals to market a medical device, such as those sold by our BioMedical segment. Approvals might not be granted for new devices on a timely basis, if at all. Regulations are subject to change as a result of legislative, administrative or judicial action, which may further increase our costs or reduce sales. Our failure to maintain approvals or obtain approval for new products could adversely affect our business, results of operations, financial condition and cash flows.

In addition, we are subject to regulations covering manufacturing practices, product labeling and advertising and adverse-event reporting that apply after we have obtained approval to sell a product. Many of our facilities and procedures and those of our suppliers are subject to ongoing oversight, including periodic inspection by governmental authorities. Compliance with production, safety, quality control and quality assurance regulations is costly and time-consuming, and while we seek to be in full compliance, noncompliance could arise from time

to time. If we fail to comply, our operations, financial condition and cash flows could be adversely affected, including through the imposition of fines, costly remediation or plant shutdowns as a result of noncompliance.

We carry goodwill and indefinite-lived intangible assets on our balance sheet, which are subject to impairment testing and could subject us to significant charges to earnings in the future if impairment occurs.

As of December 31, 2010, we had goodwill and indefinite-lived intangible assets of $316.2 million, which represented approximately 33.1% of our total assets. The value of these assets may increase in the future if we complete acquisitions as part of our overall business strategy. Goodwill and indefinite-lived intangible assets are not amortized, but are tested for impairment annually on October 1st or more often if events or changes in circumstances indicate a potential impairment may exist. Factors that could indicate that our goodwill or indefinite-lived intangible assets are impaired include a decline in stock price and market capitalization, lower than projected operating results and cash flows, and slower growth rates in our industry. Our stock price historically has fluctuated significantly in response to market and other factors. For example, it declined significantly from mid-2008 to early 2009 and then increased sharply in late 2010. Declines in our stock price in the future could increase the risk of goodwill impairment if the price of our stock does not recover. To test for impairment, a model to estimate the fair market value of our reporting segments has been developed. This fair market value model incorporates our estimates of future operating results and cash flows, estimates of allocations of certain assets and cash flows among reporting segments, estimates of future growth rates and our judgment regarding the applicable discount rates to use to discount those estimated operating results and cash flows. If an impairment is determined to exist, it may result in a significant non-recurring non-cash charge to earnings and lower shareholders' equity.

We may be required to make material expenditures in order to comply with environmental, health and safety laws and climate change regulations, or incur additional liabilities under these laws and regulations.

We are subject to numerous environmental, health and safety laws and regulations that impose various environmental controls on us or otherwise relate to environmental protection and various health and safety matters, including the discharge of pollutants in the air and water, the handling, use, treatment, storage and clean-up of solid and hazardous materials and wastes, the investigation and remediation of soil and groundwater affected by hazardous substances and the requirement to obtain and maintain permits and licenses. These laws and regulations often impose strict, retroactive and joint and several liability for the costs of, and damages resulting from, cleaning up our, or our predecessors', past or present facilities and third party disposal sites. Compliance with these laws generally increases the costs of transportation and storage of raw materials and finished products, as well as the costs of storing and disposing waste, and could decrease our liquidity and profitability and increase our liabilities. Health and safety and other laws in the jurisdictions in which we operate impose various requirements on us including state licensing requirements that may benefit our customers. If we are found to have violated any of these laws, we may become subject to corrective action orders and fines or penalties, and incur substantial costs, including substantial remediation costs and commercial liability to our customers. Further, we also could be subject to future liability resulting from conditions that are currently unknown to us that could be discovered in the future.

We are currently remediating or developing work plans for remediation of environmental conditions involving certain current or former facilities. For example, the discovery of contamination arising from historical industrial operations at our Clarksville, Arkansas property, which is currently being leased to a third party business, has exposed us, and in the future may continue to expose us, to remediation obligations. We have also been subject to environmental liabilities for other sites where we formerly operated or at locations where we or our predecessors did or are alleged to have operated. To date, our environmental remediation expenditures and costs for otherwise complying with environmental laws and regulations have not been material, but the uncertainties associated with the investigation and remediation of contamination and the fact that such laws or

regulations change frequently makes predicting the cost or impact of such laws and regulations on our future operations uncertain. Stricter environmental, safety and health laws, regulations or enforcement policies could result in substantial costs and liabilities to us and could subject us to more rigorous scrutiny. Consequently, compliance with these laws could result in significant expenditures as well as other costs and liabilities that could decrease our liquidity and profitability and increase our liabilities.

There is a growing political and scientific belief that emissions of greenhouse gases ("GHG") alter the composition of the global atmosphere in ways that are affecting the global climate. Various stakeholders, including legislators and regulators, shareholders and non-governmental organizations, as well as companies in many business sectors, are considering ways to reduce GHG emissions. There is growing consensus that some form of U.S. regulation will be forthcoming at the federal level with respect to GHG emissions. Such regulation could result in regulatory or product standard requirements for the Company's global businesses but because any impact is dependent on the design of the mandate or standard, the Company is unable to predict its significance at this time. Furthermore, the potential physical impacts of theorized climate change on the Company's customers, and therefore on the Company's operations, are speculative and highly uncertain, and would be particular to the circumstances developing in various geographical regions. These may include changes in weather patterns (including drought and rainfall levels), water availability, storm patterns and intensities, and temperature levels. These potential physical effects may adversely impact the cost, production, sales and financial performance of the Company's operations.

Increases in labor costs, potential labor disputes and work stoppage could materially decrease our revenues and profitability.

Our financial performance is affected by the availability of qualified personnel and the cost of labor. As of January 31, 2011, we had 3,013 employees, including 1,271 salaried, 216 bargaining unit hourly and 1,526 non-bargaining unit hourly employees. Employees represented by a union are subject to one collective bargaining agreement in the United States that expires in February 2013. We have experienced one work stoppage in 2007. Although we entered into a new labor agreement with our unionized employees at this facility in 2010, if we are unable to enter into new, satisfactory labor agreements with our unionized employees when necessary in the future or other labor controversies or union organizing efforts arise, we could experience a significant disruption to our operations, lose business or experience an increase in our operating expenses, which could reduce our profit margins. Furthermore, increased U.S. federal regulation or significant modifications to existing labor regulations, could potentially increase our labor costs.

Additional liabilities related to taxes, including any new taxes imposed on us as a result of health care reform legislation, could adversely impact our financial results, financial condition and cash flow.

We are subject to tax and related obligations in the jurisdictions in which we operate or do business, including state, local, federal and foreign taxes. The taxing rules of the various jurisdictions in which we operate or do business often are complex and subject to varying interpretations. Tax authorities may challenge tax positions that we take or historically have taken, and may assess taxes where we have not made tax filings or may audit the tax filings we have made and assess additional taxes, as they have done from time to time in the past. Some of these assessments may be substantial, and also may involve the imposition of substantial penalties and interest. In addition, governments could impose new taxes on us in the future. For example, health care reform in the United States includes new taxes on manufacturers of medical devices such as the respiratory therapy equipment manufactured by our BioMedical segment. The payment of substantial additional taxes, penalties or interest resulting from tax assessments, or the imposition of any new taxes, could materially and adversely impact our results of operations, financial condition and cash flow.

Our pension plan is currently underfunded.

Certain U.S. hourly and salaried employees are covered by our defined benefit pension plan. The plan has been frozen since February 2006. As of December 31, 2010, the projected benefit obligation under our pension

plan was approximately $44.7 million and the value of the assets of the plan was approximately $33.2 million, resulting in our pension plan being underfunded by approximately $11.5 million. We are also a participant in a multiemployer plan which is underfunded. If the performance of the assets in our pension plan or the multiemployer plan does not meet expectations or if other actuarial assumptions are modified, our required pension contributions for future years could be higher than we expect, which may negatively impact our results of operations, cash flows and financial condition.

If we are unable to continue our technological innovation and successful introduction of new commercial products, our profitability could be adversely affected.

The industries we serve, including the energy, industrial gas and biomedical industries, experience ongoing technological change and product improvement. Manufacturers periodically introduce new generations of products or require new technological capacity to develop customized products or respond to industry developments or needs. Our future growth will depend on our ability to gauge the direction of the commercial and technological progress in our markets, as well as our ability to acquire new product technologies or fund and successfully develop, manufacture and market products in this constantly changing environment. We must continue to identify, develop, manufacture and market innovative products on a timely basis to replace existing products in order to maintain our profit margins and competitive position. We may not be successful in acquiring and developing new products or technologies and any of our new products may not be accepted by our customers. If we fail to keep pace with evolving technological innovations in the markets we serve, our profitability may decrease.

Failure to protect our intellectual property and know-how could reduce or eliminate any competitive advantage and reduce our sales and profitability, and the cost of protecting our intellectual property may be significant.

We rely on a combination of internal procedures, nondisclosure agreements, intellectual property rights assignment agreements, as well as licenses, patents, trademarks and copyright law to protect our intellectual property and know-how. Our intellectual property rights may not be successfully asserted in the future or may be invalidated, circumvented or challenged. For example, we frequently explore and evaluate potential relationships and projects with other parties, which often requires that we provide the potential partner with confidential technical information. While confidentiality agreements are typically put in place, there is a risk the potential partner could violate the confidentiality agreement and use our technical information for its own benefit or the benefit of others or compromise the confidentiality. In addition, the laws of certain foreign countries in which our products may be sold or manufactured do not protect our intellectual property rights to the same extent as the laws of the United States. For example, we are increasing our manufacturing capabilities and sales in China, where laws may not protect our intellectual property rights to the same extent as in the United States. Failure or inability to protect our proprietary information could result in a decrease in our sales or profitability.

We have obtained and applied for some U.S. and foreign trademark and patent registrations and will continue to evaluate the registration of additional trademarks and patents, as appropriate. We cannot guarantee that any of our pending applications will be approved. Moreover, even if the applications are approved, third parties may seek to oppose or otherwise challenge them. A failure to obtain registrations in the United States or elsewhere could limit our ability to protect our trademarks and technologies and could impede our business. Further, the protection of our intellectual property may require expensive investment in protracted litigation and the investment of substantial management time and there is no assurance we ultimately would prevail or that a successful outcome would lead to an economic benefit that is greater than the investment in the litigation. The patents in our patent portfolio are scheduled to expire between 2011 and 2030.

In addition, we may be unable to prevent third parties from using our intellectual property rights and know-how without our authorization or from independently developing intellectual property that is the same as or similar to ours, particularly in those countries where the laws do not protect our intellectual property rights as fully as in the United States. We compete in a number of industries (for example, heat exchangers and cryogenic

storage) that are small or specialized, which makes it easier for a competitor to monitor our activities and increases the risk that ideas will be stolen. The unauthorized use of our know-how by third parties could reduce or eliminate any competitive advantage we have developed, cause us to lose sales or otherwise harm our business or increase our expenses as we attempt to enforce our rights.

We may be subject to claims that our products or processes infringe the intellectual property rights of others, which may cause us to pay unexpected litigation costs or damages, modify our products or processes or prevent us from selling our products.

Although it is our intention to avoid infringing or otherwise violating the intellectual property rights of others, third parties may nevertheless claim (and in the past have claimed) that our processes and products infringe their intellectual property and other rights. For example, our BioMedical business manufactures products for relatively broad consumer use, is actively marketing these products in multiple jurisdictions internationally and risks infringing technologies that may be protected in one or more of these international jurisdictions as the scope of our international marketing efforts expands. Our strategies of capitalizing on growing international demand as well as developing new innovative products across multiple business lines present similar infringement claim risks both internationally and in the United States as we expand the scope of our product offerings and markets. We compete with other companies for contracts in some small or specialized industries, which increases the risk that the other companies will develop overlapping technologies leading to an increased possibility that infringement claims will arise. Whether or not these claims have merit, we may be subject to costly and time-consuming legal proceedings, and this could divert our management's attention from operating our businesses. In order to resolve such proceedings, we may need to obtain licenses from these third parties or substantially re-engineer or rename our products in order to avoid infringement. In addition, we might not be able to obtain the necessary licenses on acceptable terms, or at all, or be able to re-engineer or rename our products successfully.

Our operations could be impacted by the effects of severe weather, which could be more severe than the damage and impact that our Louisiana operations encountered from hurricanes in 2005 and 2008.

Some of our operations, including our operations in New Iberia, Louisiana and Houston, Texas, are located in geographic regions and physical locations that are susceptible to physical damage and longer-term economic disruption from hurricanes or other severe weather. We also could make significant future capital expenditures in hurricane-susceptible or other severe weather locations from time to time. These weather events can disrupt our operations, result in damage to our properties and negatively affect the local economy in which these facilities operate. In early September 2008, for example, our New Iberia, Louisiana facility was forced to close as a result of heavy rainfall, evacuations, strong winds and power outages resulting from Hurricane Gustav. Two weeks after Hurricane Gustav, winds and flooding from Hurricane Ike damaged our New Iberia, Louisiana, Houston, Texas and The Woodlands, Texas operations and offices, and those facilities were also closed for a period of time. In 2005, our New Iberia operations encountered damage and were disrupted from the storm surge and flooding caused by Hurricane Rita. Future hurricanes or other severe weather may cause production or delivery delays as a result of the physical damage to the facilities, the unavailability of employees and temporary workers, the shortage of or delay in receiving certain raw materials or manufacturing supplies and the diminished availability or delay of transportation for customer shipments, any of which may have an adverse affect on our revenues and profitability. Additionally, the potential physical impact of theorized climate change could include more frequent and intense storms, which would heighten the risk to our operations in areas that are susceptible to hurricanes and other severe weather. Although we maintain insurance subject to certain deductibles, which may cover some of our losses, that insurance may become unavailable or prove to be inadequate.

We operate in many different jurisdictions and we could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act and similar worldwide anti-corruption laws.

The U.S. Foreign Corrupt Practices Act (FCPA) and similar worldwide anti-corruption laws generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the

purpose of obtaining or retaining business. Our internal policies mandate compliance with these anti-corruption laws. We operate in many parts of the world that have experienced governmental corruption to some degree, and in certain circumstances, strict compliance with anti-corruption laws may conflict with local customs and practices. Despite our training and compliance programs, we cannot assure you that our internal control policies and procedures always will protect us from reckless or criminal acts committed by our employees or agents. Our continued expansion outside the U.S., including in developing countries, could increase the risk of such violations in the future. Violations of these laws, or allegations of such violations, could disrupt our business and result in a material adverse effect on our results of operations or financial condition.

Increased government regulation could adversely affect our financial results, financial condition and cash flow.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") institutes a wide range of reforms, some of which may impact us. Among other things, the Dodd-Frank Act contains significant corporate governance and executive compensation-related provisions that authorize or require the SEC to adopt additional rules and regulations in these areas, such as shareholder "say on pay" voting and proxy access. The impact of these provisions on our business is uncertain. The Dodd-Frank Act also provides for new statutory and regulatory requirements for derivative transactions, including foreign exchange and interest rate hedging transactions. Certain transactions will be required to be cleared on exchanges, and cash collateral will be required for those transactions. While the Dodd-Frank Act provides for a potential exception from these clearing and cash collateral requirements for commercial end-users, the exception is subject to future rule making and interpretation by regulatory authorities. We enter into foreign exchange contracts, interest rate swaps and foreign currency forward contracts from time to time to manage our exposure to commodity price risk, foreign currency exchange risk and interest rate risk. If, in the future, we are required to provide cash collateral for our hedging transactions, it could reduce our ability to execute strategic hedges. In addition, the contractual counterparties in hedging arrangements will be required to comply with the Dodd-Frank Act's new requirements, which could ultimately result in increased costs of these arrangements.

We are subject to regulations governing the export of our products.

Due to our significant foreign sales, our export activities are subject to regulation, including the U.S. Treasury Department's Office of Foreign Assets Control's regulations. While we believe we are in compliance with these regulations and maintain programs intended to achieve compliance, we may currently or may in the future be in violation of these regulations. Any violations may subject us to government scrutiny, investigation and civil and criminal penalties and may limit our ability to export our products.

As a provider of products to the U.S. government, we are subject to federal rules, regulations, audits and investigations, the violation or failure of which could adversely affect our business.

We sell certain of our products to the U.S. government and, therefore, we must comply with and are affected by laws and regulations governing purchases by the U.S. government. Government contract laws and regulations affect how we do business with our government customers and, in some instances, impose added costs on our business. For example, a violation of specific laws and regulations could result in the imposition of fines and penalties or the termination of our contracts or debarment from bidding on contracts. In some instances, these laws and regulations impose terms or rights that are more favorable to the government than those typically available to commercial parties in negotiated transactions.

Risks Related to our Leverage

Our leverage and future debt service obligations could adversely affect our financial condition, limit our ability to raise additional capital to fund our operations, limit our ability to react to changes in the economy or our industry, impact the way we operate our business, expose us to interest rate risk to the extent of our variable rate debt and prevent us from fulfilling our debt service obligations.

We are leveraged and have future debt service obligations. Our financial performance could be affected by our leverage. As of December 31, 2010, our total indebtedness was $224.9 million. In addition, at that date, we had $22.0 million of letters of credit and bank guarantees outstanding and borrowing capacity of approximately $113.0 million under the revolving portion of our senior secured credit facility, after giving effect to the letters of credit and bank guarantees outstanding. While we had $165.1 million in cash at December 31, 2010, which we believe mitigates the risk related to our leverage, there is no assurance that we will continue to be profitable in the future or that we will not use our available cash in ways other than those that reduce our leverage or mitigate the risk related to our leverage. We may also incur additional indebtedness in the future. Our level of indebtedness could have important negative consequences to us and you, including:

- we may have difficulty generating sufficient cash flow to pay interest and satisfy our debt obligations;
- we may have difficulty obtaining financing in the future for working capital, capital expenditures, acquisitions or other purposes;
- we will need to use a substantial portion of our available cash flow to pay interest and principal on our debt, which will reduce the amount of money available to finance our operations and other business activities;
- some of our debt, including our borrowings under our senior secured credit facility, has variable rates of interest, which exposes us to the risk of increased interest rates;
- our debt level increases our vulnerability to general economic downturns and adverse industry conditions;
- our debt level could limit our flexibility in planning for, or reacting to, changes in our business and in our industry in general;
- our debt and the amount we must pay to service our debt obligations could place us at a competitive disadvantage compared to our competitors that have less debt;
- our customers may react adversely to our debt level and seek or develop alternative suppliers; and
- our failure to comply with the financial and other restrictive covenants in our debt instruments which, among other things, require us to maintain specified financial ratios and limit our ability to incur debt and sell assets, could result in an event of default that, if not cured or waived, could have a material adverse effect on our business or prospects.

Our business may not generate sufficient cash flow from operations and future borrowings may not be available to us under our senior secured credit facility or otherwise in an amount sufficient to permit us to pay the principal and interest on our indebtedness or fund our other liquidity needs. In addition, a portion of our indebtedness bears interest at variable rates. If market interest rates increase, debt service on our variable-rate debt will rise, which would adversely affect our cash flow. We may be unable to refinance any of our debt, including our senior secured credit facility or our senior subordinated notes, on commercially reasonable terms. See Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources."

If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to sell assets, seek additional capital or seek to restructure or refinance our indebtedness. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. Our senior secured credit facility and the indenture under which our senior subordinated notes were issued restrict our

ability to use the proceeds from asset sales. We may be unable to consummate those asset sales to raise capital or sell assets at prices that we believe are fair and proceeds that we do receive may be inadequate to meet any debt service obligations then due.

We may still be able to incur substantially more debt. This could further exacerbate the risks that we face.

We may be able to incur substantial additional indebtedness in the future. The terms of our debt instruments do not fully prohibit us from doing so. The revolving credit portion of our senior secured credit facility provides commitments of up to $135.0 million, approximately $113.0 million of which would have been available for future borrowings (after giving effect to letters of credit and bank guarantees outstanding) as of December 31, 2010. See Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Debt Instruments and Related Covenants." We may also further increase the size of our senior secured credit facility or refinance with higher borrowing limits. If new debt is added to our current debt levels, the related risks that we now face could intensify.

The senior secured credit facility and the indenture governing our senior subordinated notes contain a number of restrictive covenants which limit our ability to finance future operations or capital needs or engage in other business activities that may be in our interest.

The senior secured credit facility and the indenture governing our senior subordinated notes impose, and the terms of any future indebtedness may impose, operating and other restrictions on us and our subsidiaries. Such restrictions affect or will affect, and in many respects limit or prohibit, among other things, our ability and the ability of our subsidiaries to:

- incur additional indebtedness;
- create liens;
- pay dividends and make other distributions in respect of our capital stock;
- redeem or buy back our capital stock;
- make certain investments or certain other restricted payments;
- sell certain kinds of assets;
- enter into certain types of transactions with affiliates; and
- affect mergers or consolidations.

The senior secured credit facility also requires us to achieve certain financial and operating results and maintain compliance with specified financial ratios. Our ability to comply with these ratios may be affected by events beyond our control.

The restrictions contained in the senior secured credit facility and the indenture governing our senior subordinated notes could:

- limit our ability to plan for or react to market or economic conditions or meet capital needs or otherwise restrict our activities or business plans; and
- adversely affect our ability to finance our operations, acquisitions, investments or strategic alliances or other capital needs or to engage in other business activities that would be in our interest.

A breach of any of these covenants or our inability to comply with the required financial ratios could result in a default under our senior secured credit facility and/or the indenture governing our senior subordinated notes. If an event of default occurs under our senior secured credit facility, which includes an event of default under the indenture governing our senior subordinated notes, the lenders could elect to:

- declare all borrowings outstanding, together with accrued and unpaid interest, to be immediately due and payable;

- require us to apply all of our available cash to repay the borrowings; or
- prevent us from making debt service payments on the senior subordinated notes;

any of which would result in an event of default under our senior subordinated notes. The lenders will also have the right in these circumstances to terminate any commitments they have to provide further financing.

If we were unable to repay or otherwise refinance these borrowings when due, our lenders could sell the collateral securing the senior secured credit facility, which constitutes substantially all of our domestic wholly-owned subsidiaries' assets.

We are a holding company and we may depend upon cash from our subsidiaries to service our debt. If we do not receive cash from our subsidiaries, we may be unable to meet our obligations.

We are a holding company and all of our operations are conducted through our subsidiaries. Accordingly, we may be dependent upon the earnings and cash flows from our subsidiaries to provide the funds necessary to meet our debt service obligations. If we could not have access to the cash flows of our subsidiaries, we may be unable to pay the principal or interest on our debt. In addition, certain of our subsidiaries are holding companies that rely on subsidiaries of their own as a source of funds to meet any obligations that might arise.

Generally, the ability of a subsidiary to make cash available to its parent is affected by its own operating results and is subject to applicable laws and contractual restrictions contained in its debt instruments and other agreements. Moreover, there may be restrictions on payments by our subsidiaries to us under applicable laws, including laws that require companies to maintain minimum amounts of capital, to make payments to shareholders only from profits and restrictions on our ability to repatriate dividends from our foreign subsidiaries. As a result, although our subsidiaries may have cash, we may be unable to obtain that cash to satisfy our obligations and make payments to our stockholders, if any.

Risks Related to the Trading Market for Our Common Stock

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law may discourage a takeover attempt.

Provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law could make it more difficult for a third party to acquire us. Provisions of our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law impose various procedural and other requirements, which could make it more difficult for stockholders to effect certain corporate actions. For example, our amended and restated certificate of incorporation authorizes our board of directors to determine the rights, preferences, privileges and restrictions of unissued series of preferred stock, without any vote or action by our stockholders. Therefore, our board of directors can authorize and issue shares of preferred stock with voting or conversion rights that could adversely affect the voting or other rights of holders of our common stock. These rights may have the effect of delaying or deterring a change of control of our company. These provisions could limit the price that certain investors might be willing to pay in the future for shares of our common stock.

Our common stock has experienced, and may continue to experience, price volatility.

Our common stock has at times experienced substantial price volatility as a result of many factors, including the general volatility of stock market prices and volumes, changes in securities analysts' estimates of our financial performance, variations between our actual and anticipated financial results, fluctuations in order or backlog levels, changes in accounting policies or procedures as have been required by the Financial Accounting Standards Board or other regulatory agencies, or uncertainty about current global economic conditions. For these reasons, among others, the price of our stock may continue to fluctuate.

Item 1B. ***Unresolved Staff Comments.***

Not Applicable.

Item 2. ***Properties.***

We occupy 32 principal facilities totaling approximately 2.5 million square feet, with the majority devoted to manufacturing, assembly and storage. Of these manufacturing facilities, approximately 1.7 million square feet are owned and 0.8 million square feet are occupied under operating leases. We lease approximately 17,500 square feet for our corporate office in Garfield Heights, Ohio. Our major owned facilities in the United States are subject to mortgages securing our senior secured credit facility.

The following table sets forth certain information about significant facilities occupied by us as of January 31, 2011:

Location	Segment	Square Feet	Ownership	Use
La Crosse, Wisconsin	Energy & Chemicals	149,000	Owned	Manufacturing/Office
New Iberia, Louisiana	Energy & Chemicals	62,400	Leased	Manufacturing
The Woodlands, Texas	Energy & Chemicals	29,000	Leased	Office
Tulsa, Oklahoma	Energy & Chemicals	58,500	Owned	Manufacturing/Office
Tulsa, Oklahoma	Energy & Chemicals	140,000	Leased	Manufacturing/Office
Tulsa, Oklahoma	Energy & Chemicals	68,000	Leased	Manufacturing/Office
Wolverhampton, United Kingdom	Energy & Chemicals	1,600	Leased	Office
Changzhou, China	Distribution & Storage/Energy & Chemicals	260,000	Owned	Manufacturing/Office
Anaheim, California	Distribution & Storage	6,100	Leased	Office/Manufacturing
Anaheim, California	Distribution & Storage	2,000	Leased	Manufacturing
Decin, Czech Republic	Distribution & Storage	638,000	Owned	Manufacturing/Office
Houston, Texas	Distribution & Storage	22,000	Owned	Service
McCarran, Nevada	Distribution & Storage	42,300	Owned	Service
New Prague, Minnesota	Distribution & Storage	31,000	Leased	Office
Plaistow, New Hampshire	Distribution & Storage	2,600	Leased	Office
San Jose, California	Distribution & Storage	20,800	Leased	Office/Manufacturing
Solingen, Germany	Distribution & Storage	13,400	Leased	Manufacturing/Office/ Service/Warehouse
Canton, Georgia	Distribution & Storage/BioMedical	154,000	Owned	Manufacturing/Office
Canton, Georgia	Distribution & Storage/BioMedical	20,800	Leased	Office
Jasper, Georgia	Distribution & Storage/BioMedical	32,500	Leased	Warehouse/Service
New Prague, Minnesota	Distribution & Storage/BioMedical	237,000	Owned	Manufacturing/Service
Chengdu, China	BioMedical	176,000	Owned	Office/Manufacturing
Lidcombe, Australia	BioMedical	2,400	Leased	Office/Warehouse
Plainfield, Indiana	BioMedical	141,000	Leased	Office/Manufacturing
Padova, Italy	BioMedical	11,800	Leased	Service
San Diego, California	BioMedical	46,200	Leased	Office/Manufacturing
Tokyo, Japan	BioMedical	1,600	Leased	Office
Toulouse, France	BioMedical	9,000	Leased	Service
Wokingham, United Kingdom	BioMedical	10,000	Leased	Office/Warehouse/Service
Wuppertal, Germany	BioMedical	104,900	Leased	Office/Warehouse/Service
Garfield Heights, Ohio	Corporate	17,500	Leased	Office
Luxembourg, Luxembourg	Corporate	1,900	Leased	Office
Denver, Colorado(1)	Discontinued operation	109,000	Owned	Held for Sale
Clarksville, Arkansas(2)	Discontinued operation	110,000	Owned	Manufacturing/Office

(1) At December 31, 2010, there is a signed contract for the sale of this facility.

(2) This facility is leased from us, with a purchase option, by the company that owns certain assets of the former Greenville Tube LLC business.

Regulatory Environment

We are subject to federal, state and local regulations relating to the discharge of materials into the environment, production and handling of our hazardous and regulated materials and our products and the conduct and condition of our production facilities. We do not believe that these regulatory requirements have had a material effect upon our capital expenditures, earnings or competitive position. We are not anticipating any material capital expenditures in 2011 that are directly related to regulatory compliance matters. We are also not aware of any pending or potential regulatory changes that would have a material adverse impact on our business.

Item 3. *Legal Proceedings.*

We are occasionally subject to various legal actions related to performance under contracts, product liability, environmental liability, taxes, employment, intellectual property and other matters, several of which actions claim substantial damages, in the ordinary course of its business. Based on the Company's historical experience in litigating these claims, as well as the Company's current assessment of the underlying merits of the claims and applicable insurance, if any, we currently believe the resolution of these legal claims will not have a material adverse effect on our financial position, liquidity, cash flows or results of operations. Future developments may, however, result in resolution of these legal claims in a way that could have a material adverse effect. See Item 1A. "Risk Factors."

Item 4A. *Executive Officers of the Registrant*.*

The name, age and positions of each Executive Officer of the Company as of February 1, 2011 are as follows:

Name	Age	Position
Samuel F. Thomas	59	Chairman, Chief Executive Officer and President
Michael F. Biehl	55	Executive Vice President, Chief Financial Officer and Treasurer
Matthew J. Klaben	41	Vice President, General Counsel and Secretary
Kenneth J. Webster	48	Vice President, Chief Accounting Officer and Controller

* Included pursuant to Instruction 3 to Item 401(b) of Regulation S-K.

Samuel F. Thomas has served as Chairman of our Board of Directors since March 2007 and has served as our Chief Executive Officer and President and as a member of our Board of Directors since October 2003. Prior to joining our company, Mr. Thomas was Executive Vice President of Global Consumables at ESAB Holdings Ltd., a provider of welding consumables and equipment. In addition to his most recent position at ESAB, Mr. Thomas was responsible for ESAB North America during his employment at ESAB Holdings Ltd. Prior to joining ESAB in February 1999, Mr. Thomas was Vice President of Friction Products for Federal Mogul, Inc. Prior to its acquisition by Federal Mogul in 1998, Mr. Thomas was employed by T&N plc from 1976 to 1998, where he served from 1991 as chief executive of several global operating divisions, including industrial sealing, camshafts and friction products.

Michael F. Biehl has been our Executive Vice President since April 2006, served as our Chief Accounting Officer from October 2002 until March 2006, and has been our Chief Financial Officer since July 2001. Until December 16, 2008, Mr. Biehl was also Chart's Treasurer and assumed that role again effective August 23, 2010. Prior to joining us, Mr. Biehl served as Vice President, Finance and Treasurer at Oglebay Norton Company, an industrial minerals mining and processing company. Prior to joining Oglebay Norton in 1992, Mr. Biehl worked in the audit practice of Ernst & Young LLP in Cleveland, Ohio from 1978 to 1992.

Matthew J. Klaben is our Vice President, General Counsel and Secretary. Prior to joining us in March 2006, Mr. Klaben was a partner at the law firm of Calfee, Halter & Griswold LLP in Cleveland, Ohio from January

2005 until March 2006, and an associate from April 1998 until December 2004. Before that, Mr. Klaben was an associate at the law firm of Jones Day in Cleveland, Ohio from September 1995 until April 1998.

Kenneth J. Webster is our Vice President, Chief Accounting Officer and Controller and has served in that capacity since May 27, 2010. Prior to that, Mr. Webster was Chief Accounting Officer and Controller since March 1, 2008. Mr. Webster joined the Company in July 2006 as the Company's Director of Internal Audit. Prior to joining Chart, Mr. Webster served as Assistant Corporate Controller for International Steel Group, an integrated steel manufacturer, from March 2004 to April 2005, at which time International Steel Group was acquired by Mittal Steel USA, Inc. Following the acquisition, Mr. Webster continued to serve in his capacity as Assistant Corporate Controller for Mittal Steel USA, Inc. until July 2006. Before that, Mr. Webster served in various accounting and finance positions with Bethlehem Steel.

PART II

Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.***

The Company's common stock is traded on the Nasdaq Global Select Market under the symbol "GTLS." Prior to 2008, the common stock traded on the Nasdaq Global Market. The high and low sales prices for the shares of common stock for the periods indicated are set forth in the table below.

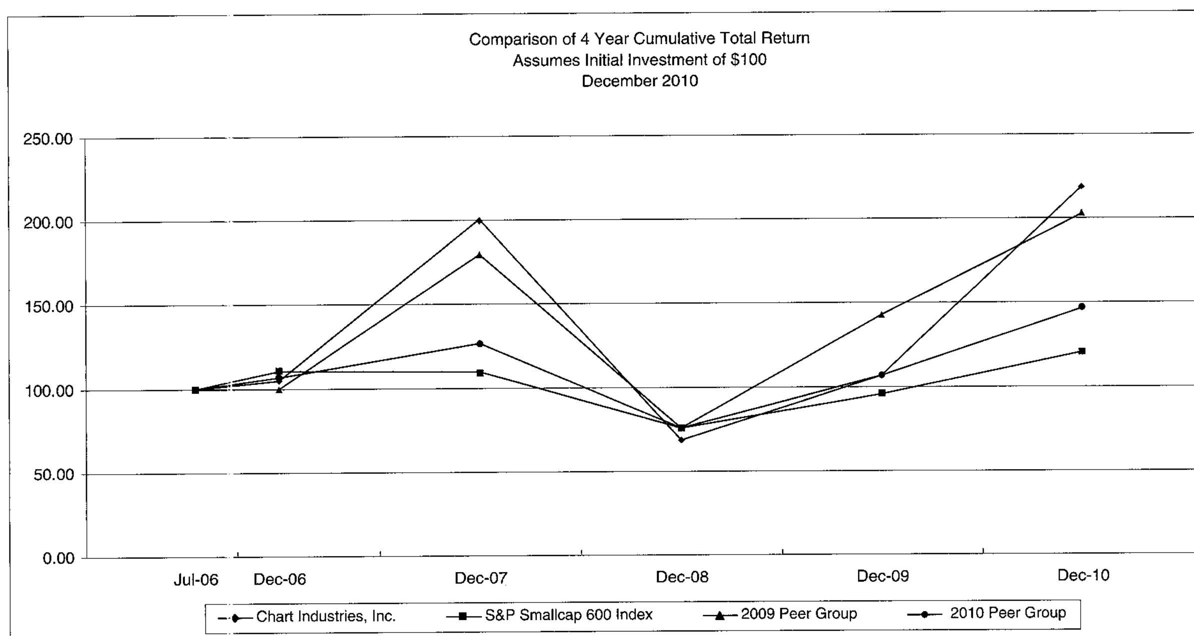
	High and Low Sales Price			
	2010		2009	
	High	Low	High	Low
First quarter	$21.80	$15.50	$12.09	$ 5.17
Second quarter	26.43	15.44	24.62	7.39
Third quarter	20.69	13.85	22.75	15.36
Fourth quarter	35.34	19.89	23.92	15.60
Year	$35.34	$13.85	$24.62	$ 5.17

As of February 1, 2011, there were 72 holders of record of our common stock. Since many holders hold shares in "street name," we believe that there are a significantly larger number of beneficial owners of our common stock than the number of record holders.

We do not currently intend to pay any cash dividends on our common stock, and instead intend to retain earnings, if any, for future operations, potential acquisitions and debt reduction. The amounts available to us to pay cash dividends are restricted by our senior secured credit facility. The indenture governing the notes also limits our ability to pay dividends. Any decision to declare and pay dividends in the future will be made at the discretion of our board of directors and will depend on, among other things, our results of operations, financial condition, cash requirements, contractual restrictions and other factors that our board of directors may deem relevant.

Cumulative Total Return Comparison

Set forth below is a line graph comparing the cumulative total return of a hypothetical investment in the shares of common stock of Chart Industries with the cumulative return of a hypothetical investment in each of the S&P SmallCap 600 Index, the 2009 Peer Group Index comprised of eight oil field equipment/service and industrial companies and our new Peer Group Index based on the respective market prices of each such investment on the dates shown below, assuming an initial investment of $100 on July 31, 2006, including reinvestment of dividends. Trading in Chart common stock commenced July 26, 2006, following a public offering.



	7/31/2006	12/31/2006	12/31/2007	12/31/2008	12/31/2009	12/31/2010
Chart Industries, Inc.	**$100.00**	**$105.26**	**$200.65**	**$69.03**	**$107.27**	**$219.35**
S&P SmallCap 600 Index	100.00	110.70	110.37	76.08	95.53	120.66
2009 Peer Group Index	100.00	99.95	180.42	75.71	143.30	202.84
2010 Peer Group Index	100.00	107.51	127.20	77.50	106.66	147.76

The Company selects the peer companies that comprise the Peer Group Index solely on the basis of objective criteria. These criteria result in an index composed of oil field equipment/service and comparable industrial companies. We changed our Peer Group Index this year. The companies comprising the old Peer Group Index ("2009 Peer Group") had not changed since our initial public offering in 2006 and some of the 2009 Peer Group companies were only loosely comparable to the Company in size and industry. To create a Peer Group Index that was more closely comparable to the Company in 2010, the Company substantially modified its peer group to include companies whose current lines of business are more comparable to the Company's. The updated 2010 Peer Group Index ("2010 Peer Group") members are Dresser-Rand Group Inc., Gardner Denver Inc., Idex Corp., Graco Inc., Lufkin Industries Inc., Powell Industries Inc., Robbins & Meyers Inc., Colfax Corp., Barnes Group Inc., Enpro Industries Inc., Esco Technologies Inc., and Kaydon Corp. The 2009 Peer Group was comprised of Dresser-Rand Group Inc., Idex Corp., FMC Technologies Inc., Pentair Inc., Cameron International Corp., Dril-Quip Inc., National Oilwell Varco Co., and Gardner Denver Inc. Originally, Grant-Prideco Inc. was included in the peer group, however, it was acquired by National Oilwell Varco Co. in 2008 and therefore has been eliminated from the Peer Group. In accordance with SEC rules, both the 2009 Peer Group and 2010 Peer Group are represented in the above graph.

Item 6. *Selected Financial Data.*

The following table sets forth the selected historical consolidated financial information as of the dates and for each of the periods indicated. The Company selected historical financial consolidated data as of and for the years ended December 31, 2006 and 2007 are derived from our audited financial statements for such periods, which have been audited by Ernst & Young LLP, and which are not included in this Annual Report on Form 10-K. The Company selected historical financial consolidated data as of and for the years ended December 31, 2008, 2009 and 2010 are derived from our audited financial statements for such periods incorporated by reference into Item 8 of this Annual Report on Form 10-K, which have been audited by Ernst & Young LLP.

You should read the following table together with Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes, included elsewhere in this Annual Report on Form 10-K.

	Year Ended December 31,				
	2006	2007	2008	2009	2010
Statement of Operations Data:					
Sales	$545,185	$675,459	$753,086	$597,458	$555,455
Cost of sales(1)	390,266	485,918	513,698	395,577	390,156
Gross profit	154,919	189,541	239,388	201,881	165,299
Selling, general and administrative expenses(2)(3)(4)	88,048	104,360	106,035	107,547	117,795
Operating income(5)	66,871	85,181	133,353	94,334	47,504
Interest expense, net	26,997	23,820	19,810	17,433	19,259
Other expense (income)(6)	(533)	42	3,948	(7,641)	(253)
	26,464	23,862	23,758	9,792	19,006
Income before income taxes and noncontrolling interest	40,407	61,319	109,595	84,542	28,498
Income tax expense	13,044	17,319	30,489	23,386	7,993
Net income	27,363	44,000	79,106	61,156	20,505
Noncontrolling interest, net of taxes	468	(156)	182	145	345
Net income attributable to Chart Industries, Inc.	$ 26,895	$ 44,156	$ 78,924	$ 61,011	$ 20,160
Earnings (loss) per share data:					
Basic earnings (loss) per share	$ 1.70	$ 1.64	$ 2.78	$ 2.14	$ 0.71
Diluted earnings (loss) per share	$ 1.65	$ 1.61	$ 2.72	$ 2.11	$ 0.69
Weighted average shares — basic	15,835	26,872	28,354	28,457	28,534
Weighted average shares — diluted	16,269	27,493	29,008	28,981	29,255
Cash Flow Data:					
Cash provided by operating activities	$ 36,398	$ 82,507	$ 97,812	$ 86,926	$ 38,574
Cash used in investing activities	(38,664)	(18,541)	(65,676)	(802)	(64,215)
Cash provided by (used in) financing activities	9,235	7,444	(4,061)	776	(19,302)
Other Financial Data:					
Depreciation and amortization(7)	$ 22,449	$ 20,352	$ 23,170	$ 23,028	$ 26,640

	As of December 31, 2006	As of December 31, 2007	As of December 31, 2008	As of December 31, 2009	As of December 31, 2010
Balance Sheet Data:					
Cash, cash equivalents and investments	$ 18,854	$ 92,869	$154,429	$211,168	$165,112
Working capital(8)	73,290	61,484	60,360	59,299	76,301
Total assets	724,875(9)	825,754(10)	909,427(11)	926,503(12)	954,839(13)
Long-term debt	290,000	250,000	243,175	243,175	218,425
Total debt	290,750	250,000	243,175	243,175	224,925
Shareholders' equity	219,734	327,991	403,960	475,561	499,164

(1) Includes $3.6 million of restructuring costs associated with workforce reductions and the Denver facility shutdown for the year ended December 31, 2009. Includes non-cash inventory valuation charges of $2.6 million related to purchase accounting and restructuring costs of $2.4 million related to the planned closure of the Plainfield, Indiana facility for the year ended December 31, 2010.

(2) Includes amortization expense related to intangible assets for the years ended December 31, 2006, 2007, 2008, 2009 and 2010 of $15.4 million, $10.9 million, $11.0 million, $10.7 million and $11.0 million, respectively.

(3) Includes income, net of insurance recoveries, related to Hurricane Rita of $2.3 million for the year ended December 31, 2006.

(4) Includes reversal of contingent liabilities on insolvent former subsidiary of $6.5 million for the year ended December 31, 2008.

(5) Includes $4.9 million of unusual costs for customer settlements and facility shutdown costs for the year ended December 31, 2008.

(6) Includes gains on acquisition of business of $7.0 million associated with the Covidien Acquisition for the year ended December 31, 2009 and $1.1 million associated with the Covidien Japan Acquisition for year ended December 31, 2010.

(7) Includes financing costs amortization for the years ended December 31, 2006, 2007, 2008, 2009 and 2010 of $1.5 million, $1.6 million, $1.9 million, $1.6 million, and $3.1 million, respectively.

(8) Working capital is defined as current assets excluding cash and short term investments minus current liabilities excluding short-term debt.

(9) Includes $247.1 million of goodwill and $146.6 million of finite-lived and indefinite-lived intangible assets as of December 31, 2006.

(10) Includes $248.5 million of goodwill and $135.7 million of finite-lived and indefinite-lived intangible assets as of December 31, 2007.

(11) Includes $261.5 million of goodwill and $129.5 million of finite-lived and indefinite-lived intangible assets as of December 31, 2008.

(12) Includes $264.5 million of goodwill and $123.8 million of finite-lived and indefinite-lived intangible assets as of December 31, 2009.

(13) Includes $275.3 million of goodwill and $144.3 million of finite-lived and indefinite-lived intangible assets as of December 31, 2010.

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations.*

You should read the following discussion of our results of operations and financial condition in conjunction with the "Selected Financial Data" section and our consolidated financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements. Actual results may differ materially from those discussed below. See "Forward-Looking Statements" at the end of this discussion and Item 1A. "Risk Factors" for a discussion of the uncertainties, risks and assumptions associated with these statements.

Overview

We are a leading independent global manufacturer of highly engineered equipment used in the production, storage and end-use of hydrocarbon and industrial gases. The largest portion of end-use applications for our products is energy-related. We are a leading manufacturer of standard and engineered equipment primarily used for low-temperature and cryogenic applications. We have developed an expertise in cryogenic systems and equipment, which operate at low temperatures sometimes approaching absolute zero (0 kelvin; -273° Centigrade; -459° Fahrenheit). The majority of our products, including vacuum insulated containment vessels, heat exchangers, cold boxes and other cryogenic components, are used throughout the liquid gas supply chain for the purification, liquefaction, distribution, storage and end-use of hydrocarbon and industrial gases.

General economic conditions improved throughout 2010 as evidenced by our improving quarterly order trends and financial performance. Orders for the year ended December 31, 2010 were $604.5 million compared

to $377.4 million for the year ended December 31, 2009, representing an increase of $227.1 million, or 60.2%. Recently completed acquisitions accounting for $58.2 million of the order increase coupled with improving global economic conditions in all of our business segments, led to significant year over year order improvement. Orders in the fourth quarter of 2010 were the strongest quarterly order intake since the second quarter of 2008. Orders in our E&C segment typically fluctuate due to project size and it is not unusual to see order intake vary significantly between periods as a result. Backlog as of December 31, 2010 was $236.4 million as compared to $185.1 million as of December 31, 2009, representing an increase of $51.3 million, or 27.7%. Backlog increased in all business segments as a result of improved economic conditions. Sales for 2010 were $555.5 million compared to sales of $597.5 million for 2009, reflecting a decrease of $42.0 million, or 7%. The reduction in sales occurred in our E&C segment due to the completion of several large projects in 2009. This was partially offset by sales from recently completed acquisitions which provided $58.5 million in additional sales largely in our BioMedical segment. Gross profit for the year ended December 31, 2010 was $165.3 million, or 29.8% of sales, as compared to $201.9 million, or 33.8% of sales, for the year ended December 31, 2009. Lower volume and pricing drove margins lower in our E&C segment during 2010. Operating income for the year ended December 31, 2010 was $47.5 million compared to $94.3 million for the year ended December 31, 2009.

Operating Results

The following table sets forth the percentage relationship that each line item in our consolidated statements of operations represents to sales for the years ended December 31, 2008, 2009 and 2010.

	2008	2009	2010
Sales	100.0%	100.0%	100.0%
Cost of sales	68.2	66.2	70.2
Gross profit	31.8	33.8	29.8
Selling, general and administrative expense(1)(2)	12.6	16.0	18.9
Amortization expense	1.5	1.8	2.0
Impairment/loss on sale or disposal of assets	0.1	0.2	0.3
Operating income	17.6	15.8	8.6
Interest expense, net	2.4	2.6	2.9
Financing costs amortization	0.2	0.3	0.6
Other expense (income)(3)	0.5	(1.3)	0.1
Income tax expense	4.0	3.9	1.4
Net income before noncontrolling interest	10.5	10.2	3.6
Noncontrolling interest, net of taxes	—	—	—
Net income attributable to Chart Industries, Inc.	10.5	10.2	3.6

(1) Includes stock-based compensation expense of $3.1 million, $3.3 million and $4.9 million, representing 0.4%, 0.6% and 0.9% of sales, for the years ended December 31, 2008, 2009 and 2010, respectively.

(2) Includes reversal of contingent liabilities related to secondary obligations of an insolvent former subsidiary of $6.5 million for the year ended December 31, 2008.

(3) Includes gains on acquisition of business of $1.1 million and $7.0 million associated with the Covidien Acquisition during the years ended December 31, 2010 and 2009, respectively.

Segment Information

The following table sets forth sales, gross profit, gross profit margin and operating income or loss for our operating segments for the last three years:

	Year Ended December 31,		
	2008	2009	2010
Sales			
Energy & Chemicals	$312,683	$255,074	$137,801
Distribution and Storage	343,703	252,197	269,293
BioMedical	96,700	90,187	148,361
Total	$753,086	$597,458	$555,455
Gross Profit			
Energy & Chemicals	$103,085	$ 94,652	$ 31,005
Distribution and Storage	101,340	74,119	77,194
BioMedical	34,963	33,110	57,100
Total	$239,388	$201,881	$165,299
Gross Profit Margin			
Energy & Chemicals	33.0%	37.1%	22.5%
Distribution and Storage	29.5%	29.4%	28.7%
BioMedical	36.2%	36.7%	38.5%
Total	31.8%	33.8%	29.8%
Operating Income (Loss)			
Energy & Chemicals	$ 70,752	$ 61,852	$ 6,121
Distribution & Storage	63,770	39,888	41,934
BioMedical	20,742	15,912	30,698
Corporate	(21,911)	(23,318)	(31,249)
Total	$133,353	$ 94,334	$ 47,504

Results of Operations for the Year Ended December 31, 2010 Compared to the Year Ended December 31, 2009

Sales

Sales for 2010 were $555.5 million compared to $597.5 million for 2009, reflecting a decrease of $42.0 million, or 7.0%. E&C segment sales were $137.8 million for 2010 compared to $255.1 million for 2009, representing a decrease of $117.3 million, or 46.0%. This decline in sales occurred primarily in the systems product line due to the lack of significant new orders and the completion of several large projects in 2009. Brazed aluminum heat exchangers sales also declined due to reduced volume and lower pricing. Although the global economic environment improved throughout 2010, the delay of large energy related projects continued to have an unfavorable impact on E&C volume and pricing during 2010. D&S segment sales were $269.3 million for the year ended December 31, 2010 compared to $252.2 million for 2009, reflecting an increase of $17.1 million, or 6.8%. Increased D&S segment sales were primarily driven by package gas systems sales, which increased $16.4 million in 2010 compared to 2009 primarily as a result of increased demand both domestically and in China. BioMedical segment sales for the year ended December 31, 2010 were $148.4 million, representing an increase of $58.2 million, or 64.5%, compared to sales of $90.2 million in 2009. Medical respiratory product sales increased $54.2 million largely due to our acquisition of Covidien's oxygen therapy business in November 2009, which we refer to as the Covidien Acquisition, which added $50.4 million in sales during 2010. Biological storage systems sales increased $8.4 million primarily as a result of increased global demand. These increases were partially offset by the discontinuation of magnetic resonance imaging ("MRI") component sales in 2009.

Gross Profit and Margin

Gross profit for the year ended December 31, 2010 was $165.3 million, or 29.8% of sales compared to $201.9 million, or 33.8% of sales for the year ended December 31, 2009, reflecting a decrease of $36.6 million. E&C segment gross profit decreased $63.7 million and the related margin percent decreased 14.6 percentage points, respectively, in 2010 compared with 2009. The decrease in gross profit was primarily attributable to lower volume and price due to the completion of several projects during 2009 and continued delay of any new large energy related orders creating underutilized capacity in both the brazed aluminum heat exchangers and process system business. D&S segment gross profit increased $3.1 million in 2010 compared to 2009 while the related margin percent remained relatively constant. The gross profit increase was largely attributable to increased sales volume and favorable product mix. In addition, 2009 costs included restructuring charges of $2.0 million related to workforce reductions. BioMedical segment gross profit increased $24.0 million and its related margin percent increased 1.8 percentage points in 2010 compared to 2009 primarily due to higher sales volume and favorable mix for medical respiratory sales driven by the Covidien Acquisition. These increases were partially offset by non-cash inventory valuation charges of $2.4 million related to the write up of acquired inventory from the Covidien Acquisition to fair value that was sold during the year ended December 31, 2010. Increased volume in biological storage systems also contributed to the increased gross profit.

Selling, General and Administrative ("SG&A") Expenses

SG&A expenses for 2010 were $105.0 million, or 18.9% of sales compared to $95.6 million, or 16.0% of sales for 2009. E&C segment SG&A expenses were $21.2 million, or 15.4% of sales for 2010 versus $29.1 million, or 11.4% of sales for 2009. The decrease of $7.9 million is primarily the result of lower variable compensation and sales commission expense as a result of lower sales volume and decreased bad debt expense. D&S segment SG&A expenses in 2010 were $30.3 million, or 11.3% of sales, compared to $29.2 million, or 11.6% of sales, in 2009. The increase of $1.1 million was primarily attributable to higher compensation costs due to the acquisition of Cryotech during 2010 and higher marketing and sales commission expense due to improving business conditions as well as targeting new growth opportunities. SG&A expenses for the BioMedical segment were $22.8 million, or 15.4% of sales for 2010, representing an increase of $8.8 million as compared to SG&A expenses for 2009 of $14.0 million, or 15.5% of sales. The increase is primarily due to the increased employee, integration, and restructuring costs as a result of several completed acquisitions over the last year and a half in the BioMedical segment. Corporate SG&A expenses for 2010 were $30.7 million compared to $23.3 million for 2009. The increase of $7.4 million was primarily driven by higher stock-based compensation costs, employee related costs and consulting fees related to acquisitions and an Enterprise Resource Planning ("ERP") system implementation.

Amortization Expense

Amortization expense for 2010 was $11.0 million, or 2.0% of sales, compared to $10.7 million, or 1.8% of sales, for 2009. Amortization expense increased as a result of amortization of intangible assets acquired as part of the Chengdu Golden Phoenix Liquid Nitrogen Container Company, Ltd. ("Golden Phoenix") and Covidien Acquisitions completed in June and November 2009, respectively. For 2010, amortization expense for the E&C, D&S and BioMedical segments was $3.7 million, $5.0 million and $2.3 million, respectively, compared to $3.7 million, $5.1 million and $1.9 million, respectively, for 2009.

Asset Impairment/Losses on Disposal of Assets

For the year ended December 31, 2010, asset impairment expense of $1.8 million was recorded as a result of the write-down to fair value of the land and building in Denver, Colorado and the land in Plaistow, New Hampshire, which are assets held for sale, and the write down to fair value of certain leasehold improvements in the Plainfield, Indiana facility. For the year ended December 31, 2009, the Company recognized asset impairment expense of $1.2 million related to the write down to fair value of the land and buildings in Denver, Colorado and land in Plaistow, New Hampshire, which were assets held for sale at December 31, 2009. Also,

included in asset impairment expense are losses on sales or disposal of equipment of $0.2 million and $0.3 million in 2010 and 2009, respectively, primarily as a result of equipment sales related to the closures of the BioMedical facilities in Plainfield, Indiana and Denver, Colorado.

Operating Income

As a result of the foregoing, operating income for 2010 was $47.5 million, or 8.6% of sales, representing a decrease of $46.8 million compared to operating income of $94.3 million, or 15.8% of sales for 2009. For 2010, operating income (loss) for the E&C, D&S and BioMedical segments and Corporate were $6.1 million, or 4.4% of sales, $41.9 million, or 15.6% of sales, $30.7 million, or 20.7% of sales, and ($31.2) million, respectively. For 2009, operating income (loss) for the E&C, D&S and BioMedical segments and Corporate were $61.8 million, or 24.2% of sales, $39.9 million, or 15.8% of sales, $15.9 million, or 17.6% of sales, and ($23.3) million, respectively.

Gain on Acquisition of Business

For the year ended December 31, 2010, the Company recognized a $1.1 million gain as a result of the acquisition of Covidien Japan Inc.'s liquid oxygen therapy business in April 2010, which we refer to as the Covidien Japan Acquisition. For the year ended December 31, 2009, the Company recognized a $7.0 million gain as a result of the acquisition of Covidien's oxygen therapy business in November 2009. The purchase price was allocated to the assets acquired and liabilities assumed based on estimates of fair value at the date of acquisition. The estimates of fair value exceeded the cash paid and, accordingly, resulted in a gain on acquisition of business.

Interest Expense, Net

For the year ended December 31, 2010, net interest expense was $16.2 million compared to $15.8 million for the year ended December 31, 2009. The increase of $0.4 million was primarily attributable to higher average variable interest rates on the term loan portion of our senior secured credit facility of 2.7% during 2010 as compared to 2.4% during 2009. The effect of the higher variable interest rates was partially offset by lower average debt outstanding on the term loan as a result of $18.3 million in payments during the year ended December 31, 2010. Further information regarding the Company's debt is located in Note C to the Company's consolidated financial statements included in Item 8 of this Annual Report on Form 10-K.

Other Expense and Income

For the years ended December 31, 2010 and 2009, amortization of deferred financing costs was $3.1 million and $1.6 million, respectively. The increase of $1.5 million was attributable to the $1.7 million write off of the remaining deferred financing fees related to the former senior credit facility, which was refinanced in May 2010. For the years ended December 31, 2010 and 2009, foreign currency losses of $0.9 million and gains of $0.7 million, respectively, were recognized by the Company. The losses in 2010 were the result of increased volatility in foreign exchange rates impacting transactions denominated in foreign currencies and the marked to market gains and losses on the Company's foreign currency forward contracts.

Income Tax Expense

Income tax expense for 2010 was $8.0 million and the effective tax rate was 28.0% compared to income tax expense for 2009 of $23.4 million and an effective tax rate of 27.7%. The increase in the effective tax rate in 2010 is largely due to an increase in state income tax expense primarily as a result of the various acquisitions.

Net Income

As a result of the foregoing, net income for the year ended December 31, 2010 was $20.2 million compared to net income of $61.0 million for the year ended December 31, 2009, representing a decrease of 66.9%.

Results of Operations for the Year Ended December 31, 2009 Compared to the Year Ended December 31, 2008

Sales

Sales for 2009 were $597.5 million compared to $753.1 million for 2008, reflecting a decrease of $155.6 million, or 20.7%. E&C segment sales were $255.1 million for 2009 compared to $312.7 million for 2008, representing a decrease of $57.6 million, or 18.4%. This decrease in E&C sales for 2009 was primarily due to lower volume in both brazed aluminum heat exchangers and process systems resulting from a decline in large project orders as a result of the global economic crisis. In addition, a number of large LNG system projects were completed and orders cancelled in the brazed aluminum heat exchangers business, which contributed to the decline. These declines were partially offset by increased volume in air cooled heat exchangers as this business continued to grow with demand from the U.S. domestic natural gas compression segment as well as new applications in the power industry. D&S segment sales were $252.2 million for the year ended December 31, 2009 compared to $343.7 million for 2008, reflecting a decrease of $91.5 million, or 26.6%. Bulk storage sales decreased $39.8 million and package gas systems sales decreased $51.7 million in 2009 compared to 2008 as a result of lower prices and volume as industrial gas customers limited their capital spending as a result of the economic downturn. BioMedical segment sales for the year ended December 31, 2009 were $90.2 million, representing a decrease of $6.5 million, or 6.7%, compared to sales of $96.7 million in 2008. Medical respiratory product sales increased $4.6 million due to increased demand in Europe and the Covidien Acquisition which added $2.9 million in sales since acquisition. Biological storage systems sales decreased $3.3 million primarily due to lower volume in domestic and international markets partially offset by sales of $2.2 million from the acquisition of Golden Phoenix in June 2009. MRI and other product sales decreased $7.6 million largely due to the discontinuation of the MRI product line and the shutdown of the Denver, Colorado BioMedical facility, which was completed during the third quarter of 2009.

Gross Profit and Margin

Gross profit for the year ended December 31, 2009 was $201.9 million, or 33.8% of sales compared to $239.3 million, or 31.8% of sales for the year ended December 31, 2008, reflecting a decrease of $37.4 million. E&C segment gross profit decreased $8.4 million while the related margin increased 4.1 percentage points, respectively, in 2009 compared with 2008. The decrease in gross profit was primarily attributable to lower volumes for brazed aluminum heat exchangers and process systems. The declines in volume were partially offset by increased volume and efficiency for air cooled heat exchangers. Process systems margin benefited from improved project execution and project cost performance. D&S segment gross profit decreased $27.2 million in 2009 compared to 2008 while the related margin remained relatively constant. The gross profit decrease was largely attributable to lower sales volume, pricing and restructuring charges of $2.0 million related to workforce reductions, partially offset by lower material costs and other cost reduction initiatives. BioMedical segment gross profit decreased $1.8 million in 2009 compared to 2008 primarily due to lower sales volume for biological storage systems and restructuring charges of $1.5 million related to workforce reductions and closure of the Denver, Colorado facility. BioMedical segment gross profit margin increased in 2009 by 0.5 percentage points compared to 2008. This increase was primarily due to a more favorable mix and lower material costs.

Selling, General and Administrative ("SG&A") Expenses

SG&A expenses for 2009 were $95.6 million, or 16.0% of sales compared to $100.8 million, or 13.4% of sales for 2008. E&C segment SG&A expenses were $29.1 million, or 11.4% of sales for 2009 versus $27.9 million, or 8.9% of sales for 2008. The increase of $1.2 million was primarily the result of higher bad debt expense. The expense was partially offset by lower sales commissions and variable incentive compensation expense as a result of lower sales volume. D&S segment SG&A expenses in 2009 were $29.2 million, or 11.6% of sales, compared to $32.0 million, or 9.3% of sales, in 2008. This decrease was primarily attributable to lower compensation costs, lower outside marketing and consulting services as well as reduced travel costs, partially

offset by restructuring charges of $1.2 million related to workforce reductions. SG&A expenses for the BioMedical segment were $14.0 million, or 15.5% of sales for 2009, representing an increase of $1.5 million as compared to SG&A expenses for 2008 of $12.5 million, or 12.9% of sales. The increase is primarily due to the acquisition of Covidien's oxygen therapy business at the end of November 2009. Corporate SG&A expenses for 2009 were $23.3 million compared to $28.4 million for 2008. The decrease of $5.1 million was primarily driven by lower compensation, outside consulting services and travel costs as a result of cost reduction initiatives.

Amortization Expense

Amortization expense for 2009 was $10.7 million, or 1.8% of sales, compared to $11.0 million, or 1.5% of sales, for 2008. Amortization expense decreased as a result of certain intangible assets becoming fully amortized during 2009 partially offset by the amortization of intangible assets acquired as part of the Golden Phoenix and Covidien Acquisitions completed in June and November 2009, respectively. For 2009, amortization expense for the E&C, D&S and BioMedical segments was $3.7 million, $5.1 million and $1.9 million, respectively, compared to $3.7 million, $5.6 million and $1.7 million, respectively, for 2008.

Asset Impairment

For the year ended December 31, 2009, the Company recognized asset impairment expense of $1.2 million related to the write down to fair value of the land and buildings in Denver, Colorado and land in Plaistow, New Hampshire, which are assets held for sale at December 31, 2009. The Company also recognized in 2009 a loss on the sale of equipment in conjunction with the closure of the BioMedical facility in Denver. For the year ended December 31, 2008, the Company recognized a $0.7 million loss primarily related to a leased facility that was shut down by the Company's E&C segment.

Operating Income

As a result of the foregoing, operating income for 2009 was $94.3 million, or 15.8% of sales, representing a decrease of $39.0 million compared to operating income of $133.3 million, or 17.7% of sales for 2008. For 2009, operating income (loss) for the E&C, D&S and BioMedical segments and Corporate were $61.8 million, or 24.2% of sales, $39.9 million, or 15.8% of sales, $15.9 million, or 17.6% of sales, and ($23.3) million, respectively. For 2008, operating income (loss) for the E&C, D&S and BioMedical segments and Corporate were $70.7 million, or 22.6% of sales, $63.8 million, or 18.6% of sales, $20.7 million, or 21.4% of sales, and ($21.9) million, respectively.

Gain on Acquisition of Business

For the year ended December 31, 2009, the Company recognized a $7.0 million gain as a result of the acquisition of Covidien's oxygen therapy business in November 2009. The purchase price was allocated to the assets acquired and liabilities assumed based on estimates of fair value at the date of acquisition. The estimates of fair value exceeded the cash paid and, accordingly, resulted in a gain on acquisition of business.

Interest Expense, Net

For the year ended December 31, 2009, net interest expense was $15.8 million compared to $17.9 million for the year ended December 31, 2008. The decrease of $2.1 million is partially attributable to lower average interest rates on our variable rate senior secured credit facility of 2.4% during 2009 as compared to 5.4% during 2008. Also contributing to the decrease in net interest expense was lower debt outstanding as a result of the repurchase of $6.8 million in outstanding senior subordinated notes during the third quarter of 2008. Further information regarding the Company's debt is located in Note C to the Company's consolidated financial statements included in Item 8 of this Annual Report on Form 10-K.

Other Expense and Income

For the years ended December 31, 2009 and 2008, amortization of deferred financing costs was $1.6 million and $1.9 million, respectively. The decrease in amortization expense was attributable to the $0.2 million write off of deferred loan costs in conjunction with the purchase of $6.8 million of our senior subordinated notes during 2008. For the years ended December 31, 2009 and 2008, foreign currency gains of $0.7 million and losses of $3.9 million, respectively, were recognized by the Company. The gains during 2009 were the result of less volatility in foreign exchange rates which affected the marked to market gains and losses on foreign currency forward contracts, specifically in our Czech Republic subsidiary. Most of the 2008 currency loss occurred during the fourth quarter due to significant currency volatility that largely impacted our euro denominated transactions, cash balances and marked-to-market forward currency contracts.

Income Tax Expense

Income tax expense for 2009 was $23.4 million and the effective tax rate was 27.7% compared to income tax expense for 2008 of $30.5 million and an effective tax rate of 27.8%. The decrease in the effective tax rate in 2009 was primarily attributable to a permanent tax difference on the gain on acquisition of business related to the acquisition of Covidien's oxygen therapy business.

Net Income

As a result of the foregoing, net income for the year ended December 31, 2009 was $61.0 million compared to net income of $78.9 million for the year ended December 31, 2008, representing a decrease of 22.7%.

Orders and Backlog

We consider orders to be those for which we have received a firm signed purchase order or other written contractual commitment from the customer. Backlog is comprised of the portion of firm signed purchase orders or other written contractual commitments received from customers that we have not recognized as revenue upon shipment or under the percentage of completion method. Backlog can be significantly affected by the timing of orders for large projects, particularly in the E&C segment, and is not necessarily indicative of future backlog levels or the rate at which backlog will be recognized as sales. Orders included in our backlog may include customary cancellation provisions under which the customer could cancel part or all of the order, potentially subject to the payment of certain costs and/or penalties. Our backlog as of December 31, 2010, 2009 and 2008 was $236.4 million, $185.1 million and $398.8 million, respectively.

The table below sets forth orders and backlog by segment for the periods indicated:

	Year Ended December 31,		
	2010	2009	2008
Orders			
Energy & Chemicals	$165,827	$ 75,788	$220,833
Distribution & Storage	287,819	208,851	367,556
BioMedical	150,864	92,746	94,214
Total	$604,510	$377,385	$682,603
Backlog			
Energy & Chemicals	$115,972	$ 87,816	$265,900
Distribution & Storage	108,665	87,727	125,929
BioMedical	11,779	9,518	7,013
Total	$236,416	$185,061	$398,842

Orders for 2010 were $604.5 million compared to $377.4 million for 2009, representing an increase of $227.1 million, or 60.2%. E&C segment orders were $165.8 million in 2010, an increase of $90.0 million compared to 2009. Orders in the E&C segment experienced increases in all businesses including process systems, brazed aluminum heat exchangers, and air cooled heat exchangers due to improving global economic conditions, although the absence of any large energy related orders still kept order trends below historical peak levels. In addition, E&C orders fluctuate due to project size and it is not unusual to see order intake vary significantly between quarters and years as a result. D&S segment orders for 2010 were $287.8 million compared to $208.9 million for 2009, an increase of $78.9 million, or 37.8%. D&S order entry improved as capital spending from industrial gas customers began to improve during 2010. D&S order intake improved sequentially each quarter during 2010 with the fourth quarter of 2010 being the strongest in over two years. Bulk storage system and packaged gas system orders for the year were $177.2 million and $110.6 million, respectively, representing an increase of 47.8% in bulk storage systems and 24.3% in packaged gas system orders. Orders for the BioMedical segment for 2010 were $150.9 million compared to orders of $92.7 million for the year ended December 31, 2009. Medical respiratory orders increased $50.7 million primarily as a result of the Covidien Acquisition in November 2009. Biological storage system orders also increased $11.6 million as global demand continued to improve.

Orders for 2009 were $377.4 million compared to $682.6 million for 2008, representing a decrease of $305.2 million, or 44.7%. E&C segment orders were $75.8 million in 2009, a decrease of $145.0 million compared to 2008. Orders in the E&C segment experienced a significant decline as a result of the global economic crisis and depressed energy prices with order cancellations occurring and potential new project timing delayed due to the lack of project financing. In addition, E&C orders fluctuate due to project size and it is not unusual to see order intake vary significantly between quarters and years as a result. D&S segment orders for 2009 were $208.9 million compared to $367.5 million for 2008, a decline of $158.6 million, or 43.2%. D&S order entry was also significantly impacted by the global economic downturn with declines in all product lines. Our industrial gas customers, particularly in North America and Western Europe, restricted their purchases as they were impacted by de-installation rates with their customers due to facility shutdowns and low industrial production activity. Bulk storage system and packaged gas system orders for the year were $119.9 million and $89.0 million, respectively, representing a decline of 48.2% in bulk storage systems and 34.7% in packaged gas system orders. Orders for the BioMedical segment for 2009 were $92.7 million compared to orders of $94.2 million for the year ended December 31, 2008. Orders have remained relatively constant throughout the global economic downturn in the BioMedical segment. In addition, the acquisition of Covidien's oxygen therapy business in November 2009 and Golden Phoenix added $6.5 million in orders during 2009. Orders for medical respiratory products were $44.8 million and orders for biological storage systems were $43.8 million for the year ended December 31, 2009.

Liquidity and Capital Resources

On May 18, 2010, the Company completed the refinancing of its prior credit facility with a $200.0 million senior secured credit facility ("Senior Credit Facility"). The new Senior Credit Facility consists of a $65.0 million term loan and a $135.0 million revolving credit facility with a scheduled maturity date of May 18, 2015. Under the terms of the new facility, 10% of the $65 million term loan is payable in quarterly installments of $1.6 million with the balance due in 2015. As part of the refinancing, the Company used cash to pay off $15.0 million of its prior $80.0 million term loan. The balance due on the term loan was $61.7 million at December 31, 2010.

Debt Instruments and Related Covenants

As of December 31, 2010, the Company had $163.2 million outstanding under its senior subordinated notes ("Subordinated Notes") and $22.0 million of letters of credit and bank guarantees supported by the revolving portion of the Senior Credit Facility. The Company is in compliance with all covenants, including its financial covenants, under the Senior Credit Facility and Subordinated Notes. Availability on the revolving portion of the Senior Credit Facility was $113.0 million at December 31, 2010.

Chart Ferox, a.s., or Ferox, our wholly-owned subsidiary that operates in the Czech Republic, maintains secured revolving credit facilities with borrowing capacity including overdraft protection, of up to 150.0 million Czech korunas ("CSK"), of which 50.0 million CSK is available only for letters of credit and bank guarantees. Under the revolving credit facilities, Ferox may make borrowings in CSK, euros and U.S. dollars.

Our debt and related covenants are further described in Note C to our consolidated financial statements included elsewhere in this report.

Sources and Uses of Cash

Years Ended December 31, 2010 and 2009

Our cash and cash equivalents totaled $165.1 million as of December 31, 2010, a decrease of $46.1 million from the balance at December 31, 2009. Cash equivalents are invested in money market funds that invest in high quality, short-term instruments, such as U.S. government obligations, certificates of deposit, repurchase obligations and commercial paper issued by corporations that have been highly rated by at least one nationally recognized rating organization. Based on the foregoing, we believe that there is low risk that our cash and cash equivalents will not be a source of liquidity for us.

Cash provided by operating activities for the year ended December 31, 2010 was $38.6 million compared to cash provided of $86.9 million for the year ended December 31, 2009. The decrease of $48.3 million was driven by decreased net income of $40.7 million and a reduction in customer advances and billings in excess of contract revenue due to reduced project backlog in E&C.

Cash used by investing activities for the years ended December 31, 2010 and 2009 was $64.2 million and $0.8 million, respectively. Capital expenditures for 2010 were $16.9 million compared with $13.2 million for 2009. The 2010 capital expenditures were primarily for the completion of the new industrial gas equipment repair center in McCarran, Nevada, a new BioMedical manufacturing facility in Canton, Georgia and the continuing implementation of a new ERP system for the Company. During 2010, $43.8 million was used for three acquisitions: Covidien's Japanese liquid oxygen therapy business, substantially all of the assets of Cryotech International, Inc., and SeQual Technologies, Inc. The final deferred purchase payments for the 2009 acquisition of Golden Phoenix of $4.1 million were paid in 2010. $1.0 million in proceeds was received in 2010 from the sale of certain operating equipment at the BioMedical segment's Plainfield, Indiana facility. Short term investments of $32.3 million matured during 2009 which had been invested during 2008 in short term investments with original maturities of less than six months. Capital expenditures in 2009 were primarily for a new industrial gas equipment repair center in McCarran, Nevada, a new BioMedical segment facility in Wuppertal, Germany and the implementation of a new ERP system for the Company. During 2009, $18.1 million, net of cash acquired, was used for three acquisitions: the equity interests of Golden Phoenix, the oxygen therapy business of Covidien and substantially all of the assets of Tri-Thermal, Inc.

For the year ended December 31, 2010, cash used by financing activities was $19.3 million compared to cash provided of $0.8 million for the year ended December 31, 2009. During 2010, principal debt payments of $18.3 million were made of which $15.0 million was a voluntary payment on the term loan portion of the prior credit facility as part of the refinancing. The additional $3.3 million in principal payments were scheduled quarterly payments on the term loan portion of the new Senior Credit Facility. $2.8 million in financing costs related to the refinancing were also paid during 2010. The exercise of stock options provided $1.0 million and $0.8 million in 2010 and 2009, respectively.

Years Ended December 31, 2009 and 2008

Cash provided by operating activities for the year ended December 31, 2009 was $86.9 million compared to cash provided of $97.8 million for the year ended December 31, 2008. The decrease of $10.9 million was driven

by decreased net income of $17.9 million and a reduction in customer advances and billings in excess of contract revenue due to reduced order rates and project backlog in E&C.

Cash used by investing activities for the years ended December 31, 2009 and 2008 was $0.8 million and $65.7 million, respectively. Short term investments of $32.3 million matured during 2009 which had been invested during 2008 in short term investments with original maturities of less than six months. Capital expenditures for 2009 were $13.2 million compared with $14.0 million for 2008. Capital expenditures in 2009 were primarily for a new industrial gas equipment repair center in McCarran, Nevada, a new BioMedical segment facility in Wuppertal, Germany and the implementation of a new ERP system for the Company. The 2008 capital expenditures were primarily for the D&S segment facility expansions and improvements mainly in China and the Czech Republic to support business growth and normal equipment purchases and replacements to increase automation and improve efficiency across all facilities. During 2009, $18.1 million, net of cash acquired, was used for three acquisitions: the equity interests of Golden Phoenix, the oxygen therapy business of Covidien and substantially all of the assets of Tri-Thermal, Inc. In 2008, $18.8 million of cash, net of cash acquired was used to purchase Flow and $0.6 million was contributed to a joint venture in Saudi Arabia for the manufacture of air cooled heat exchangers.

For the year ended December 31, 2009, cash provided by financing activities was $0.8 million, from the exercise of stock options, compared to cash used of $4.1 million for the year ended December 31, 2008. During 2008, $6.8 million in cash was used to purchase a portion of our outstanding Subordinated Notes in September on the open market offset by cash received from the exercise of stock options.

Cash Requirements

The Company does not anticipate any unusual cash requirements for working capital needs for the year ending December 31, 2011. Management anticipates the Company will be able to satisfy cash requirements for its ongoing business with cash generated by operations, existing cash balances and, if necessary, borrowings under our credit facilities. We expect capital expenditures for 2011 to be in the range of $15 to $20 million primarily for continued automation, process improvements and/or expansions at existing manufacturing facilities, support of anticipated business growth in specific product lines and acquisition integration. In addition, we are anticipating an approximately $1.1 million contingency payment related to the earn-out on the acquisition of Cryotech.

In 2011, the Company is forecasting to use approximately $17.0 million for scheduled interest payments under the Senior Credit Facility and Subordinated Notes. We are required to make quarterly principal payments of $1.6 million under the term loan portion of our Senior Credit Facility. We may also from time to time seek to purchase a portion of our Subordinated Notes outstanding through cash purchases on the open market, privately negotiated transactions or otherwise. Such purchases, if any, will depend on prevailing market conditions, our liquidity requirements and our debt covenants. In addition, we are forecasting to use approximately $25.0 to $27.0 million of cash to pay U.S. and foreign income taxes and approximately $2.0 million of cash to fund our defined benefit pension plans under ERISA funding requirements.

Contractual Obligations

Our known contractual obligations as of December 31, 2010 and cash requirements resulting from those obligations are as follows:

	Payments Due by Period				
	Total	2011	2012-2013	2014-2015	2016 and Thereafter
	(Dollars in thousands)				
Long-term debt	$224,925	$ 6,500	$13,000	$205,425	$ —
Interest on long-term debt(1)	84,891	16,993	34,773	33,125	—
Deferred acquisition payments	695	695	—	—	—
Acquisition contingent consideration	6,900	1,055	5,845	—	—
Operating leases	23,917	6,671	8,744	4,809	3,693
Pension obligations(2)	9,076	2,176	3,700	2,500	700
Total contractual cash obligations	$350,404	$34,090	$66,062	$245,859	$4,393

(1) The interest payments in the above table were estimated based upon our existing debt structure at December 31, 2010, which included the Senior Credit Facility and Subordinated Notes, less scheduled debt payments each year, and the interest rates in effect at December 31, 2010.

(2) The planned funding of the pension obligations was based upon actuarial and management estimates taking into consideration the current status of the plans.

Not included in the above table are unrecognized tax benefits of $2,468 at December 31, 2010.

Our commercial commitments as of December 31, 2010, which include standby letters of credit and bank guarantees, represent potential cash requirements resulting from contingent events that require performance by us or our subsidiaries pursuant to funding commitments, and are as follows:

	Total	2011	2012-2014
	(Dollars in thousands)		
Standby letters of credit	$ 9,632	$ 6,065	$3,567
Bank guarantees	16,390	12,237	4,153
Total commercial commitments	$26,022	$18,302	$7,720

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined in the Securities Act.

Contingencies

We are involved with environmental compliance, investigation, monitoring and remediation activities at certain of our operating facilities or formerly owned manufacturing facilities, and accrue for these activities when commitments or remediation plans have been developed and when costs are probable and can be reasonably estimated. Historical annual cash expenditures for these activities have been charged against the related environmental reserves. Future expenditures relating to these environmental remediation efforts are expected to be made over the next 17 years as ongoing costs of remediation programs. Management believes that any additional liability in excess of amounts accrued, which may result from the resolution of such matters should not have a material adverse effect on our financial position, liquidity, cash flows or results of operations.

We are occasionally subject to various legal claims related to performance under contracts, product liability, taxes, employment matters, environmental matters, intellectual property and other matters, several of which claims assert substantial damages, in the ordinary course of our business. Based on our historical experience in

litigating these claims, as well as our current assessment of the underlying merits of the claims and applicable insurance, if any, we believe the resolution of these other legal claims will not have a material adverse effect on our financial position, liquidity, cash flows or results of operations. Future developments may, however, result in resolution of these legal claims in a way that could have a material adverse effect. See Item 1A. "Risk Factors."

Foreign Operations

During 2010, we had operations in Australia, Asia and Europe, which accounted for approximately 37.2% of consolidated sales and 28.6% of total assets at December 31, 2010. Functional currencies used by these operations include the Chinese yuan, the Czech koruna, the euro, Japanese yen, and the British pound. We are exposed to foreign currency exchange risk as a result of transactions by these subsidiaries in currencies other than their functional currencies, and from transactions by our domestic operations in currencies other than the U.S. dollar. The majority of these functional currencies and the other currencies in which we record transactions are fairly stable. The use of these currencies, combined with the use of foreign currency forward purchase and sale contracts, has enabled us to be sheltered from significant gains or losses resulting from foreign currency transactions. This situation could change if these currencies experience significant fluctuations or the volume of forward contracts changes.

Application of Critical Accounting Policies

Our consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles and are based on the selection and application of significant accounting policies, which require management to make estimates and assumptions about future events that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates. Management believes the following are some of the more critical judgmental areas in the application of its accounting policies that affect its financial position and results of operation.

Allowance for Doubtful Accounts. We evaluate the collectibility of accounts receivable based on a combination of factors. In circumstances where we are aware of a specific customer's inability to meet its financial obligations (e.g., bankruptcy filings, substantial downgrading of credit scores), a specific reserve is recorded to reduce the receivable to the amount we believe will be collected. We also record allowances for doubtful accounts based on the length of time the receivables are past due and historical experience. If circumstances change (e.g., higher than expected defaults or an unexpected material adverse change in a customer's ability to meet its financial obligations), our estimates of the collectibility of amounts due could be changed by a material amount.

Inventory Valuation Reserves. We determine inventory valuation reserves based on a combination of factors. In circumstances where we are aware of a specific problem in the valuation of a certain item, a specific reserve is recorded to reduce the item to its net realizable value. We also recognize reserves based on the actual usage in recent history and projected usage in the near-term. If circumstances change (e.g., lower than expected or higher than expected usage), estimates of the net realizable value could be changed by a material amount.

Long-Lived Assets. We monitor our long-lived assets for impairment indicators on an ongoing basis. If impairment indicators exist, we perform the required analysis and record impairment charges in accordance with the accounting guidance. In conducting our analysis, we compare the undiscounted cash flows expected to be generated from the long-lived assets to the related net book values. If the undiscounted cash flows exceed the net book value, the long-lived assets are not impaired. If the net book value exceeds the undiscounted cash flows, an impairment loss is measured and recognized. An impairment loss is measured as the difference between the net book value and the fair value of the long-lived assets. Fair value is estimated based upon either discounted cash flow analyses or estimated salvage values. Cash flows are estimated using internal forecasts as well as assumptions related to discount rates. Changes in economic or operating conditions impacting these estimates and assumptions could result in the impairment of long-lived assets.

Goodwill and Other Indefinite-Lived Intangible Assets. We evaluate goodwill and indefinite-lived intangible assets for impairment on an annual basis, and on an interim basis, if necessary. As of October 1, 2010, the estimated fair values substantially exceeded the carrying value for all reporting units. To test for impairment, we are required to estimate the fair market value of each of our reporting units. The reporting units are also the reportable segments: Energy & Chemicals, Distribution & Storage, and BioMedical. We use the income and market approaches to develop fair value estimates, which are weighted equally to arrive at a fair value estimate for each reporting unit. This approach has been consistently applied between years. With respect to the income approach, we developed a model to estimate the fair value of each of our reporting units. This fair market value model incorporates our estimates of future cash flows, estimates of allocations of certain assets and cash flows among reporting units, estimates of future growth rates and management's judgment regarding the applicable discount rates to use to discount those estimated cash flows. With respect to the market approach, we use the guideline company method selecting companies with similar assets or businesses to estimate fair value of each reporting unit. Changes to these judgments and estimates could result in a significantly different estimate of the fair market value of the reporting units, which could result in a different assessment of the recoverability of goodwill and other indefinite-lived intangible assets.

Pensions. We sponsor one defined benefit pension plan which has been frozen since February 2006. The funded status is measured as the difference between the fair value of the plan assets and the projected benefit obligation. The Company recognizes the change in the funded status of the plan in the year in which the change occurs through accumulated other comprehensive income. Our funding policy is to contribute at least the minimum funding amounts required by law. We have chosen policies according to accounting guidance that allow the use of a calculated value of plan assets (which is further described below), which generally reduces the volatility of pension (income) expense from changes in pension liability discount rates and the performance of the pension plans' assets.

A significant element in determining our pension expense in accordance with accounting guidance is the expected return on plan assets. We have assumed that the expected long-term rate of return on plan assets as of December 31, 2010 and 2009 will be 7.75%. These expected return assumptions were developed using a simple averaging formula based upon the plans' investment guidelines, mix of asset classes and the historical returns of equities and bonds. We believe our assumptions for expected future returns are reasonable. However, we cannot guarantee that we will achieve these returns in the future. The assumed long-term rate of return on assets is applied to the market value of plan assets. This produces the expected return on plan assets that reduces pension expense. The difference between this expected return and the actual return on plan assets is deferred. The net deferral of past asset gains or losses affects the calculated value of plan assets and, ultimately, future pension income or expense.

At the end of each year, we determine the rate to be used to discount plan liabilities. The discount rate reflects the current rate at which the pension liabilities could be effectively settled at the end of the year. In estimating this rate, we look to rates of return on high quality, fixed-income investments that receive one of the two highest ratings given by a recognized rating agency and the expected timing of benefit payments under the plan. At December 31, 2010, we determined this rate to be 5.5% as compared to 6.0% in 2009. Changes in discount rates over the past three years have not materially affected pension (income) expense, and the net effect of changes in the discount rate, as well as the net effect of other changes in actuarial assumptions and experience, have been deferred and amortized over the expected future service of participants.

At December 31, 2010, our consolidated net pension liability recognized was $11.5 million, an increase of $0.9 million from December 31, 2009. This increase in liability was due to reduced gains in the value of the plan assets as a more conservative asset allocation was developed to avoid large losses in the future like those experienced in 2008. Employer contributions to the plan of $0.6 million were offset by benefit payments of $1.6 million. For the years ended December 31, 2010, 2009 and 2008, we recognized approximately $0.4 million and $1.2 million of pension expense, and $0.5 million of pension income, respectively. See Note G to our financial statements included elsewhere in this report for further discussion.

Environmental Remediation Obligations. Our obligations for known environmental problems at our current and former manufacturing facilities have been recognized on an undiscounted basis on estimates of the cost of investigation and remediation at each site. Management along with our consultants reviews our environmental remediation sites quarterly to determine if additional cost adjustments or disclosures are required. The characteristics of environmental remediation obligations, where information concerning the nature and extent of clean-up activities is not immediately available and changes in regulatory requirements frequently occur, result in a significant risk of increase to the obligations as they mature. Expected future expenditures are not discounted to present value and potential insurance recoveries are not recognized until realized.

Product Warranty Costs. We estimate product warranty costs and accrue for these costs as products are sold. The warranty reserve includes both a general reserve component, calculated based upon historical experience over the warranty period for each product and a specific reserve component for any specifically identified warranty issues. Due to the uncertainty and potential volatility of these warranty estimates, changes in assumptions could materially affect net income.

Revenue Recognition — Long-Term Contracts. We recognize revenue and gross profit as work on long-term contracts progresses using the percentage of completion method of accounting, which relies on estimates of total expected contract revenues and costs. We follow this method since reasonably dependable estimates of the revenue and costs applicable to various stages of a contract can be made. Since the financial reporting of these contracts depends on estimates, which are assessed continually during the term of the contract, recognized revenues and profit are subject to revisions as the contract progresses toward completion. Revisions in profit estimates are reflected in the period in which the facts that give rise to the revision become known. Accordingly, favorable changes in estimates result in additional profit recognition, and unfavorable changes will result in the reversal of previously recognized revenue and profits. When estimates indicate a loss is expected to be incurred under a contract, cost of sales is charged with a provision for such loss. As work progresses under a loss contract, revenue and cost of sales continue to be recognized in equal amounts, and the excess of costs over revenues is charged to the contract loss reserve. Change orders resulting in additional revenue and profit are recognized upon approval by the customer based on the percentage that incurred costs to date bear to total estimated costs at completion. Pre-contract costs relate primarily to salaries and benefits incurred to support the selling effort and, accordingly, are expensed as incurred. Certain contracts include incentive-fee arrangements clearly defined in the agreement and are not recognized until earned. We use the percentage of completion method of accounting primarily in the E&C segment.

Stock-based Employee Compensation. Stock compensation expense is calculated based on the estimated fair value of our stock options and performance stock units. The fair value of the stock options and certain of the performance stock units is calculated using the Black-Scholes pricing model and the fair value of the remaining performance stock units which vest based on market condition is calculated using the Monte Carlo Simulation model. The grant date fair value calculation requires the use of variables such as exercise term of the option, future volatility, dividend yield and risk-free interest rate. Compensation expense is recognized over the vesting period of the option or term of the stock award after consideration of the estimated forfeiture rates.

Recently Adopted Accounting Standards

Effective July 1, 2010, the Company adopted the new guidance issued by the Financial Accounting Standards Board ("FASB") regarding disclosures about the credit quality of financing receivables This guidance requires an entity to provide disclosures about financing receivables on a disaggregated basis and provide additional disclosures related to credit quality indicators, aging, troubled debt restructurings, and significant purchases and sales of financing receivables during the reporting period. Trade accounts receivable with maturities of less than one year are exempt from the disclosure requirements. The adoption of this guidance did not have a material impact of the Company's financial position or results of operations.

Effective January 1, 2010, the Company adopted the new guidance related to improving disclosures about fair value measurements. This guidance requires new disclosures about transfers in and out of Levels 1 and 2; an

entity should disclose separately the amounts of significant transfers in and out of Level 1 and Level 2 fair value measurements and describe the reasons for the transfers. The guidance also requires new disclosures about activity in Level 3 fair value measurements whereby an entity should present separately information about purchases, sales, issuances, and settlements on a gross basis rather that as one net number. The guidance clarifies existing disclosures related to the level of disaggregation used for each class of assets and liabilities measured at fair value and requires disclosures about the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements that fall in either Level 2 or Level 3. With the exception of the Level 3 activity requirements which are effective for the fiscal year beginning after December 15, 2010, the adoption of this guidance did not have a material impact on the Company's financial position or results of operations.

Recently Issued Accounting Standards

In December 2010, the FASB issued amendments related to the disclosures of supplementary pro forma information for business combinations. These amendments specify that a public entity should disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. The amendments also expand the supplemental pro forma disclosures to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination included in the reported pro forma revenue and earnings. These amendments are effective for acquisitions that occur on or after the beginning of the fiscal year beginning on or after December 15, 2010. These amendments will not impact the Company's financial position and results of operations for any business combinations entered into after the date of adoption.

In October 2009, the FASB issued ASU 2009-13, "Revenue Recognition (Topic 605) — Multiple-Deliverable Revenue Arrangements". This ASU eliminates the requirement that all undelivered elements must have objective and reliable evidence of fair value before a company can recognize the portion of the consideration that is attributable to items that already have been delivered. This may allow some companies to recognize revenue on transactions that involve multiple deliverables earlier than under the current requirements. Additionally, under the new guidance, the relative selling price method is required to be used in allocating consideration between deliverables and the residual value method will no longer be permitted. This ASU is effective prospectively for revenue arrangements entered into or materially modified beginning in fiscal 2011 although early adoption is permitted. A company may elect, but will not be required, to adopt the amendments in this ASU retrospectively for all prior periods. The Company has evaluated the ASU and does not believe it will have a material impact on the consolidated financial statements.

Forward-Looking Statements

This Annual Report on Form 10-K includes "forward-looking statements." These forward-looking statements include statements relating to our business. In some cases, forward-looking statements may be identified by terminology such as "may," "should," "expects," "anticipates," "believes," "projects," "forecasts," "continue" or the negative of such terms or comparable terminology. Forward-looking statements contained herein (including future cash contractual obligations, liquidity, cash flow, orders, results of operations, and trends, among other matters) or in other statements made by us are made based on management's expectations and beliefs concerning future events impacting us and are subject to uncertainties and factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control, that could cause our actual results to differ materially from those matters expressed or implied by forward-looking statements. We believe that the following factors, among others (including those described in Item 1A. "Risk Factors"), could affect our future performance and the liquidity and value of our securities and cause our actual results to differ materially from those expressed or implied by forward-looking statements made by us or on our behalf:

- the cyclicality of the markets which we serve and the vulnerability of those markets to economic downturns;
- the loss of, or a significant reduction or delay in purchases by our largest customers;

- the fluctuations in energy prices;
- governmental energy policies could change, or expected changes could fail to materialize;
- competition in our markets;
- the impact of global economic and financial conditions;
- our ability to manage our fixed-price contract exposure;
- our reliance on the availability of key suppliers and services;
- degradation of our backlog as a result of modification or termination of orders;
- changes in government health care regulations and reimbursement policies;
- general economic, political, business and market risks associated with our global operations;
- fluctuations in foreign currency exchange and interest rates;
- our ability to successfully acquire or integrate companies that provide complementary products or technologies;
- financial distress of third parties;
- our ability to control our costs while maintaining customer relationships and core business resources;
- our ability to successfully manage our planned operational expansions;
- difficulties in implementing a new ERP system;
- the loss of key employees;
- the pricing and availability of raw materials;
- litigation and disputes involving us, including the extent of product liability, warranty, pension, employment and environmental claims asserted against us;
- United States Food and Drug Administration regulation of our products;
- the impairment of our goodwill and other indefinite-lived intangible assets;
- the costs of compliance with environmental, health and safety laws and responding to potential liabilities under these laws;
- labor costs and disputes and the deterioration of our relations with our employees;
- additional liabilities related to taxes;
- the underfunded status of our pension plan;
- our ability to continue our technical innovation in our product lines;
- our ability to protect our intellectual property and know-how;
- claims that our products or processes infringe intellectual property rights of others;
- disruptions in our operations due to severe weather;
- potential violations of the Foreign Corrupt Practices Act;
- increased government regulation;
- regulations governing the export of our products and other regulations applicable to us as a supplier of products to the U.S. government;
- risks associated with our indebtedness, leverage, debt service and liquidity;
- fluctuations in the price of our stock; and
- other factors described in this Annual Report.

There may be other factors that may cause our actual results to differ materially from the forward-looking statements.

All forward-looking statements attributable to us or persons acting on our behalf apply only as of the date of this Annual Report and are expressly qualified in their entirety by the cautionary statements included in this Annual Report. We undertake no obligation to update or revise forward-looking statements which may be made to reflect events or circumstances that arise after the date made or to reflect the occurrence of unanticipated events.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

In the normal course of business, our operations are exposed to continuing fluctuations in foreign currency values and interest rates that can affect the cost of operating and financing. Accordingly, we address a portion of these risks through a program of risk management.

Our primary interest rate risk exposure results from the current Senior Credit Facility's various floating rate pricing mechanisms. If interest rates were to increase 200 basis points (2%) from December 31, 2010 rates, and assuming no changes in debt from the December 31, 2010 levels, our additional annual expense would be approximately $1.2 million on a pre-tax basis.

The Company has assets, liabilities and cash flows in foreign currencies creating exposure to foreign currency exchange fluctuations in the normal course of business. Chart's primary exchange rate exposure is with the euro, the Japanese yen, the British pound, the Czech koruna and the Chinese yuan. Monthly measurement, evaluation and forward exchange rate contracts are employed as methods to reduce this risk. The Company enters into foreign exchange forward contracts to hedge anticipated and firmly committed foreign currency transactions. Chart does not use derivative financial instruments for speculative or trading purposes. The terms of the contracts are generally one year or less. At December 31, 2010, the Company had foreign exchange contracts with notional values of 16.9 million euros, 386.9 million Japanese yen, 5.0 million U.S. dollars, 500,000 Australian dollars and 75,000 British pounds. At December 31, 2010, a hypothetical 10% weakening of the U.S. dollar would not materially affect the Company's financial statements.

Covenant Compliance

We believe that our Senior Credit Facility and the indenture governing our outstanding Subordinated Notes are material agreements, that the covenants are material terms of these agreements and that information about the covenants is material to an investor's understanding of our financial condition and liquidity. The breach of covenants in the Senior Credit Facility that are tied to ratios based on Adjusted EBITDA, as defined below, could result in a default under the Senior Credit Facility and the lenders could elect to declare all amounts borrowed due and payable. Any such acceleration would also result in a default under our indenture. Additionally, under the Senior Credit Facility and indenture, our ability to engage in activities such as incurring additional indebtedness, making investments and paying dividends is also tied to ratios based on Adjusted EBITDA.

Covenant levels and pro forma ratios for the four quarters ended December 31, 2010 are as follows:

	Covenant Level	Four Quarters Ended December 31, 2010 Ratio
Senior Credit Facility(1)		
Minimum Adjusted EBITDA* to cash interest ratio	3.00x	5.59x
Maximum funded indebtedness to Adjusted EBITDA* ratio	3.25x	0.90x
Indenture(2)		
Minimum pro forma Adjusted EBITDA* to pro forma fixed charge coverage ratio required to incur additional debt pursuant to ratio provisions(3)	2.0x	5.4x

(1) Failure to satisfy these ratio requirements would constitute a default under the Senior Credit Facility. If lenders under the Senior Credit Facility failed to waive any such default, repayment obligations under the Senior Credit Facility could be accelerated, which would also constitute a default under the indenture.

(2) Our ability to incur additional debt and make certain restricted payments under our indenture, subject to specified exceptions, is tied to an Adjusted EBITDA to fixed charge ratio of at least 2.0 to 1.0.

(3) The ratio is calculated giving pro forma effect to our acquisitions of Cryotech and SeQual Technologies during 2010.

* Adjusted EBITDA as used herein is defined as net income before interest expense, provision for income taxes, depreciation and amortization and further adjusted to exclude non-recurring items, non-cash items and other adjustments permitted in calculating covenants contained in the related Senior Credit Facility and indenture governing the Subordinated Notes.

Item 8. *Financial Statements and Supplementary Data.*

Our Financial Statements and the accompanying Notes that are filed as part of this Annual Report are listed under Item 15. "Exhibits and Financial Statement Schedules" and are set forth beginning on page F-1 immediately following the signature page of this Form 10-K and are incorporated into this Item 8 by reference.

Item 9. *Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.*

None.

Item 9A. *Controls and Procedures.*

Evaluation of Disclosure Controls and Procedures.

As of December 31, 2010, an evaluation was performed, under the supervision and with the participation of the Company's management including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Rule 13a-15 under the Securities and Exchange Act of 1934, as amended (the "Exchange Act"). Based upon that evaluation, such officers concluded that the Company's disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act (1) is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms and (2) is accumulated and communicated to the Company's management including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow for timely decisions regarding required disclosure.

The Company is undertaking a phased implementation and upgrade of its existing J D Edwards global Enterprise Resource Planning software system and five sites have now gone "live" as of December 31, 2010 with the remaining sites planning to go "live" during 2011. The phased implementation has not at this point altered the Company's internal controls. The Company believes it is maintaining and monitoring appropriate internal controls during the implementation period and that its internal controls will be enhanced as a result of the implementation of the new system.

Management's Report on Internal Control Over Financial Reporting.

Management's Report on Internal Control Over Financial Reporting is set forth on page F-2 of this Annual Report on Form 10-K and incorporated herein by reference.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2010 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report which is set forth in Item 8. "Financial Statements and Supplementary Data," on page F-4 under the caption "Report of Independent Registered Public Accounting Firm" and incorporated herein by reference.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. ***Other Information.***

Not Applicable.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance.*

Information required by this item as to the Directors of the Company appearing under the caption "Election of Directors" in the Company's 2011 Proxy Statement is incorporated herein by reference. Information required by this item as to the Executive Officers of the Company is included as Item 4A of this Annual Report on Form 10-K as permitted by Instruction 3 to Item 401(b) of Regulation S-K. Information required by Item 405 is set forth in the 2011 Proxy Statement under the heading "Section 16(a) Beneficial Ownership Reporting Compliance" which information is incorporated herein by reference. Information required by Items 406 and 407(c)(3), (d)(4) and (d)(5) of Regulation S-K is set forth in the 2011 Proxy Statement under the headings "Information Regarding Meetings and Committees of the Board of Directors", "Code of Ethical Business Conduct and Officer Code of Ethics" and "Stockholder Communications with the Board", which information is incorporated herein by reference.

The Charters of the Audit Committee, Compensation Committee and Nominations and Corporate Governance Committee and the Corporate Governance Guidelines, Officer Code of Ethics and Code of Ethical Business Conduct are available on the Company's website at www.chart-ind.com and in print to any stockholder who requests a copy. Requests for copies should be directed to Secretary, Chart Industries, Inc., One Infinity Corporate Centre Drive, Suite 300, Garfield Heights, Ohio 44125. The Company intends to disclose any amendments to the Code of Ethical Business Conduct or Officer Code of Ethics, and any waiver of the Code of Ethical Business Conduct or Officer Code of Ethics granted to any Director or Executive Officer of the Company, on the Company's website.

Item 11. *Executive Compensation.*

The information required by Item 402 of Regulation S-K is set forth in the 2011 Proxy Statement under the heading "Executive and Director Compensation," which information is incorporated herein by reference. The information required by Items 407(e)(4) and 407(e)(5) of Regulation S-K is set forth in the 2011 Proxy Statement under the headings "Compensation Committee Interlocks and Insider Participation" and "Compensation Committee Report," respectively, which information is incorporated herein by reference.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.*

The information required by this item is set forth in the 2011 Proxy Statement under the headings "Security Ownership of Certain Beneficial Owners" and "Equity Compensation Plan Information," which information is incorporated herein by reference.

Item 13. *Certain Relationships and Related Transactions, and Director Independence.*

The information required by this item is set forth in the 2011 Proxy Statement under the headings "Related Party Transactions" and "Director Independence," which information is incorporated herein by reference.

Item 14. *Principal Accounting Fees and Services.*

The information required by this item is set forth in the 2011 Proxy Statement under the heading "Principal Accounting Fees and Services," which information is incorporated herein by reference.

PART IV

Item 15. ***Exhibits and Financial Statement Schedules.***

(a) The following documents are filed as part of this 2010 Annual Report on Form 10-K:

1. *Financial Statements.* The following consolidated financial statements of the Company and its subsidiaries and the reports of the Company's independent registered public accounting firm are incorporated by reference in Item 8:

Management's Report on Internal Control over Financial Reporting

Reports of Independent Registered Public Accounting Firm

Consolidated Balance Sheets at December 31, 2010 and 2009

Consolidated Statements of Operations for the years ended December 31, 2010, 2009 and 2008

Consolidated Statements of Shareholders' Equity for the years ended December 31, 2010, 2009 and 2008

Consolidated Statements of Cash Flows for the years ended December 31, 2010, 2009 and 2008

Notes to Consolidated Financial Statements

2. *Financial Statement Schedules.* The following additional information should be read in conjunction with the consolidated financial statements:

Schedule II Valuation and Qualifying Accounts for the years ended December 31, 2010, 2009 and 2008

All other financial statement schedules have been omitted since they are either not required, not applicable, or the information is otherwise included.

3. *Exhibits.* See the Index to Exhibits at page E-1 of this Annual Report on Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CHART INDUSTRIES, INC.

By: /s/ SAMUEL F. THOMAS
Samuel F. Thomas
Chairman, Chief Executive Officer and President

Date: February 28, 2011

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature and Title	
/s/ SAMUEL F. THOMAS **Samuel F. Thomas**	Chairman, Chief Executive Officer, President and a Director
/s/ MICHAEL F. BIEHL **Michael F. Biehl**	Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer)
/s/ KENNETH J. WEBSTER **Kenneth J. Webster**	Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)
/s/ W. DOUGLAS BROWN **W. Douglas Brown**	Director
/s/ RICHARD E. GOODRICH **Richard E. Goodrich**	Director
/s/ STEVEN W. KRABLIN **Steven W. Krablin**	Director
/s/ MICHAEL W. PRESS **Michael W. Press**	Director
/s/ JAMES M. TIDWELL **James M. Tidwell**	Director
/s/ THOMAS L. WILLIAMS **Thomas L. Williams**	Director

Date: February 28, 2011

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MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of Chart Industries, Inc. and its subsidiaries (the "Company") are responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed under the supervision of the Company's principal executive and financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

The Company's internal control over financial reporting includes policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets of the Company;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and the directors of the Company; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the Company's financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.

Management has assessed the effectiveness of its internal control over financial reporting as of December 31, 2010 based on the framework established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management has determined that the Company's internal control over financial reporting is effective as of December 31, 2010.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2010 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report appearing below, which expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2010.

/s/ SAMUEL F. THOMAS	/s/ MICHAEL F. BIEHL
Samuel F. Thomas	**Michael F. Biehl**
Chairman, Chief Executive Officer and President	**Executive Vice President, Chief Financial Officer and Treasurer**

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
Chart Industries, Inc.

We have audited the accompanying consolidated balance sheets of Chart Industries, Inc. and subsidiaries as of December 31, 2010 and 2009, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2010. Our audits also included the financial statement schedule listed in the index at Item 15(a) 2. These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Chart Industries, Inc. and subsidiaries at December 31, 2010 and 2009, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2010, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Chart Industries, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2011 expressed an unqualified opinion thereon.

/S/ ERNST & YOUNG LLP

Cleveland, Ohio
February 28, 2011

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
Chart Industries, Inc.

We have audited Chart Industries, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2010 based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Chart Industries, Inc. and subsidiaries' management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Chart Industries, Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Chart Industries, Inc. and subsidiaries as of December 31, 2010 and 2009, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2010 and our report dated February 28, 2011 expressed an unqualified opinion thereon.

/S/ ERNST & YOUNG LLP

Cleveland, Ohio
February 28, 2011

CHART INDUSTRIES, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31, 2010	December 31, 2009
	(Dollars in thousands, except per share amounts)	
ASSETS		
Current Assets		
Cash and cash equivalents	$165,112	$211,168
Accounts receivable, net	88,131	77,509
Inventories, net	104,435	85,570
Unbilled contract revenue	22,070	18,252
Prepaid expenses	5,121	5,484
Other current assets	21,227	16,421
Total Current Assets	406,096	414,404
Property, plant and equipment, net	116,158	111,153
Goodwill	275,252	264,532
Identifiable intangible assets, net	144,286	123,773
Other assets, net	13,047	12,641
TOTAL ASSETS	$954,839	$926,503
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Accounts payable	$ 54,749	$ 38,089
Customer advances and billings in excess of contract revenue	51,661	51,782
Accrued salaries, wages and benefits	20,359	22,309
Warranty reserve	12,101	8,764
Current portion of long-term debt	6,500	—
Other current liabilities	25,813	22,993
Total Current Liabilities	171,183	143,937
Long-term debt	218,425	243,175
Long-term deferred tax liability, net	39,140	42,757
Accrued pension liabilities	11,483	10,646
Other long-term liabilities	13,234	8,742
Shareholders' Equity		
Common stock, par value $.01 per share — 150,000,000 shares authorized, as of December 31, 2010 and 2009, respectively, 28,831,724 and 28,481,586 shares issued and outstanding at December 31, 2010 and 2009, respectively	288	285
Additional paid-in capital	258,425	251,692
Retained earnings	230,640	210,480
Accumulated other comprehensive income	9,811	13,104
Total Chart Industries, Inc. shareholders' equity	499,164	475,561
Noncontrolling interest	2,210	1,685
Total equity	501,374	477,246
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$954,839	$926,503

The accompanying notes are an integral part of these consolidated financial statements.

CHART INDUSTRIES, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2010	2009	2008
	(Dollars and shares in thousands, except per share amounts)		
Sales	$555,455	$597,458	$753,086
Cost of sales	390,156	395,577	513,698
Gross profit	165,299	201,881	239,388
Selling, general and administrative expenses	104,973	95,601	100,847
Amortization expense	11,049	10,716	10,963
Asset impairment	1,773	1,230	—
Reversal of contingent liabilities related to insolvent subsidiary	—	—	(6,514)
Loss on sale or disposal of assets	—	—	739
	117,795	107,547	106,035
Operating income	47,504	94,334	133,353
Other expense (income):			
Interest expense, net	16,196	15,817	17,953
Amortization of deferred financing costs	3,063	1,616	1,857
Foreign currency loss (gain)	871	(687)	3,948
Gain on acquisition of business	(1,124)	(6,954)	—
	19,006	9,792	23,758
Income before income taxes	28,498	84,542	109,595
Income tax expense (benefit):			
Current	17,338	25,137	35,975
Deferred	(9,345)	(1,751)	(5,486)
	7,993	23,386	30,489
Net income	20,505	61,156	79,106
Noncontrolling interest, net of taxes	345	145	182
Net income attributable to Chart Industries, Inc.	$ 20,160	$ 61,011	$ 78,924
Net income attributable to Chart Industries, Inc. per common share — basic	$ 0.71	$ 2.14	$ 2.78
Net income attributable to Chart Industries, Inc. per common share — diluted	$ 0.69	$ 2.11	$ 2.72
Weighted average number of common shares outstanding:			
Basic	28,534	28,457	28,354
Diluted	29,255	28,981	29,008

The accompanying notes are an integral part of these consolidated financial statements.

CHART INDUSTRIES, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Common Stock						
	Shares Outstanding	Amount	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Noncontrolling Interests	Total Equity
	(Dollars and shares in thousands)						
Balance at December 31, 2007	28,212	$282	$241,732	$ 70,545	$15,432	$1,214	$329,205
Net income	—	—	—	78,924		182	79,106
Other comprehensive income (loss)							
Foreign currency translation adjustments	—	—	—	—	(1,383)	96	(1,287)
Increase in pension liability, net of tax benefit of $4,278	—	—	—	—	(7,480)	—	(7,480)
Comprehensive income	—	—	—	—	—	—	70,339
Compensation expense recognized for employee stock options	—	—	3,134	—	—	—	3,134
Exercise of options	186	2	1,327	—	—	—	1,329
Tax benefit of non-qualifying stock options	—	—	1,435	—	—	—	1,435
Other	—	—	10	—	—	—	10
Balance at December 31, 2008	28,398	$284	$247,638	$149,469	$ 6,569	$1,492	405,452
Net income	—	—		61,011		145	61,156
Other comprehensive income (loss)							
Foreign currency translation adjustments	—	—	—	—	3,427	48	3,475
Amortization of unrecognized losses	—	—	—	—	679	—	679
Decrease in pension liability, net of tax expense of ($1,777)	—	—	—	—	2,429	—	2,429
Comprehensive income	—	—	—	—	—	—	67,739
Compensation expense recognized for employee stock options	—	—	3,279	—	—	—	3,279
Exercise of options	84	1	745	—	—	—	746
Tax benefit of non-qualifying stock options	—	—	30	—	—	—	30
Balance at December 31, 2009	28,482	$285	$251,692	$210,480	$13,104	$1,685	$477,246
Net income	—	—	—	20,160	—	345	20,505
Other comprehensive income (loss)							
Foreign currency translation adjustments	—	—	—	—	(2,753)	180	(2,573)
Amortization of unrecognized losses	—	—	—	—	270	—	270
Decrease in pension liability, net of tax expense of ($470)	—	—	—	—	(810)	—	(810)
Comprehensive income	—	—	—	—	—	—	17,392
Compensation expense recognized for employee stock options	—	—	4,933	—	—	—	4,933
Exercise of options	350	1	1,062	—	—	—	1,063
Tax benefit of non-qualifying stock options	—	—	796	—	—	—	796
Other	—	2	(58)	—	—	—	(56)
Balance at December 31, 2010	28,832	$288	$258,425	$230,640	$ 9,811	$2,210	$501,374

The accompanying notes are an integral part of these consolidated financial statements.

CHART INDUSTRIES, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2010	2009	2008
	(Dollars in thousands)		
OPERATING ACTIVITIES			
Net income	$ 20,505	$ 61,156	$ 79,106
Adjustments to reconcile net income to net cash provided by operating activities:			
Amortization of deferred financing costs	3,063	1,616	1,857
Employee stock and stock option related compensation expense	4,933	3,279	3,134
Asset impairment	1,773	1,230	739
Depreciation and amortization	23,577	21,412	21,313
Reversal of contingent liability on insolvent subsidiary	—	—	(6,514)
Gain on acquisition of business	(1,124)	(6,954)	—
Foreign currency transaction loss (gain)	871	(687)	3,948
Deferred income tax expense (benefit)	(9,345)	(1,751)	(5,486)
Other	3,236	1,999	(35)
Changes in assets and liabilities:			
Accounts receivable	(2,614)	15,217	2,505
Inventory	(13,717)	25,221	(8,296)
Unbilled contract revenues and other current assets	(2,554)	27,112	(14,045)
Accounts payable and other current liabilities	10,505	(16,567)	(12,987)
Deferred income taxes	(337)	641	(4,768)
Customer advances and billings in excess of contract revenue	(198)	(45,998)	37,341
Net Cash Provided By Operating Activities	38,574	86,926	97,812
INVESTING ACTIVITIES			
Capital expenditures	(16,939)	(13,190)	(13,968)
Purchase of short term investments	—	—	(32,264)
Proceeds from sale of assets	989	107	—
Acquisition of businesses, net of cash acquired	(47,865)	(18,086)	(18,828)
Proceeds from maturities of short term investments	—	32,264	—
Other investing activities	(400)	(1,897)	(616)
Net Cash (Used In) Investing Activities	(64,215)	(802)	(65,676)
FINANCING ACTIVITIES			
Principal payments on long-term debt	(18,250)	—	(6,825)
Payment of financing costs	(2,857)	—	—
Stock option exercise proceeds	1,063	746	1,329
Tax benefit from exercise of stock options	796	30	1,435
Other financing activities	(54)	—	—
Net Cash (Used In) Provided By Financing Activities	(19,302)	776	(4,061)
Net (decrease) increase in cash and cash equivalents	(44,943)	86,900	28,075
Effect of exchange rate changes on cash	(1,113)	2,103	1,221
Cash and cash equivalents at beginning of period	211,168	122,165	92,869
CASH AND CASH EQUIVALENTS AT END OF PERIOD	$165,112	$211,168	$122,165

The accompanying notes are an integral part of these consolidated financial statements.

NOTE A — Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations: Chart Industries, Inc. (the "Company"), is a leading global supplier of standard and custom-engineered products and systems serving a wide variety of low-temperature and cryogenic applications. The Company has developed an expertise in cryogenic systems and equipment, which operate at low temperatures sometimes approaching absolute zero. The majority of the Company's products, including vacuum insulated containment vessels, heat exchangers, cold boxes and other cryogenic components, are used throughout the liquid-gas supply chain for the purification, liquefaction, distribution, storage and end-use of industrial gases and hydrocarbons. The Company has domestic operations located throughout the United States, including the principal executive offices located in Ohio, and an international presence in Asia, Australia and Europe.

Principles of Consolidation: The consolidated financial statements include the accounts of the Company and its subsidiaries. Intercompany accounts and transactions are eliminated in consolidation. Investments in affiliates where the Company's ownership is between 20 percent and 50 percent, or where the Company does not have control but has the ability to exercise significant influence over operations or financial policy, are accounted for under the equity method.

Basis of Presentation: The consolidated financial statements and accompanying notes as of and for the years ended December 31, 2010, 2009 and 2008 are prepared in conformity with U.S. generally accepted accounting principles and require management to make certain estimates and assumptions. These may affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements. They may also affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates upon subsequent resolution of identified matters.

Reclassifications: In 2010, the Company determined shipping and handling revenues should be recorded in sales and related shipping and handling costs should be recorded in cost of sales. Previously, both shipping and handling revenues and costs were netted within sales. Prior periods have been reclassified to conform to the current period presentation.

Cost of Sales: Any expenses associated with manufacturing are included in cost of sales. These costs include all materials, direct and indirect labor, inbound freight, purchasing and receiving, inspection, internal transfers and distribution and warehousing of inventory. In addition, shop supplies, facility maintenance costs, manufacturing engineering, project management and depreciation expense for assets used in the manufacturing process are included in cost of sales.

Selling, general and administrative costs ("SG&A"): SG&A includes selling, marketing, customer service, product management, design engineering, and other administrative costs not directly supporting the manufacturing process as well as depreciation expense associated with non-manufacturing assets. In addition, SG&A includes corporate operating expenses for executive management, accounting, tax, treasury, human resources, information technology, legal, internal audit, risk management and stock-based compensation expense.

Cash and Cash Equivalents: The Company considers all investments with an initial maturity of three months or less when purchased to be cash equivalents. The December 31, 2010 and 2009 balances include money market investments.

Short Term Investments: From time to time, the Company invests in short-term, highly liquid, variable rate instruments, which have stated maturities of greater than three months but less than six months. These short term investments are recorded at cost which approximates fair value. The Company has determined that its investment securities are available and intended for use in current operations and, accordingly, has classified investment securities as current assets. There are no short-term investments as of December 31, 2010 and 2009.

Concentrations of Credit Risks: The Company sells its products to gas producers, distributors and end-users across the industrial gas, hydrocarbon and chemical processing industries in countries all over the world. Approximately 57%, 59% and 65% of sales were to foreign countries in 2010, 2009 and 2008, respectively. No single customer exceeded ten percent of consolidated sales in 2010 and 2009. In 2008 sales to Air Liquide represented approximately 10% of consolidated sales across all segments. Sales to the Company's top ten customers accounted for 38%, 47% and 48% of consolidated sales in 2010, 2009 and 2008, respectively. The Company's sales to particular customers fluctuate from period to period, but the large gas producer and distributor customers of the Company tend to be a consistently large source of revenue for the Company. To minimize credit risk from trade receivables, the Company reviews the financial condition of potential customers in relation to established credit requirements before sales credit is extended and monitors the financial condition of customers to help ensure timely collections and to minimize losses. Additionally, for certain domestic and foreign customers, particularly in the Energy and Chemicals ("E&C") segment, the Company requires advance payments, letters of credit and other such guarantees of payment. Certain customers also require the Company to issue letters of credit or performance bonds, particularly in instances where advance payments are involved, as a condition of placing the order.

The Company is also subject to concentrations of credit risk with respect to its cash and cash equivalents and forward foreign currency exchange contracts. To minimize credit risk from these financial instruments, the Company enters into these arrangements with major banks and other quality financial institutions and invests only in high-quality instruments. The Company does not expect any counterparties to fail to meet their obligations in this area.

Allowance for Doubtful Accounts: The Company evaluates the collectibility of accounts receivable based on a combination of factors. In circumstances where the Company is aware of a specific customer's inability to meet its financial obligations (e.g., bankruptcy filings, or substantial downgrading of credit scores), a specific reserve is recorded to reduce the receivable to the amount the Company believes will be collected. The Company also records allowances for doubtful accounts based on the length of time the receivables are past due and historical experience. The allowance for doubtful accounts balance at December 31, 2010 and 2009 was $3,008 and $1,727, respectively.

Inventories: Inventories are stated at the lower of cost or market with cost being determined by the first-in, first-out ("FIFO") method at December 31, 2010 and 2009. The components of inventory are as follows:

	December 31,	
	2010	2009
Raw materials and supplies	$ 35,565	$22,795
Work in process	23,643	19,967
Finished goods	45,227	42,808
	$104,435	$85,570

Inventory Valuation Reserves: The Company determines inventory valuation reserves based on a combination of factors. In circumstances where the Company is aware of a specific problem in the valuation of a certain item, a specific reserve is recorded to reduce the item to its net realizable value. The Company also recognizes reserves based on the actual usage in recent history and projected usage in the near-term. If circumstances change (e.g., lower-than-expected or higher-than-expected usage), estimates of the net realizable value could be changed by a material amount.

Property, Plant and Equipment: All capital expenditures for property, plant and equipment are stated on the basis of cost. Expenditures for maintenance and repairs are charged to expense as incurred, whereas major improvements are capitalized. The cost of applicable assets is depreciated over their estimated useful lives. Depreciation is computed using the straight-line method for financial reporting purposes and accelerated methods for income tax purposes. Depreciation expense was $12,528, $10,696 and $10,350 for the years ended December 31, 2010, 2009 and 2008, respectively. The following table summarizes the components of property, plant and equipment:

		December 31,	
Classification	**Estimated Useful**	**2010**	**2009**
Land and buildings	20-35 years	$ 72,783	$ 66,976
Machinery and equipment	3-12 years	69,572	66,921
Computer equipment, furniture and fixtures	3-7 years	10,912	8,791
Construction in process		8,800	3,876
		162,067	146,564
Less accumulated depreciation		(45,909)	(35,411)
Total property, plant and equipment, net		$116,158	$111,153

The Company monitors its property, plant and equipment, and finite-lived intangible assets for impairment indicators on an ongoing basis. If impairment indicators exist, the Company performs the required analysis and records impairment charges. In conducting its analysis, the Company compares the undiscounted cash flows expected to be generated from the long-lived assets to the related net book values. If the undiscounted cash flows exceed the net book value, the long-lived assets are considered not to be impaired. If the net book value exceeds the undiscounted cash flows, an impairment loss is measured and recognized. An impairment loss is measured as the difference between the net book value and the fair value of the long-lived assets. Fair value is estimated based upon either discounted cash flow analyses or estimated salvage values. Cash flows are estimated using internal forecasts as well as assumptions related to discount rates. Changes in economic or operating conditions impacting these estimates and assumptions could result in the impairment of long-lived assets.

Goodwill and Other Intangible Assets: The Company does not amortize goodwill or other indefinite-lived intangible assets, but reviews them at least annually, and on an interim basis if necessary, for impairment using a measurement date of October 1st. The Company amortizes intangible assets that have finite lives over their useful lives.

The Company determines the fair value of any indefinite-lived intangible assets using a discounted cash flow method, compares the fair value to its carrying value and records an impairment loss if the carrying value exceeds its fair value. Goodwill is tested utilizing a two-step approach. After recording any impairment losses for indefinite-lived intangible assets, the Company determines the fair value of each reporting unit and compares the fair value to its carrying value, including goodwill, of such reporting unit (step one). To test for impairment, the Company is required to estimate the fair value of each reporting unit. The reporting units are also the reportable segments: Energy & Chemicals, Distribution & Storage, and BioMedical. Consistent with prior years, the Company uses the income and market approaches to develop fair value estimates, which are weighted equally to arrive at a fair value estimate for each reporting unit. With respect to the income approach, a model has been developed to estimate the fair value of each reporting unit. This fair value model incorporates estimates of future cash flows, estimates of allocations of certain assets and cash flows among reporting units, estimates of future growth rates and management's judgment regarding the applicable discount rates to use to discount those estimated cash flows. With respect to the market approach, a guideline company method is used selecting

companies with similar assets or businesses to estimate fair value of each reporting unit. Changes to these judgments and estimates could result in a significantly different estimate of the fair value of the reporting units, which could result in a different assessment of the recoverability of goodwill and other indefinite-lived intangible assets. If the fair value exceeds the carrying value, no impairment loss would be recognized. If the carrying value of the reporting unit exceeds its fair value, the goodwill of the reporting unit may be impaired. The amount of the impairment, if any, would then be measured in step two, which compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. As of October 1, 2010, the estimated fair values substantially exceeded the carrying value for all reporting units. The following table displays the gross carrying amount and accumulated amortization for finite-lived intangible assets and indefinite-lived intangible assets:

	Weighted Average Estimated Useful Life	December 31, 2010		December 31, 2009	
		Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Finite-lived assets					
Unpatented technology	9 years	$ 15,073	$ (7,275)	$ 10,988	$ (5,407)
Patents	10 years	8,497	(4,304)	9,016	(4,040)
Product names	14 years	5,676	(1,285)	4,001	(907)
Non-compete agreements	3 years	2,130	(1,952)	3,474	(2,871)
Customer relations	13 years	125,848	(39,103)	106,194	(31,239)
		$157,224	$(53,919)	$133,673	$(44,464)
Indefinite-lived intangible assets:					
Goodwill		$275,252		$264,532	
Trademarks and trade names		37,911		34,564	
In-process research and development		3,070		—	
		$316,233		$299,096	

Amortization expense for intangible assets subject to amortization was $11,049, $10,716 and $10,963 for the years ended December 31, 2010, 2009 and 2008, respectively, and is estimated to range from approximately $13,100 to $8,800 annually for fiscal years 2011 through 2016, respectively.

Goodwill increased $10,720 during the year ended December 31, 2010. Acquisitions accounted for $11,228 of the increase and the remaining $508 decrease is due to the impact of foreign currency translation adjustments.

Financial Instruments: The fair values of cash equivalents, short term investments, accounts receivable and short term bank debt approximate their carrying amount because of the short maturity of these instruments.

Derivative Instruments: The Company utilizes certain derivative financial instruments to enhance its ability to manage foreign currency risk that exists as part of ongoing business operations. Derivative instruments are entered into for periods consistent with related underlying exposures and do not constitute positions independent of those exposures. The Company does not enter into contracts for speculative purposes, nor is it a party to any leveraged derivative instrument.

The Company is exposed to foreign currency exchange risk as a result of transactions in currencies other than the functional currency of certain subsidiaries. The Company utilizes foreign currency forward purchase and sale contracts to manage the volatility associated with foreign currency purchases and certain intercompany

transactions in the normal course of business. Contracts typically have maturities of less than one year. Principal currencies include the euro, British pound and Czech koruna. The Company's foreign currency forward contracts do not qualify as hedges as defined by accounting guidance. Changes in their fair value are recorded in the consolidated statement of operations. The changes in fair value generated a net loss of $630 for 2010, a net gain of $1,492 for 2009, and a net loss of $1,536 for 2008.

As of December 31, 2010, the Company held forward currency contracts to sell (i) 16,900 euros against the Czech koruna, (ii) 386,853 Japanese yen against the U.S. dollar, (iii) 5,000 U.S. dollars against the euro, (iv) 500 Australian dollars against the U.S dollar, and (v) 75 British pounds against the euro. At December 31, 2010, the fair value of the Company's derivative liabilities representing foreign currency forward contracts was $807. These were recorded on the balance sheet as other current liabilities. As of December 31, 2009, the Company held forward currency contracts to sell 3,300 euros against the U.S. dollar and to sell 270 Polish zloty against the Czech koruna.

At December 31, 2009, the fair value of the Company's derivative assets representing foreign currency forward contracts was $127. These were recorded on the balance sheet as other current assets. The Company's foreign currency forward contracts are not exchange traded instruments and, accordingly, are classified as being valued utilizing level 2 inputs which are based on observable inputs such as quoted prices for similar assets and liabilities in active markets.

Product Warranties: The Company provides product warranties with varying terms and durations for the majority of its products. The Company records warranty expense in cost of sales. The changes in the Company's consolidated warranty reserve are as follows:

	Year Ended December 31,		
	2010	2009	2008
Balance at beginning of period	$ 8,764	$ 8,636	$ 5,731
Warranty expense	5,893	3,316	5,598
Warranty usage	(3,827)	(4,335)	(2,693)
Acquired warranty reserves	1,271	1,147	—
Balance at end of period	$12,101	$ 8,764	$ 8,636

Shareholders' Equity: The Company reports comprehensive income in its consolidated statement of shareholders' equity. The components of accumulated other comprehensive income (loss) are as follows:

	December 31,	
	2010	2009
Foreign currency translation adjustments	$14,938	$17,691
Pension liability adjustments, net of taxes of ($470) and ($1,777) at December 31, 2010 and 2009, respectively	(5,127)	(4,587)
	$ 9,811	$13,104

Fair Value of Financial Instruments: The Company measures financial assets and liabilities at fair value in three levels of inputs. The three-tier fair value hierarchy, which prioritizes the inputs used in the valuation methodologies, is:

Level 1 — Valuations based on quoted prices for identical assets and liabilities in active markets.

Level 2 — Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3 — Valuations based on unobservable inputs reflecting our own assumptions, consistent with reasonably available assumptions made by other market participants. These valuations require significant judgment.

Revenue Recognition: For the majority of the Company's products, revenue is recognized when products are shipped, title has transferred and collection is reasonably assured. For these products, there is also persuasive evidence of an arrangement and the selling price to the buyer is fixed or determinable. For brazed aluminum heat exchangers, cold boxes, liquefied natural gas fueling stations and engineered tanks, the Company uses the percentage of completion method of accounting. Earned revenue is based on the percentage that incurred costs to date bear to total estimated costs at completion after giving effect to the most current estimates. Earned revenue on contracts in process at December 31, 2010, 2009 and 2008, totaled $240,239, $295,530 and $395,756, respectively. Timing of amounts billed on contracts varies from contract to contract and could cause significant variation in working capital needs. Amounts billed on percentage of completion contracts in process at December 31, 2010, 2009 and 2008 totaled $239,600, $298,131 and $417,843, respectively. The cumulative impact of revisions in total cost estimates during the progress of work is reflected in the period in which these changes become known. Earned revenue reflects the original contract price adjusted for agreed upon claims and change orders, if any. Losses expected to be incurred on contracts in process, after consideration of estimated minimum recoveries from claims and change orders, are charged to operations as soon as such losses are known. Pre-contract costs relate primarily to salaries and benefits incurred to support the selling effort and, accordingly, are expensed as incurred. Change orders resulting in additional revenue and profit are recognized upon approval by the customer based on the percentage that incurred costs to date bear to total estimated costs at completion. Change orders resulting in additional revenue and profit are recognized upon approval by the customer based on the percentage that incurred costs to date bear to total estimated costs at completion. Certain contracts include incentive-fee arrangements. The incentive fees in such contracts can be based on a variety of factors but the most common are the achievement of target completion dates, target costs, and/or other performance criteria. Incentive fee revenue is not recognized until it is earned. Timing of amounts billed on contracts varies from contract to contract and could cause a significant variation in working capital requirements.

Shipping and Handling Costs: Amounts billed to customers for shipping are classified as sales, and the related costs are classified as cost of sales. Shipping revenue of ($6,537), ($5,507) and ($7,111) for the years ended December 31, 2010, 2009 and 2008, respectively, are included in sales. Shipping costs of $8,488, $5,942, and $8,723 for the years ended December 31, 2010, 2009 and 2008, respectively, are included in the cost of sales.

Advertising Costs: The Company incurred advertising costs of $3,268, $3,355 and $3,643 for the years ended December 31, 2010, 2009 and 2008, respectively. Such costs are expensed as incurred.

Research and Development Costs: The Company incurred research and development costs of $3,858, $3,256 and $5,927 for the years ended December 31, 2010, 2009 and 2008, respectively. Such costs are expensed as incurred.

Foreign Currency Translation: The functional currency for the majority of the Company's foreign operations is the applicable local currency. The translation from the applicable foreign currencies to U.S. dollars is performed for balance sheet accounts using exchange rates in effect at the balance sheet date and for revenue

and expense accounts using a weighted average exchange rate during the period. The resulting translation adjustments are recorded as a component of shareholders' equity. Gains or losses resulting from foreign currency transactions are charged to operations as incurred.

Income Taxes: The Company and its U.S. subsidiaries file a consolidated federal income tax return. Deferred income taxes are provided for temporary differences between financial reporting and the consolidated tax return in accordance with the liability method. A valuation allowance is provided against net deferred tax assets when conditions indicate that it is more likely than not that the benefit related to such assets will not be realized.

The Company utilizes a two-step approach for the recognition and measurement of uncertain tax positions. The first step is to evaluate the tax position and determine whether it is more likely than not that the position will be sustained upon examination by tax authorities. The second step is to measure the tax benefit as the largest amount that is more likely than not of being realized upon settlement.

Interest and penalties related to income taxes are accounted for as income tax expense.

Stock-Based Compensation: The Company records stock-based compensation according to current accounting guidance which requires all share-based payments to employees and directors, including grants of employee stock options, to be measured at fair value on the date of grant.

Compensation for share-based awards is recognized on an accrual basis over the vesting period. The total cost of a share-based payment award is reduced by estimated forfeitures expected to occur over the vesting period which generally is equivalent to the required service period of the award. See Note H for further discussions regarding stock options and other share-based awards.

Earnings per share: The following table presents calculations of income (loss) per share of common stock:

	Year Ended December 31,		
	2010	2009	2008
Net income attributable to Chart Industries, Inc.	$20,160	$61,011	$78,924
Net income attributable to Chart Industries, Inc. per common share — basic	$ 0.71	$ 2.14	$ 2.78
Net income attributable to Chart Industries, Inc. per common share — diluted	$ 0.69	$ 2.11	$ 2.72
Weighted average number of common shares outstanding — basic	28,534	28,457	28,354
Incremental shares issuable upon assumed conversion and exercise of stock options	721	524	654
Total shares — diluted	29,255	28,981	29,008

Certain options to purchase common stock of the Company were not included in net income attributable to Chart Industries, Inc. per common share-diluted as they were anti-dilutive and consisted of 362, 170 and 213 shares for the years ended December 31, 2010, 2009 and 2008, respectively.

New Accounting Pronouncements.

In June 2009, the FASB issued guidance as codified in ASC 810-10, "Consolidation of Variable Interest Entities" (previously SFAS No. 167, "Amendments to FASB Interpretation No. 46(R)"). This guidance is intended to improve financial reporting by providing additional guidance to companies involved with variable interest entities ("VIE's") and by requiring additional disclosures about a company's involvement in variable

interest entities. This guidance is generally effective for annual periods beginning after November 15, 2009 and for interim periods within that first annual reporting period. The adoption of this guidance did not have a material impact on the financial statements of the Company.

In October 2009, the FASB issued ASU 2009-13, "Revenue Recognition (Topic 605) — Multiple-Deliverable Revenue Arrangements". This ASU eliminates the requirement that all undelivered elements must have objective and reliable evidence of fair value before a company can recognize the portion of the consideration that is attributable to items that already have been delivered. This may allow some companies to recognize revenue on transactions that involve multiple deliverables earlier than under the current requirements. Additionally, under the new guidance, the relative selling price method is required to be used in allocating consideration between deliverables and the residual value method will no longer be permitted. This ASU is effective prospectively for revenue arrangements entered into or materially modified beginning in fiscal 2011 although early adoption is permitted. A company may elect, but will not be required, to adopt the amendments in this ASU retrospectively for all prior periods. The Company has evaluated the ASU and does not believe it will have a material impact on the consolidated financial statements.

In December 2010, the FASB issued ASU 2010-28, "Intangibles — Goodwill and Other (Topic 350)." This ASU modifies the first step of the goodwill impairment test to include reporting units with zero or negative carrying amounts. For these reporting units, the second step of the goodwill impairment test shall be performed to measure the amount of impairment loss, if any, when it is more likely than not that a goodwill impairment exists. This ASU is effective for fiscal years and interim periods beginning after December 15, 2010. The Company has evaluated the ASU and does not believe it will have a material impact on the consolidated financial statements.

In December 2010, the FASB issued ASU 2010-29, "Business Combinations (Topic 805)." This ASU specifies that if a company presents comparative financial statements, the company should disclose revenue and earnings of the combined entity as though the business combination that occurred during the year had occurred as of the beginning of the comparable prior annual reporting period only. The ASU also expands the supplemental pro forma disclosures under Topic 805 to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination included in the pro forma revenue and earnings. This ASU is effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010. Effective January 1, 2011, the Company will adopt this ASU and include all required disclosures in the notes to its consolidated financial statements.

NOTE B — Balance Sheet Components

The following table summarizes the components of other current assets, other assets, net, other current liabilities and other long-term liabilities on the Company's consolidated balance sheet as of December 31, 2010 and 2009:

	December 31,	
	2010	2009
Other current assets:		
Deposits	$ 407	$ 278
Assets held for sale	2,824	3,250
Deferred income taxes	12,686	7,977
Other receivables	5,310	4,916
	$21,227	$16,421
Other assets, net:		
Deferred financing costs	$ 6,039	$ 6,245
Cash value life insurance	1,513	1,371
Prepaid leases	1,214	1,194
Other	4,281	3,831
	$13,047	$12,641
Other current liabilities:		
Accrued interest	$ 3,206	$ 3,112
Accrued other taxes	2,497	1,470
Accrued income taxes	1,066	520
Accrued rebates	4,090	2,615
Accrued employee separation and plant closure costs	2,578	2,881
Accrued other	12,376	12,395
	$25,813	$22,993
Other long-term liabilities:		
Accrued environmental	$ 6,355	$ 6,462
Accrued contingent consideration	5,845	—
Accrued contingencies and other	1,034	2,280
	$13,234	$ 8,742

NOTE C — Debt and Credit Arrangements

The following table shows the components of the Company's borrowings at December 31, 2010 and 2009, respectively.

	December 31,	
	2010	2009
Senior term loan, due May 2015, average interest rate of 2.89% at December 31, 2010	$ 61,750	$ —
Senior term loan, average interest rate of 2.42% at December 31, 2009	—	80,000
Subordinated notes, due 2015, interest accrued at 9.125%	163,175	163,175
Total debt	224,925	243,175
Less: current maturities	(6,500)	—
Long-term debt	$218,425	$243,175

On May 18, 2010, the Company completed refinancing its prior senior secured credit facility with a five-year $200,000 senior credit facility ("Senior Credit Facility"). As a result of the refinancing, the Company wrote off $1,706 of deferred financing fees related to the prior senior credit facility. The new Senior Credit Facility consists of a $65,000 term loan (the "Term Loan"), of which $61,750 remains outstanding and a $135,000 revolving credit facility (the "Revolver") with a scheduled maturity date of May 18, 2015. As part of the refinancing, the Company used cash to pay off $15,000 of its prior $80,000 term loan. The Revolver includes a $25,000 sub-limit for the issuance of swingline loans and a $50,000 sub-limit to be used for letters of credit. There is a foreign currency limit of $40,000 under the Revolver which can be used for foreign currency denominated letters of credit and borrowings in a foreign currency, in each case in currencies agreed upon with the lenders. In addition, the facility permits borrowings up to $40,000 under the Revolver made by the Company's wholly-owned subsidiary, Chart Industries Luxembourg S.à r.l. The Company also has $163,175 of 9 1/8% senior subordinated notes (the "Subordinated Notes") outstanding.

The Senior Credit Facility matures on May 18, 2015 (the "Maturity Date"). On September 30, 2010, the Company began repaying the principal balance of the Term Loan with its first quarterly installment of $1,625 and will continue to make quarterly installments through the Maturity Date. The Company may select a Eurocurrency Borrowing or an ABR Borrowing rate. If the Company elects the Eurocurrency Borrowing, the base rate for the elected period equals the applicable Adjusted LIBOR rate plus the applicable margin (as defined in the Senior Credit Facility). If the Company elects an ABR Borrowing, the base rate for any day equals an applicable interest margin (as defined in the Senior Credit Facility) plus the greatest of the Prime Rate in effect on such day, the Federal Funds Effective Rate in effect on such day plus 0.5%, and the Adjusted LIBOR Rate for a one month interest period on such day plus 1.0%. The applicable interest margin on the Senior Credit Facility could change based upon the leverage ratio calculated at each fiscal quarter end. In addition, the Company is required to pay a commitment fee of between 0.3% and 0.5% of the unused Revolver balance and a letter of credit participation fee equal to the daily aggregate letter of credit exposure at the rate per annum equal to the Applicable Margin for Eurocurrency Revolving Facility Borrowings (ranging from 2% to 3.5%, depending on the leverage ratio calculated at each fiscal quarter end). A fronting fee must be paid on each letter of credit that is issued equal to 0.125% per annum of the stated dollar amount of the letter of credit. The obligations under the Senior Credit Facility are guaranteed by the Company and substantially all of its U.S. subsidiaries and secured by substantially all of the assets of the Company's U.S. subsidiaries and 65% of the capital stock of the Company's Material (as defined by the Senior Credit Facility) non-U.S. subsidiaries that are owned by U.S. subsidiaries.

The Subordinated Notes are due in 2015 with interest payable semi-annually on April 15th and October 15th. Any of the Subordinated Notes may be redeemed solely at the Company's option, except as restricted by the Senior Credit Facility. The initial redemption price on October 15, 2010 is 104.563% of the principal amount, plus accrued interest. The Subordinated Notes are general unsecured obligations of the Company and are subordinated in right of payment to all existing and future senior debt of the Company, including the Senior Credit Facility, pari passu in right of payment with all future senior subordinated indebtedness of the Company, and senior in right of payment with any future indebtedness of the Company that expressly provides for its subordination to the Subordinated Notes. The Subordinated Notes are unconditionally guaranteed jointly and severally by substantially all of the Company's U.S. subsidiaries.

The Senior Credit Facility agreement and provisions of the indenture governing the Subordinated Notes contain a number of customary covenants, including but not limited to restrictions on the Company's ability to incur additional indebtedness, create liens or other encumbrances, sell assets, enter into sale and lease-back transactions, make certain payments, investments, loans, advances or guarantees, make acquisitions and engage in mergers or consolidations, pay dividends or distributions, and make capital expenditures. The Senior Credit Facility and indenture governing the Subordinated Notes also include financial covenants relating to net leverage

and interest coverage ratios. The Company is in compliance with all covenants. As of December 31, 2010, there was $61,750 outstanding under the Term Loan and $163,175 outstanding under the Subordinated Notes and $21,969 in letters of credit issued but no borrowings outstanding under the Revolver.

Chart Ferox, a.s. ("Ferox"), a wholly-owned subsidiary of the Company, maintains secured credit facilities with borrowing capacity, including overdraft protection, of up to 150,000 Czech koruna ("CSK"). Ferox maintains two separate facilities. Under the first facility, the revolving credit portion allows Ferox to make borrowings in CSK, euros and U.S. dollars. Borrowings in CSK are at PRIBOR, borrowings in Euros are at EURIBOR and borrowings in U.S. dollars are at LIBOR, each with a fixed margin of 1.0%. The first facility allows for overdraft protection in CSK, euros and U.S. dollars. The second facility does not allow for revolving credit borrowings. Borrowings in CSK are at PRIBOR, borrowings in euros are at an overnight European indexed average and borrowings in U.S. dollars are at LIBOR, with a fixed margin of 1.0%. Ferox is not required to pay a commitment fee to the lender under its facility in respect to the unutilized commitments thereunder. Ferox must pay letter of credit and guarantee fees equal to 0.70% on the face amount of each guarantee. Ferox's land, buildings and accounts receivable secure the credit facilities. As of December 31, 2010, there were no borrowings outstanding under the Ferox credit facilities. However, there were $4,058 of bank guarantees supported by the Ferox revolving credit facilities.

Flow Instruments & Engineering GmbH ("Flow"), a wholly-owned subsidiary of Ferox, maintains two revolving lines of credit with 320 euros in borrowing capacity. As of December 31, 2010, there were no borrowings outstanding under either line of credit.

The scheduled annual maturities of long-term debt at December 31, 2010, are as follows:

Year	Amount
2011	$ 6,500
2012	6,500
2013	6,500
2014	6,500
2015	198,925
Thereafter	—
	$224,925

The Company paid interest of $16,774, $16,820 and $20,936 for the years ended December 31, 2010, 2009 and 2008, respectively.

The fair value of the term loan portion of the Senior Credit Facility is estimated based on the present value of the underlying cash flows discounted at the Company's estimated borrowing rate. Under such method the fair value of the Company's Term Loan approximated its carrying value at December 31, 2010. The fair value of the Subordinated Notes is estimated based on a third party's estimated bid price. The fair value equaled the carrying value of $163,175 at December 31, 2010 and 2009.

NOTE D — Restructuring Activities

In April 2010, Caire Inc., a wholly-owned subsidiary of the Company, announced its plan to close its liquid oxygen therapy manufacturing facility in Plainfield, Indiana and relocate the manufacturing and customer service operations to a facility close to existing BioMedical operations in Canton, Georgia. The Plainfield facility was acquired as part of the 2009 acquisition of the liquid oxygen therapy business of Covidien plc. The total

anticipated cost of the restructuring is approximately $7,000 which includes asset impairment charges. The Company expects the closure to be completed in the second quarter of 2011. The cost will include cash expenditures for employee retention and separation benefits as well as lease exit costs. For the year ended December 31, 2010, the Company recorded $3,730 related to the closure of the Plainfield, Indiana BioMedical facility and the write-down to net realizable value of certain assets at the facility. The Company also recorded an additional $834 in asset impairment expense as a result of the write-down to fair value of the assets held for sale in Denver, Colorado and in Plaistow, New Hampshire. The Company also recorded $192 in restructuring costs related to the integration of SeQual Technologies, Inc. which was acquired on December 28, 2010. These charges were recorded in cost of sales ($2,579), selling, general and administrative expenses, ($531) and asset impairment charges ($1,646).

During 2009, the Company recorded $8,020, related to termination benefits primarily in the Distribution & Storage and BioMedical segments and the write-down to net realizable value of certain assets at the Denver, Colorado facility and land held for sale in Plaistow, New Hampshire. These charges were recorded in cost of sales ($3,605), selling, general and administrative expenses ($3,185) and asset impairment charges ($1,230).

The following tables summarize the Company's restructuring activities for the years ended December 31, 2010 and 2009:

	Year Ended December 31, 2010				
	Energy & Chemicals	Distribution & Storage	BioMedical	Corporate	Total
Balance as of January 1, 2010	$ 682	$ 1,608	$ 503	$ 88	$ 2,881
Restructuring charges	—	(45)	4,723	78	4,756
Asset impairment	—	—	(1,546)	(100)	(1,646)
Cash payments	(579)	(1,176)	(1,592)	(66)	(3,413)
Balance as of December 31, 2010	$ 103	$ 387	$ 2,088	$ —	$ 2,578

	Year Ended December 31, 2009				
	Energy & Chemicals	Distribution & Storage	BioMedical	Corporate	Total
Balance as of January 1, 2009	$ —	$ —	$ —	$ —	$ —
Restructuring charges	1,004	3,397	3,336	283	8,020
Asset impairment	—	(234)	(996)	—	(1,230)
Cash payments	(322)	(1,555)	(1,837)	(195)	(3,909)
Balance as of December 31, 2009	$ 682	$ 1,608	$ 503	$ 88	$ 2,881

NOTE E — Acquisitions

On December 28, 2010, Caire Inc. ("Caire"), a wholly-owned subsidiary of the Company, completed the acquisition of SeQual Technologies Inc. ("SeQual") for a total potential purchase price of $60,000 in cash, of which $38,700 was paid at closing. The cash purchase price is subject to post closing working capital and other adjustments. The majority of the remaining potential total purchase price represents contingent consideration to be paid over two years beginning in 2012 based on the achievement of certain gross profit targets. The estimated value of the contingent consideration at the acquisition date was $5,100, valued according to a discount cash flow approach, which includes assumptions for the probabilities of achieving the gross profit targets and the discount rate applied to the projected payments. The valuation of contingent consideration is classified as utilizing Level 3 inputs consistent with reasonably available assumptions which would be made by other market participants.

The purchase price allocation related to the SeQual acquisition is substantially complete with the exception of intangible assets and contingent consideration, which continue to be based on provisional fair values and are subject to revision as the Company finalizes appraisals and other analyses. Final determination of the fair values may result in further adjustments to the values presented below:

Assets acquired:	
Cash	$ 218
Accounts receivable, net	6,169
Inventory, net	4,959
Property and equipment	711
Other assets	504
Intangible assets	31,760
Goodwill	7,001
Liabilities assumed	(7,522)
Total purchase price	$43,800

SeQual is located in San Diego, California and develops, manufactures and markets products for numerous applications utilizing pressure swing adsorption technology for air separation with its primary focus on medical oxygen concentrators. SeQual's results will be included in the Company's BioMedical segment.

On August 2, 2010, Chart Inc. acquired substantially all of the assets of Cryotech International, Inc. ("Cryotech") for a potential total purchase price of $6,653 in cash, of which $4,053 was paid at closing. The remaining portion of the potential total purchase price represents contingent consideration to be paid over two years based on the achievement of certain revenue targets. The estimated value of the contingent consideration at the acquisition date was $1,800. The value of the contingent consideration was estimated using a probability model. The fair value of the assets acquired and goodwill at the date of acquisition were $1,626 and $4,227, respectively. Cryotech is located in San Jose, California and designs, manufactures, sells, and services cryogenic injectors, vacuum insulated piping systems, and manifolds, and also repairs liquid cylinders. Cryotech's results are included in the Company's Distribution & Storage segment and added $5,297 to net sales during the year ended December 31, 2010.

On April 2, 2010, Chart Japan Co., Ltd. completed the acquisition of Covidien Japan Inc.'s liquid oxygen therapy business for $1,008 in cash. The fair value of the assets acquired at closing was $2,132 which exceeded the cash paid and, accordingly, resulted in a gain on acquisition of business of $1,124 during the second quarter of 2010. Available public information indicated that Covidien sought to streamline its business portfolio in an expeditious manner and reallocate resources to other businesses, therefore, the liquid oxygen therapy business was considered a non-core asset. Net sales of $2,787 were added to the Company's BioMedical segment during the year ended December 31, 2010 as a result of the acquisition.

On November 27, 2009, Caire and other wholly-owned subsidiaries of the Company completed the acquisition of Covidien's liquid oxygen therapy business, including the design, manufacturing, and worldwide sales and service functions, for $9,082 in cash in the initial closing. The fair value of the assets acquired in the initial closing of $16,036 exceeded the cash paid and, accordingly, resulted in a gain on acquisition of business of $6,954 in 2009. Net sales of $50,439 were added to the Company's BioMedical segment during the year ended December 31, 2010 as a result of the acquisition of the liquid oxygen therapy business.

During the second quarter of 2009, the Company completed the acquisition of the equity interests of Chengdu Golden Phoenix Liquid Nitrogen Container Company, Ltd. ("Golden Phoenix") and substantially all of the assets of Tri-Thermal, Inc. for an aggregate of $12,175, net of cash acquired, of which $2,344 was paid during the first quarter of 2010 and the remaining $1,760 was paid during the second quarter of 2010. The fair values of the net assets acquired and goodwill at the date of acquisition were $10,000 and $2,700, respectively.

Golden Phoenix manufactures liquid nitrogen aluminum storage containers used primarily in the animal breeding industry and is located in China. Golden Phoenix is included in the Company's BioMedical segment. Tri-Thermal is located in Tulsa, Oklahoma and sells replacement parts for air-cooled heat exchangers. Tri-Thermal's results are included in the Company's Energy & Chemicals segment.

Pro-forma information related to these acquisitions has not been presented because the impact on the Company's consolidated results of operations is considered immaterial.

NOTE F — Income Taxes

Income before income taxes and minority interest consists of the following:

	For the Year Ended December 31,		
	2010	2009	2008
United States	$18,415	$70,695	$ 88,867
Foreign	10,083	13,847	20,728
	$28,498	$84,542	$109,595

Significant components of the provision for income taxes are as follows:

	Year Ended December 31,		
	2010	2009	2008
Current:			
Federal	$12,673	$21,779	$32,410
State	900	462	1,030
Foreign	3,765	2,896	2,535
	17,338	25,137	35,975
Deferred:			
Federal	(8,603)	(1,718)	(4,421)
State	77	(142)	(1,687)
Foreign	(819)	109	622
	(9,345)	(1,751)	(5,486)
	$ 7,993	$23,386	$30,489

The reconciliation of income taxes computed at the U.S. federal statutory tax rate to income tax expense is as follows:

	Year Ended December 31,		
	2010	2009	2008
Income tax expense at U.S. statutory rate	$ 9,974	$29,589	$38,359
State income taxes (benefit), net of federal tax benefit	976	319	(427)
Foreign income, net of credit on foreign taxes	176	(31)	(584)
Effective tax rate differential of earnings outside of U.S.	(1,221)	(1,455)	(4,759)
Foreign investment tax credit	(305)	(385)	(1,618)
Non-taxable gain on acquisition of business	(394)	(2,434)	—
(Taxable) non-deductible items	(144)	(735)	1,445
(Income) provision for tax contingencies	2	(69)	(147)
Domestic production activities deduction	(1,071)	(1,413)	(1,780)
	$ 7,993	$23,386	$30,489

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities are as follows:

	December 31, 2010	December 31, 2009
Deferred tax assets:		
Accruals and reserves	$13,699	$ 9,730
Pensions	4,245	3,846
Inventory	1,363	1,581
Stock options	5,412	4,310
Tax credit carryforwards	594	709
Foreign net operating loss carryforwards	861	412
Federal net operating loss carryforward	10,189	—
State net operating loss carryforward	947	—
Other — net	1,279	376
Total deferred tax assets before valuation allowance	$38,589	$20,964
Valuation allowance	(758)	(246)
Total deferred tax assets, net of valuation allowance	$37,831	$20,718
Deferred tax liabilities:		
Property, plant and equipment	$11,973	$11,644
Intangibles	52,312	43,854
Total deferred tax liabilities	$64,285	$55,498
Net deferred tax liabilities	$26,454	$34,780

Tax Credit Carryforwards: As of December 31, 2010, the Company had a gross deferred tax asset for tax credit carryforwards of $594. These credit carryforwards are subject to expiration from 2015 to 2019, if not utilized.

Federal and State net operating loss carryforwards: As a result of the SeQual acquisition, the Company acquired in excess of $37,000 of federal net operating losses and $31,800 of state net operating losses. Internal Revenue Code Section 382 will limit the use of net operating losses to $29,100 and $16,500, respectively, during the period ending 2030. The Company is presently studying the benefit of making an election under Internal Revenue Code Section 338(g) which would result in a step up in tax basis of the acquired assets in exchange for the extinguishment of the loss carryovers. The Company will make its final determination in a subsequent quarter of 2011. The resulting impact of the acquired attributes and tax basis will be recorded as an adjustment to the SeQual purchase accounting.

Foreign net operating loss carryforwards: As of December 31, 2010, cumulative foreign operating losses of $2,906 generated by the Company were available to reduce future taxable income. Approximately $2,722 of these operating losses expire between 2014 and 2017. The remaining $184 can be carried forward indefinitely. The gross deferred tax asset for the foreign operating losses of $861 is partially offset by a valuation allowance of $758.

The Company has not provided for income taxes on approximately $97,262 of foreign subsidiaries' undistributed earnings as of December 31, 2010, since the earnings retained have been reinvested indefinitely by the subsidiaries. It is not practicable to estimate the additional income taxes and applicable foreign withholding taxes that would be payable on the remittance of such undistributed earnings.

The Company had net income tax payments of $15,266, $24,659 and $36,167 for the years ended December 31, 2010, 2009 and 2008, respectively.

The reconciliation of beginning to ending unrecognized tax benefits is as follows:

	Year Ended December 31,	
	2010	2009
Unrecognized tax benefits at beginning of the year	$ 1,470	$1,903
Additions for tax positions of prior years	2,170	22
Reductions for tax positions of prior years	(22)	(22)
Lapse of statutes of limitation	(1,150)	(433)
Unrecognized tax benefits at end of the year	$ 2,468	$1,470

The amount of unrecognized tax benefits as of December 31, 2010 was $2,468. This amount, if ultimately recognized, will reduce the Company's annual effective tax rate.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. The Company had accrued approximately $53 for the payment of interest and penalties at December 31, 2010. The Company accrued approximately $50 and $51 for the years ended December 31, 2010 and 2009, respectively, in additional interest associated with uncertain tax positions.

The Company is subject to income taxes in the U.S. federal jurisdiction, and various states and foreign jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply. With few exceptions, the Company is no longer subject to U.S. federal, state and local or non-U.S. income tax examinations by tax authorities for years prior to 2005.

The Internal Revenue Service ("IRS") commenced an examination of the Company's U.S. income tax return for 2008 during 2010. In addition, the IRS is examining the 2005 and 2006 amended returns that were filed. The Company expects the examinations to be completed during 2011. Due to the potential resolution of the federal examination and the expiration of various statutes of limitation, it is reasonably possible the Company's unrecognized tax benefits at December 31, 2010 may decrease within the next twelve months by approximately $1,318.

NOTE G — Employee Benefit Plans

The Company has one defined benefit pension plan which is frozen, that covers certain U.S. hourly and salary employees. The defined benefit plan provides benefits based primarily on the participants' years of service and compensation.

The following table sets forth the components of net periodic pension expense (benefit) for the years ended December 31, 2010, 2009 and 2008.

	Year Ended December 31,		
	2010	2009	2008
Interest cost	$ 2,447	$ 2,397	$ 2,332
Expected return on plan assets	(2,353)	(1,827)	(2,878)
Amortization of net loss (gain)	269	678	—
Total pension expense (benefit)	$ 363	$ 1,248	$ (546)

The following table sets forth changes in the projected benefit obligation and plan assets, the funded status of the plans and the amounts recognized in the consolidated balance sheet:

	December 31, 2010	December 31, 2009
Change in projected benefit obligation:		
January 1 projected benefit obligation	$ 41,627	$ 40,740
Interest cost	2,447	2,397
Benefits paid	(1,568)	(1,387)
Actuarial losses (gains)	2,187	(123)
December 31 projected benefit obligation	$ 44,693	$ 41,627
Change in plan assets:		
Fair value at January 1	$ 30,981	$ 25,535
Actual return	3,261	5,911
Employer contributions	536	922
Benefits paid	(1,568)	(1,387)
Fair value at December 31	$ 33,210	$ 30,981
The funded status of the pension plans was as follows:		
Funded status (plan assets less than projected benefit obligations)	$(11,483)	$(10,646)
Unrecognized actuarial loss	8,208	7,198
Net amount recognized	$ (3,275)	$ (3,448)

At December 31, 2010 and 2009, the Company recorded unrecognized actuarial losses (gains) of $1,280 and $(4,206) in accumulated other comprehensive income, respectively.

The actuarial assumptions used in determining the funded status information and subsequent net periodic pension cost are as follows:

	Year Ended December 31,		
	2010	2009	2008
Discount rate	5.50%	6.00%	6.00%
Expected long-term weighted average rate of return on plan assets	7.75%	7.75%	7.25%

The discount rate reflects the current rate at which the pension liabilities could be effectively settled at year end. In estimating this rate, the Company looks to rates of return on high quality, fixed-income investments that receive one of the two highest ratings given by a recognized rating agency and the expected timing of benefit payments under the plan.

The expected long-term weighted average rate of return on plan assets was established using the Company's target asset allocation for equity and debt securities and the historical average rates of return for equity and debt securities. The Company employs a total return investment approach whereby a mix of equities and fixed income investments are used to maximize the long-term return of plan assets for a prudent level of risk. Risk tolerance is established through careful consideration of short and long-term plan liabilities, plan funded status and corporate financial condition. The investment portfolio contains a diversified blend of equity and fixed-income investments. Furthermore, equity investments are diversified across U.S. and non-U.S. stocks, as well as growth, value, and small and large capitalizations. Investment risk is measured and monitored on an ongoing basis

through quarterly investment portfolio reviews, annual liability measurements and periodic asset/liability studies. The Company's plan assets are valued using Level 1 inputs which are the quoted prices for the investments in active markets.

The Company's pension plan weighted-average actual (which is periodically rebalanced) and target asset allocations by asset category at December 31 are as follows:

		Actual	
	Target	2010	2009
Stocks	55%	57%	47%
Fixed income funds	43%	41%	51%
Cash and cash equivalents	2%	2%	2%
Total	100%	100%	100%

The Company's funding policy is to contribute at least the minimum funding amounts required by law. Based upon current actuarial estimates, the Company expects to contribute $2,176 to its defined benefit pension plan in 2011 and expects the following benefit payments to be paid by the plan:

2011	$ 1,790
2012	1,925
2013	2,091
2014	2,189
2015	2,350
In aggregate during five years thereafter	13,829
	$24,174

The Company presently makes contributions to one bargaining unit supported multi-employer pension plan resulting in expense of $391, $525 and $620 for the years ended December 31, 2010, 2009 and 2008, respectively.

The Company has a defined contribution savings plan that covers most of its U.S. employees. Company contributions to the plan are based on employee contributions, and a Company match and discretionary contributions. Expenses under the plan totaled $4,949, $5,015 and $5,059 for the years ended December 31, 2010, 2009 and 2008, respectively.

NOTE H — Stock Option Plans

Under the Amended and Restated 2005 Stock Incentive Plan ("Stock Incentive Plan") which became effective in October 2005, the Company could grant stock options, stock appreciation rights ("SARs"), restricted stock units ("RSUs"), stock awards and performance based stock awards to employees and directors. The Stock Incentive Plan reserved 3,421 for issuance. As of December 31, 2010, 1,336 options and 248 performance based stock awards were outstanding under the Stock Incentive Plan. The Company no longer grants stock options or awards under this plan.

Under the 2009 Omnibus Equity Plan ("Omnibus Equity Plan") which was approved by the shareholders in May 2009, the Company may grant stock options, SARs, RSUs, restricted stock, performance shares and common shares to employees and directors. The maximum number of shares available for grant is 1,250, which may be treasury shares or unissued shares. As of December 31, 2010, 244 options and 186 restricted stock awards were outstanding under the Omnibus Equity Plan.

The Company recognized stock-based compensation of $4,933, $3,279 and $3,134 for the years ended December 31, 2010, 2009 and 2008, respectively. The Company also recognized related tax benefits of $796, $30 and $1,435 for the years ended December 31, 2010, 2009 and 2008, respectively. As of December 31, 2010, total share-based compensation of $3,571 is expected to be recognized over the remaining weighted average period of approximately 1.6 years.

Stock Options

Under the terms of the Omnibus Equity Plan and the Stock Incentive Plan, stock options generally have either a 4 or 5 year graded vesting period, an exercise price equal to the fair market value of a share of common stock on the date of grant, and a contractual term of 10 years.

The following table summarizes the Company's stock option activity for the years ended December 31, 2010 and 2009:

	December 31, 2010		December 31, 2009	
	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
Outstanding at beginning of period	1,491	$10.39	1,431	$10.82
Granted	250	17.27	201	11.00
Exercised	(143)	7.42	(64)	11.63
Expired or forfeited	(17)	17.35	(77)	18.99
Outstanding at end of period	1,581	$11.68	1,491	$10.39
Exercisable at end of year*	1,118	$ 9.46	1,040	$ 8.67
Participants at end of year	65		59	
Available for future grants at end of year	795		1,250	

* Remaining contractual term of 5.3 years

The total fair value of options vested was $1,755, $1,421 and $1,257 for the years ended December 31, 2010, 2009 and 2008, respectively. The total intrinsic value of options exercised during the years ended December 31, 2010, 2009 and 2008 was $3,327, $594 and $5,406, respectively.

The Company uses a Black-Scholes option pricing model to estimate the fair value of stock options. The expected volatility and expected term of the options are based on historical information. The risk free rate is based on the U.S. Treasury yield in effect at the time of the grant.

Weighted average grant date fair values of stock options and the assumptions used in estimating the fair values are as follows:

	2010	2009	2008
Weighted average grant date fair value	$12.03	$11.02	$30.95
Expected term (years)	6.25	6.25	6.25
Risk-free interest rate	2.46%	2.07%	3.54%
Expected volatility	77.84%	74.87%	47.88%

Performance Stock Awards

The Company granted 164 and 107 performance share units under the Stock Incentive Plan during 2009 and 2008, respectively. The performance share units granted in 2009 and 2008 are earned over a 3 year period beginning on January 1, 2009 and 2008, respectively. Total units earned may vary between 0% and 150% of the units granted based on the attainment of pre-determined performance and market condition targets as determined by the Board of Directors. The Company valued these performance stock awards based on market conditions using a Monte Carlo Simulation model that was performed by an outside valuation firm. The fair value of the performance based units was calculated using a Black-Scholes model and the probability of any units being earned is evaluated each reporting period. The weighted average per share fair values were $5.26 and $29.22 for the 2009 and 2008 grants, respectively.

Other

In 2010, 2009 and 2008, the Company granted the non-employee directors stock awards covering 18, 24 and 7 shares, respectively, of common stock that had fair market values of $330, $300 and $250. The stock awards were fully vested on the date of grant. The Company recorded $330, $300, and $321 of compensation expense for the years ended December 31, 2010, 2009 and 2008, respectively.

In 2010, the Company also granted 192 restricted stock awards which vest ratably over a three year period. The weighted average fair value of the grants was $17.85. The Company recorded $1,162 of compensation expense in 2010.

NOTE I — Lease Commitments

The Company incurred $8,481, $7,221, and $7,165 of rental expense under operating leases for the years ended December 31, 2010, 2009 and 2008, respectively. Certain leases contain rent escalation clauses and lease concessions that require additional rental payments in the later years of the term. Rent expense for these types of leases is recognized on a straight-line basis over the minimum lease term. In addition, the Company has the right, but no obligation, to renew certain leases for various renewal terms. At December 31, 2010, future minimum lease payments for non-cancelable operating leases for the next five years total $23,917 and are payable as follows: 2011 — $6,671; 2012 — $4,666; 2013 — $4,078; 2014 — $2,965; and 2015 — $1,844 and thereafter — $3,693.

NOTE J — Contingencies

Environmental

The Company is subject to federal, state and local environmental laws and regulations concerning, among other matters, waste water effluents, air emissions and handling and disposal of hazardous materials such as cleaning fluids. The Company is involved with environmental compliance, investigation, monitoring and remediation activities at certain of its owned and formerly owned manufacturing facilities and at one owned facility that is leased to a third party, and, except for these continuing remediation efforts, believes it is currently in substantial compliance with all known environmental regulations. At December 31, 2010 and 2009, the Company had undiscounted accrued environmental reserves of $6,355 and $6,462, respectively, recorded in other long-term liabilities. The Company accrues for certain environmental remediation-related activities for which commitments or remediation plans have been developed and for which costs can be reasonably estimated. These estimates are determined based upon currently available facts and circumstances regarding each facility. Actual costs incurred may vary from these estimates due to the inherent uncertainties involved. Future expenditures relating to these environmental remediation efforts are expected to be made over the next 17 years as ongoing costs of remediation programs.

Although the Company believes it has adequately provided for the cost of all known environmental conditions, the applicable regulatory agencies could insist upon different and more costly remediation than those the Company believes are adequate or required by existing law or third parties may seek to impose environmental liabilities on the Company. The Company believes that any additional liability in excess of amounts accrued which may result from the resolution of such matters will not have a material adverse effect on the Company's financial position, liquidity, cash flows or results of operations.

CHEL

In March 2003, the Company completed the closure of its Wolverhampton, United Kingdom manufacturing facility, operated by the Company's former Chart Heat Exchanger Limited ("CHEL") subsidiary. In March 2003, CHEL filed for a voluntary administration under the United Kingdom ("U.K.") Insolvency Act of 1986. CHEL's application for voluntary administration was approved on April 1, 2003, an administrator was appointed and CHEL was no longer consolidated. Additionally, the Company received information that indicated that CHEL's net pension plan obligations had increased significantly primarily due to a decline in plan asset values and interest rates as well as increased plan liabilities, resulting in a significant plan deficit as of March 2003. Based on the Company's financial condition in March 2003, it determined not to advance funds to CHEL to fund CHEL's obligations. Since CHEL was unable to fund its net pension deficit, the trustees of the CHEL pension plan requested a decision to wind-up the plan from a U.K. pension regulatory board. That board approved the wind-up as of March 28, 2003.

For the year ended December 31, 2008, the Company recognized a $6.5 million benefit as a result of reversing contingent liabilities that were previously established for potential secondary pension and severance obligations related to CHEL. Based on events that occurred during 2008, including actions taken by a U.K. governmental agency to support a large portion of the pension obligations after the insolvent former subsidiary had made distributions to satisfy significant portions of its obligations, the contingent liabilities were no longer considered to be probable and were reversed.

Legal Proceedings

The Company is occasionally subject to various legal actions related to performance under contracts, product liability, taxes, employment matters, environmental matters, intellectual property and other matters incidental to the normal course of its business. Based on the Company's historical experience in litigating these actions, as well as the Company's current assessment of the underlying merits of the actions and applicable insurance, if any, management believes that the final resolution of these matters will not have a material adverse affect on the Company's financial position, liquidity, cash flows or results of operations. Future developments may, however, result in resolution of these legal claims in a way that could have a material adverse effect.

NOTE K — Reporting Segments

The structure of the Company's internal organization is divided into the following three reportable segments: Energy and Chemicals ("E&C"), Distribution and Storage ("D&S") and BioMedical. The Company's reportable segments are business units that are each managed separately because they manufacture, offer and distribute distinct products with different production processes and sales and marketing approaches. The E&C segment sells brazed aluminum and air-cooled heat exchangers, cold boxes and liquefied natural gas vacuum-insulated pipe to natural gas, petrochemical processing and industrial gas companies who use them for the liquefaction and separation of natural and industrial gases. The D&S segment sells cryogenic bulk storage systems, cryogenic packaged gas systems, cryogenic systems and components, beverage liquid CO2 systems,

cryogenic flow meter systems and cryogenic services to various companies for the storage and transportation of both industrial and natural gases. The BioMedical segment sells medical respiratory products, biological storage systems and other oxygen products. Due to the nature of the products that each segment sells, there are no intersegment sales. Corporate includes operating expenses for executive management, accounting, tax, treasury, human resources, information technology, legal, internal audit, risk management and stock-based compensation expenses that are not allocated to the reporting segments.

The Company evaluates performance and allocates resources based on operating income or loss from continuing operations before net interest expense, financing costs amortization expense, foreign currency gain or loss, income taxes and noncontrolling interest. The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies.

	Year Ended December 31, 2010				
	Reportable Segments				
	Energy and Chemicals	Distribution and Storage	BioMedical	Corporate	Total
Sales from external customers	$137,801	$269,293	$148,361	$ —	$555,455
Depreciation and amortization expense	7,338	10,474	5,197	568	23,577
Operating income (loss)	6,121	41,934	30,698	(31,249)	47,504
Total assets(B)(C)	188,407	513,215	227,138	26,079	954,839
Capital expenditures	973	8,563	4,594	2,809	16,939

	Year Ended December 31, 2009				
	Reportable Segments				
	Energy and Chemicals	Distribution and Storage	BioMedical	Corporate	Total
Sales from external customers	$255,074	$252,197	$ 90,187	$ —	$597,458
Depreciation and amortization expense	7,335	10,104	3,591	382	21,412
Operating income (loss)	61,852	39,888	15,912	(23,318)	94,334
Total assets(B)(D)	205,482	486,620	135,977	98,424	926,503
Capital expenditures	2,707	7,168	2,022	1,293	13,190

	Year Ended December 31, 2008				
	Reportable Segments				
	Energy and Chemicals	Distribution and Storage	BioMedical	Corporate	Total
Sales from external customers	$312,683	$343,703	$96,700	$ —	$753,086
Depreciation and amortization expense	7,475	10,613	2,793	432	21,313
Operating income (loss)(A)	70,752	63,770	20,742	(21,911)	133,353
Total assets(B)(E)	242,054	475,448	99,446	92,479	909,427
Capital expenditures	3,123	8,535	2,257	53	13,968

(A) Corporate operating income for the year ended December 31, 2008 includes a reversal of contingent liabilities related to an insolvent former subsidiary of $6,514.

(B) Corporate assets at December 31, 2010, 2009 and 2008 consist primarily of cash, cash equivalents, short term investments and deferred income taxes.

(C) Total assets at December 31, 2010 include goodwill of $83,215, $148,010 and $44,027 for the Energy and Chemicals, Distribution and Storage and BioMedical segments, respectively.

(D) Total assets at December 31, 2009 include goodwill of $83,215, $144,290 and $37,027 for the Energy and Chemicals, Distribution and Storage and BioMedical segments, respectively.

(E) Total assets at December 31, 2008 include goodwill of $81,979, $144,060 and $35,470 for the Energy and Chemicals, Distribution and Storage and BioMedical segments, respectively.

A reconciliation of the total of the reportable segments' operating income to consolidated income before income taxes and minority interest is presented below:

	Year Ended December 31,		
	2010	2009	2008
Operating income	$47,504	$94,334	$133,353
Other expense (income):			
Interest expense, net	16,196	15,817	17,953
Amortization of deferred financing costs	3,063	1,616	1,857
Gain on acquisition of business	(1,124)	(6,954)	—
Foreign currency loss (gain)	871	(687)	3,948
Income before income taxes and minority interest	$28,498	$84,542	$109,595

	Year Ended December 31,		
	2010	2009	2008
Product Sales Information:			
Energy and Chemicals Segment			
Heat exchangers	$113,313	$172,374	$197,857
Cold boxes and LNG VIP	24,488	82,700	114,826
	$137,801	$255,074	312,683
Distribution and Storage Segment			
Cryogenic bulk storage systems	$117,907	$135,523	$167,170
Cryogenic packaged gas systems and beverage liquid CO_2 systems	103,129	80,278	125,448
Cryogenic systems and components	20,221	10,987	19,382
Cryogenic services	28,036	25,409	31,703
	$269,293	$252,197	343,703
BioMedical Segment			
Medical respiratory products	$ 95,666	$ 41,793	$ 37,341
Biological storage systems	52,695	43,966	47,315
MRI components and other	—	4,428	12,044
	148,361	90,187	96,700
Total Sales	$555,455	$597,458	$753,086

Geographic Information:	Year Ended December 31, 2010 Sales	Year Ended December 31, 2010 Long-Lived Assets	Year Ended December 31, 2009 Sales	Year Ended December 31, 2009 Long-Lived Assets	Year Ended December 31, 2008 Sales
United States	$391,691	$391,428	$441,583	$356,612	$544,822
Czech Republic	72,486	86,680	79,865	87,348	116,289
China	45,203	69,243	28,641	67,791	38,995
Other Non-U.S. Countries	46,075	1,392	47,369	348	52,980
Total	$555,455	$548,743	$597,458	$512,099	$753,086

Note L — Quarterly Data (Unaudited)

Selected quarterly data for the years ended December 31, 2010 and 2009 are as follows:

	Year Ended December 31, 2010				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Sales	$118,268	$139,144	$139,205	$158,838	$555,455
Gross profit	34,276	37,575	42,801	50,647	165,299
Operating income	7,603	8,563	13,239	18,099	47,504
Net income	1,419	2,458	6,665	9,963	20,505
Net income attributable to Chart Industries, Inc.	1,384	2,399(1)	6,575	9,802	20,160
Net income attributable to Chart Industries, Inc. per share—basic	$ 0.05	$ 0.08	$ 0.23	$ 0.34	
Net income attributable to Chart Industries, Inc. per share—diluted	$ 0.05	$ 0.08	$ 0.23	$ 0.33	

	Year Ended December 31, 2009				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Sales	$181,682	$156,586	$128,883	$130,307	$597,458
Gross profit	62,666	55,923	39,374	43,918	201,881
Operating income	34,081	29,329	15,964	14,960	94,334
Net income	19,592	17,765	8,227	15,572	61,156
Net income attributable to Chart Industries, Inc.	19,462	17,776	8,248	15,525(2)	61,011
Net income attributable to Chart Industries, Inc. per share—basic	$ 0.68	$ 0.62	$ 0.29	$ 0.54	
Net income attributable to Chart Industries, Inc. per share—diluted	$ 0.68	$ 0.61	$ 0.28	$ 0.53	

(1) Includes $1,124 gain from the acquisition of business.

(2) Includes $6,954 gain from the acquisition of business.

NOTE M — Supplemental Guarantor Financial Information

The Company's Subordinated Notes issued in October 2005 are guaranteed on a full, unconditional and joint and several basis by the following subsidiaries, all of which are 100% owned: Chart Inc., CAIRE Inc., Chart Energy and Chemicals, Inc., Chart Cooler Service Company, Inc., Chart International Holdings, Inc., Chart Asia, Inc. and Chart International, Inc. Chart SeQual Technologies Inc.("Chart SeQual"), which was acquired by the Company in December 2010, is not a guarantor but is expected to become a guarantor under the Senior Credit Facility and the Indenture governing the Subordinated Notes upon execution of the required documentation during the first half of 2011. Chart SeQual represents 7% of the total assets of the guarantors as of December 31, 2010 in the following balance sheet and has an immaterial impact on the operations of the guarantors for the year ended December 31, 2010. The following subsidiaries are not guarantors of the notes:

Non-Guarantor Subsidiaries	Jurisdiction
Abahsain Specialized Industrial Co. Ltd. (34% owned)	Saudi Arabia
Changzhou CEM Cryo Equipment Co., Ltd.	China
Chart Asia Investment Company Ltd.	Hong Kong
Chart Australia Pty. Ltd.	Australia
Chart BioMedical Distribution LLC	Delaware
Chart BioMedical GmbH	Germany
Chart Biomedical Limited	United Kingdom
Chart Cryogenic Distribution Equipment (Changzhou) Co., Ltd. (50% owned)	China
Chart Cryogenic Engineering Systems (Changzhou) Co., Ltd.	China
Chart Cryogenic Equipment (Changzhou) Co., Ltd.	China
Chart Ferox a.s.	Czech Republic
Chart Ferox GmbH	Germany
Chart France S.A.S.	France
Chart Industries Luxembourg S.àr.l.	Luxembourg
Chart Italy S.r.l.	Italy
Chart Japan Co., Ltd.	Japan
Chengdu Golden Phoenix Liquid Nitrogen Container Company, Ltd.	China
Flow Instruments & Engineering GmbH	Germany
GTC of Clarksville, LLC	Delaware
Lox Taiwan (11.25% owned)	Taiwan

The following supplemental condensed consolidating and combining financial information of the Issuer (Chart Industries, Inc.), Subsidiary Guarantors and Subsidiary Non-Guarantors presents statements of operations for the years ended December 31, 2010, 2009 and 2008, balance sheets as of December 31, 2010 and December 31, 2009, and statements of cash flows for the years ended December 31, 2010, 2009 and 2008.

CONDENSED CONSOLIDATING BALANCE SHEET
As of December 31, 2010

	Issuer	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Total
ASSETS					
Cash and cash equivalents	$ 69,617	$ 2,828	$ 92,667	$ —	$165,112
Accounts receivable, net	—	53,735	34,396	—	88,131
Inventory, net	—	56,648	48,455	(668)	104,435
Other current assets	11,206	31,072	8,015	(1,875)	48,418
Total current assets	80,823	144,283	183,533	(2,543)	406,096
Property, plant and equipment, net	—	69,134	47,024	—	116,158
Goodwill	—	202,131	73,121	—	275,252
Intangible assets, net	—	136,925	7,361	—	144,286
Investments in affiliates	313,498	130,997	—	(443,663)	832
Intercompany receivables	358,225	—	—	(358,225)	—
Other assets	6,040	19,826	7,482	(21,133)	12,215
Total assets	$758,586	$703,296	$318,521	$(825,564)	$954,839
LIABILITIES AND STOCKHOLDERS' EQUITY					
Accounts payable and accruals	$ 2,583	$129,305	$ 41,999	$ (2,704)	$171,183
Total current liabilities	2,583	129,305	41,999	(2,704)	171,183
Long-term debt	218,425	—	20,729	(20,729)	218,425
Intercompany payables	—	240,622	117,015	(357,637)	—
Other long-term liabilities	36,204	19,872	7,781	—	63,857
Total liabilities	257,212	389,799	187,524	(381,070)	453,465
Common stock	288	—	—	—	288
Other stockholders' equity	501,086	313,498	130,997	(444,495)	501,086
Total stockholders' equity	501,374	313,498	130,997	(444,495)	501,374
Total liabilities and stockholders' equity	$758,586	$703,297	$318,521	$(825,565)	$954,839

CONDENSED CONSOLIDATING BALANCE SHEET
As of December 31, 2009

	Issuer	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Total
ASSETS					
Cash and cash equivalents	$149,596	$ 2,103	$ 59,469	$ —	$211,168
Accounts receivable, net	—	52,715	24,794	—	77,509
Inventory, net	—	40,130	45,946	(506)	85,570
Other current assets	6,856	26,829	6,472	—	40,157
Total current assets	156,452	121,777	136,681	(506)	414,404
Property, plant and equipment, net	—	68,523	42,630	—	111,153
Goodwill	—	190,902	73,630	—	264,532
Intangible assets, net	—	115,222	8,551	—	123,773
Investments in affiliates	279,313	113,908	—	(392,146)	1,075
Intercompany receivables	298,931	—	—	(298,931)	—
Other assets	6,245	12,321	4,400	(11,400)	11,566
Total assets	$740,941	$622,653	$265,892	$(702,983)	$926,503
LIABILITIES AND STOCKHOLDERS' EQUITY					
Accounts payable and accruals	$ (21,034)	$127,711	$ 37,527	$ (267)	$143,937
Total current liabilities	(21,034)	127,711	37,527	(267)	143,937
Long-term debt	243,175	—	11,400	(11,400)	243,175
Intercompany payables	—	203,233	94,862	(298,095)	—
Other long-term liabilities	41,554	12,396	8,195	—	62,145
Total liabilities	263,695	343,340	151,984	(309,762)	449,257
Common stock	285	—	—	—	285
Other stockholders' equity	476,961	279,313	113,908	(393,221)	476,961
Total stockholders' equity	477,246	279,313	113,908	(393,221)	477,246
Total liabilities and stockholders' equity	$740,941	$622,653	$265,892	$(702,983)	$926,503

CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS
For the Year Ended December 31, 2010

	Issuer	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Total
Net sales	$ —	$360,944	$203,071	$ (8,560)	$555,455
Cost of sales	—	233,556	164,993	(8,393)	390,156
Gross profit	—	127,388	38,078	(167)	165,299
Selling, general and administrative expenses	422	97,093	20,280	—	117,795
Operating income	(422)	30,295	17,798	(167)	47,504
Interest expense, net	16,486	(94)	(196)	—	16,196
Other (income) expense, net	3,063	163	(66)	(5)	3,155
Income (loss) before income taxes and equity in net (income) of subsidiaries	(19,971)	30,226	18,060	(162)	28,153
Income tax (benefit) provision	(5,592)	10,291	3,465	(171)	7,993
Equity in net (income) of subsidiaries	(34,539)	(14,604)	—	49,143	—
Net income	$ 20,160	$ 34,539	$ 14,595	$(49,134)	$ 20,160

CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS
For the Year Ended December 31, 2009

	Issuer	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Total
Net sales	$ —	$442,790	$158,363	$ (3,695)	$597,458
Cost of sales	—	273,160	126,421	(4,004)	395,577
Gross profit	—	169,630	31,942	309	201,881
Selling, general and administrative expenses	1,476	91,399	14,672	—	107,547
Operating (loss) income	(1,476)	78,231	17,270	309	94,334
Interest expense, net	17,745	(32)	(280)	—	17,433
Other expense (income), net	—	(3,778)	(3,718)	—	(7,496)
Income (loss) before income taxes and equity in net (income) loss of subsidiaries	(19,221)	82,041	21,268	309	84,397
Income tax (benefit) provision	(5,324)	25,957	2,641	112	23,386
Equity in net (income) loss of subsidiaries	(74,908)	(18,824)	—	93,732	—
Net income (loss)	$ 61,011	$ 74,908	$ 18,627	$(93,535)	$ 61,011

CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS
For the Year Ended December 31, 2008

	Issuer	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Total
Net sales	$ —	$554,046	204,376	$ (5,336)	$753,086
Cost of sales	—	359,236	158,989	(4,527)	513,698
Gross profit	—	194,810	45,387	(809)	239,388
Selling, general and administrative expenses	1,557	89,577	14,901	—	106,035
Operating (loss) income	(1,557)	105,233	30,486	(809)	133,353
Interest expense, net	18,574	4	(625)	—	17,953
Other expense (income), net	1,857	1,867	2,081	—	5,805
Minority interest, net of tax	—	—	182	—	182
Income (loss) before income taxes and equity in net (income) loss of subsidiaries	(21,988)	103,362	28,848	(809)	109,413
Income tax (benefit) provision	(6,112)	32,916	3,685	—	30,489
Equity in net (income) loss of subsidiaries	(94,800)	(24,354)	—	119,154	—
Net income (loss)	$ 78,924	$ 94,800	$ 25,163	$(119,963)	$ 78,924

CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS
For the Year Ended December 31, 2010

	Issuer	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Total
Cash flows from operating activities:					
Net cash provided by operating activities	$ 12,872	$ 12,602	$11,454	$ 1,646	$ 38,574
Cash flows from investing activities:					
Capital expenditures	—	(12,189)	(4,750)	—	(16,939)
Acquisition of businesses, net of cash acquired	—	(46,857)	(1,008)	—	(47,865)
Proceeds from sale of assets	—	—	989	—	989
Other investing activities	—	(400)	—	—	(400)
Net cash (used in) investing activities	—	(59,446)	(4,769)	—	(64,215)
Cash flows from financing activities:					
Net change in debt	(18,250)	(6,910)	6,910	—	(18,250)
Payment of deferred financing costs	(2,857)	—	—	—	(2,857)
Other financing activities	1,805	—	—	—	1,805
Intercompany account changes	(73,550)	54,479	20,717	(1,646)	—
Net cash (used in) provided by financing activities	(92,852)	47,569	27,627	(1,646)	(19,302)
Net (decrease) increase in cash and cash equivalents	(79,980)	725	34,312	—	(44,943)
Effect of exchange rate changes	—	—	(1,113)	—	(1,113)
Cash and cash equivalents, beginning of period	149,597	2,103	59,468	—	211,168
Cash and cash equivalents, end of period	$ 69,617	$ 2,828	$92,667	$ —	$165,112

CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS
For the Year Ended December 31, 2009

	Issuer	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Total
Cash flows from operating activities:					
Net cash (used in) provided by operating activities	$ (2,623)	$ 53,685	$ 31,726	$ 4,138	$ 86,926
Cash flows from investing activities:					
Capital expenditures	—	(10,619)	(2,571)	—	(13,190)
Acquisitions, net of cash acquired	—	(5,937)	(12,149)	—	(18,086)
Maturities of short-term investments	32,264	—	—	—	32,264
Other investing activities	—	(1,790)	—	—	(1,790)
Net cash (used in) investing activities	32,264	(18,346)	(14,720)	—	(802)
Cash flows from financing activities:					
Net change in debt	—	—	11,400	(11,400)	—
Other financing activities	776	—	—	—	776
Intercompany account changes	34,752	(35,776)	(6,238)	7,262	—
Net cash provided by (used in) financing activities	35,528	(35,776)	5,162	(4,138)	776
Net (decrease) increase in cash and cash equivalents	65,169	(437)	22,168	—	86,900
Effect of exchange rate changes	—	—	2,103	—	2,103
Cash and cash equivalents, beginning of period	84,428	2,540	35,197	—	122,165
Cash and cash equivalents, end of period	$149,597	$ 2,103	$ 59,468	$ —	$211,168

CHART INDUSTRIES, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Dollars and shares in thousands, except per share amounts)

CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS
For the Year Ended December 31, 2008

	Issuer	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Total
Cash flows from operating activities:					
Net cash (used in) provided by operating activities	$ (36,897)	$ 110,963	$ 50,681	$(26,935)	$ 97,812
Cash flows from investing activities:					
Capital expenditures	—	(8,002)	(5,966)	—	(13,968)
Acquisitions, net of cash acquired	—	—	(18,828)	—	(18,828)
Short term investments	(32,264)	—	—	—	(32,264)
Other investing activities	—	(616)	—	—	(616)
Net cash used in investing activities	(32,264)	(8,618)	(24,794)	—	(65,676)
Cash flows from financing activities:					
Net change in debt	(6,825)	—	—	—	(6,825)
Stock option exercise proceeds	1,329	—	—	—	1,329
Tax benefit from exercise of stock options	1,435	—	—	—	1,435
Intercompany account changes	108,467	(104,400)	(31,002)	26,935	—
Net cash provided by (used in) financing activities	104,406	(104,400)	(31,002)	26,935	(4,061)
Net increase (decrease) in cash and cash equivalents	35,245	(2,055)	(5,115)	—	28,075
Effect of exchange rate changes on cash	—	—	1,221	—	1,221
Cash and cash equivalents, beginning of period	49,184	4,595	39,090	—	92,869
Cash and cash equivalents, end of period	$ 84,429	$ 2,540	$ 35,196	$ —	$122,165

CHART INDUSTRIES, INC. AND SUBSIDIARIES
SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS
(Dollars in thousands)

	Balance at beginning of period	Additions		Deductions	Translations	Balance at end of period
		Charged to costs and expenses	Charged to other accounts			
Year Ended December 31, 2010:						
Allowance for doubtful accounts	$1,727	$3,326	$489(1)	$(2,552)(2)	$ 18	$3,008
Allowance for obsolete and excess inventory	$4,184	$1,800	$201(1)	$(2,965)(3)	$(39)	$3,181
Year Ended December 31, 2009:						
Allowance for doubtful accounts	$2,312	$2,386	$—	$(3,007)(2)	$ 36	$1,727
Allowance for obsolete and excess inventory	$1,912	$4,450	$910(1)	$(3,148)(3)	$ 60	$4,184
Year Ended December 31, 2008:						
Allowance for doubtful accounts	$2,081	$3,210	$ 13(1)	$(2,997)(2)	$ 5	$2,312
Allowance for obsolete and excess inventory	$2,513	$1,509	$—	$(2,064)(3)	$(46)	$1,912

(1) Reserves at date of acquisition of subsidiary or subsidiaries.

(2) Uncollectible accounts written off.

(3) Inventory items written off against the allowance.

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EXHIBIT INDEX

Exhibit No.	*Description*
2.1	Agreement and Plan of Merger, dated as of August 2, 2005 by and among Chart Industries, Inc., certain of its stockholders, First Reserve Fund X, L.P. and CI Acquisition, Inc. (incorporated by reference to Exhibit 2.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-133254)).
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to Amendment No. 5 to the Registrant's Registration Statement on Form S-1 (File No. 333-133254)).
3.2	Amended and Restated By-Laws, as amended (incorporated by reference to Exhibit 3.1 to the Registrant's current report on Form 8-K, filed with the SEC on December 19, 2008 (File No. 001-11442)).
4.1	Form of Certificate (incorporated by reference to Exhibit 4.1 to Amendment No. 4 to the Registrant's Registration Statement on Form S-1 (File No. 333-133254)).
4.2	Indenture, dated as of October 17, 2005, between Chart Industries, Inc. and The Bank of New York as trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-133254)).
10.1	Form of Amended and Restated Management Stockholders Agreement (incorporated by reference to Exhibit 10.10 to Amendment No. 3 to the Registrant's Registration Statement on Form S-1 (File No. 333-133254)).
10.2	Amended and Restated Chart Industries, Inc. 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11442)).*
10.2.1	Form of Nonqualified Stock Option Agreement (2005 and 2006 grants) under the Amended and Restated Chart Industries, Inc. 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.17 to the Registrant's Registration Statement on Form S-1 (File No. 333-133254)).*
10.2.2	Form of Restricted Stock Unit Agreement (for non-employee directors) under the Amended and Restated Chart Industries, Inc. 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.22 to Amendment No. 4 to the Registrant's Registration Statement on Form S-1 (File No. 333-133254)).*
10.2.3	Form of 2008 Performance Unit Agreement under the Amended and Restated Chart Industries, Inc. 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.4.4 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-11442)).*
10.2.4	Form of 2009 Performance Unit Agreement under the Amended and Restated Chart Industries, Inc. 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.3.5 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11442)).*
10.2.5	Form of Nonqualified Stock Option Agreement (2007 and 2008 grants) under the Amended and Restated Chart Industries, Inc. 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's current report on Form 8-K, filed with the SEC on August 7, 2007 (File No. 001-11442)).*
10.2.6	Form of Nonqualified Stock Option Agreement (2009 grants) under the Amended and Restated Chart Industries, Inc. 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.3.7 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11442)).*

Exhibit No.	Description
10.2.7	Forms of Stock Award Agreement and Deferral Election Form (for non-employee directors) (2008 grants) under the Amended and Restated Chart Industries, Inc. 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.4.6 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-11442)).*
10.2.8	Forms of Stock Award Agreement and Deferral Election Form (for non-employee directors) (2009 grants) under the Amended and Restated Chart Industries, Inc. 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008 (File No. 001-11442)).*
10.3	Chart Industries, Inc. 2009 Omnibus Equity Plan (incorporated by reference to Appendix A to the Registrant's definitive proxy statement filed with the Securities and Exchange Commission on April 7, 2009 (File No. 001-11442)).*
10.3.1	Form of Nonqualified Stock Option Agreement (2010 grants) under the Chart Industries, Inc. 2009 Omnibus Equity Plan (incorporated by reference to Exhibit 10.4.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-11442)).*
10.3.2	Form of Restricted Stock Agreement (2010 grants) under the Chart Industries, Inc. 2009 Omnibus Equity Plan (incorporated by reference to Exhibit 10.4.2 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-11442)).*
10.3.3	Forms of Stock Award Agreement and Deferral Election Form (for eligible directors) under the Chart Industries, Inc. 2009 Omnibus Equity (incorporated by reference to Exhibit 10.4.3 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-11442)).*
10.3.4	Form of Nonqualified Stock Option Agreement (2011 grants) under the Chart Industries, Inc. 2009 Omnibus Equity Plan.* (x)
10.3.5	Form of Restricted Stock Agreement (2011 grants) under the Chart Industries, Inc. 2009 Omnibus Equity Plan.* (x)
10.3.6	Form of Performance Unit Agreement (2011 grants) under the Chart Industries, Inc. 2009 Omnibus Equity Plan.* (x)
10.4	Amended and Restated Chart Industries, Inc. Voluntary Deferred Income Plan (incorporated by reference to Exhibit 10.1 to the Registrant's current report on Form 8-K, filed with the SEC on June 28, 2010 (File No. 001-11442)).*
10.5	Incentive Compensation Plan (incorporated by reference to Exhibit 10.19 to Amendment No. 3 to the Registrant's Registration Statement on Form S-1 (File No. 333-133254)).*
10.5.1	Amendment No. 1 to Chart Executive Incentive Compensation Plan (incorporated by reference to Exhibit 10.6.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11442)).*
10.6	Chart Industries, Inc. 2009 Incentive Compensation Plan (incorporated by reference to Appendix B to the Registrant's definitive proxy statement filed with the Securities and Exchange Commission on April 7, 2009 (File No. 001-11442)).*
10.7	Credit Agreement, dated May 18, 2010, among Chart Industries, Inc., Chart Industries Luxembourg S.à r.l., the lenders from time to time party thereto, JPMorgan Chase Bank, N.A. as Administrative Agent, RBS Citizens, National Association, U.S. Bank National Association and Wells Fargo Bank, National Association as Co-Syndication Agents and Bank of America, N.A. as Documentation Agent (incorporated by reference to Exhibit 10.1 to the Registrant's amended Current Report on Form 8-K, filed with the SEC on August 20, 2010 (File No. 001-11442)).

Exhibit No.	*Description*
10.8	Guarantee and Collateral Agreement, dated May 18, 2010, among Chart Industries, Inc., certain subsidiaries of Chart Industries, Inc., and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on May 19, 2010 (File No. 001-11442)).
10.9	Employment Agreement, dated February 26, 2008, by and between Registrant and Samuel F. Thomas (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 (File No. 001-11442)).*
10.9.1	Amendment No. 1, effective January 1, 2009, to the Employment Agreement dated February 26, 2008 by and between Registrant and Samuel F. Thomas (incorporated by reference to Exhibit 10.9.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11442)).*
10.9.2	Amendment No. 2, effective January 1, 2010, to the Employment Agreement dated February 26, 2008 by and between Registrant and Samuel F. Thomas (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010 (File No. 001-11442)).*
10.10	Employment Agreement, dated February 26, 2008, by and between Registrant and Michael F. Biehl (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 (File No. 001-11442)).*
10.10.1	Amendment No. 1, effective January 1, 2009, to the Employment Agreement dated February 26, 2008 by and between Registrant and Michael F. Biehl (incorporated by reference to Exhibit 10.10.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11442)).*
10.11	Employment Agreement, dated February 26, 2008, by and between Registrant and Matthew J. Klaben (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 (File No. 001-11442)).*
10.11.1	Amendment No. 1, effective January 1, 2009, to the Employment Agreement dated February 26, 2008 by and between Registrant and Matthew J. Klaben (incorporated by reference to Exhibit 10.11.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11442)).*
10.12	Employment Agreement, dated February 26, 2008, by and between Registrant and James H. Hoppel, Jr. (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 (File No. 001-11442)).*
10.12.1	Amendment No. 1, effective January 1, 2009, to the Employment Agreement dated February 26, 2008 by and between Registrant and James H. Hoppel, Jr. (incorporated by reference to Exhibit 10.12.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11442)).*
10.12.2	Transition Agreement, dated August 24, 2010, by and between Registrant and James H. Hoppel, Jr. (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on August 27, 2010 (File No. 001-11442)).*
10.13	Employment Agreement, dated February 26, 2008, by and between Registrant and Kenneth J. Webster (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 (File No. 001-11442)).*
10.13.1	Amendment No. 1, effective January 1, 2009, to the Employment Agreement dated February 26, 2008 by and between Registrant and Kenneth J. Webster (incorporated by reference to Exhibit 10.13.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11442)).*

Exhibit No.	*Description*
10.13.2	Amendment No. 2, effective January 1, 2010, to the Employment Agreement dated February 26, 2008 by and between Registrant and Kenneth J. Webster (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2010 (File No. 001-11442)).*
10.14	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.20 to the Registrant's Registration Statement on Form S-1 (File No. 333-133254)).
10.15	IAM Agreement 2010-2013, effective February 6, 2010, by and between Chart Energy & Chemicals, Inc. and Local Lodge 2191 of District Lodge 66 of the International Association of Machinists and Aerospace Workers, AFL-CIO (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010 (File No. 001-11442)).
21.1	List of Subsidiaries. (x)
23.1	Consent of Independent Registered Public Accounting Firm. (x)
31.1	Rule 13a-14(a) Certification of the Company's Chief Financial Officer. (x)
31.2	Rule 13a-14(a) Certification of the Company's Chief Executive Officer. (x)
32.1	Section 1350 Certification of the Company's Chief Financial Officer. (xx)
32.2	Section 1350 Certification of the Company's Chief Executive Officer. (xx)
101	The following financial statements from the Company's Form 10-K for the period ended December 31, 2010, formatted in XBRL: (i) Condensed Consolidated Statements of Income, (ii) Condensed Consolidated Balance Sheets, (iii) Condensed Consolidated Statements of Cash Flow, (iv) the Notes to Condensed Consolidated Financial Statements, tagged as blocks of text. In accordance with Rule 406T of Regulation S-T, the XBRL related information in Exhibit 101 to this Form 10-K shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section, and shall not be part of any registration statement or other document filed under the Securities Act of 1933 or Securities Exchange Act of 1934, except as shall be expressly set forth by specific reference in such filing.

(x) Filed herewith.

(xx) Furnished herewith.

* Management contract or compensatory plan or arrangement.

OFFICERS & DIRECTORS

OFFICERS

SAMUEL F. THOMAS
Chairman of the Board,
Chief Executive Officer and President

MICHAEL F. BIEHL
Executive Vice President,
Chief Financial Officer and Treasurer

MATTHEW J. KLABEN
Vice President,
General Counsel and Secretary

KENNETH J. WEBSTER
Vice President,
Chief Accounting Officer and Controller

DIRECTORS

SAMUEL F. THOMAS
Chairman of the Board,
Chief Executive Officer and President
Chart Industries, Inc.

MICHAEL W. PRESS [1, 3, 4]
Retired Chief Executive Officer
KBC Advanced Technologies plc
International petroleum and petrochemicals consulting and software firm

W. DOUGLAS BROWN [2, 4]
Retired Vice President,
General Counsel and Secretary
Air Products and Chemicals, Inc.
Supplier of industrial gases, performance materials, and equipment and services

RICHARD E. GOODRICH [2, 3]
Retired Executive Vice President and
Chief Financial Officer
Chicago Bridge & Iron Company N.V.
Engineering, procurement and construction company

STEVEN W. KRABLIN [2, 3]
Retired President, Chief Executive Officer
and Chairman of the Board
T-3 Energy Services, Inc.
Oilfield services company that manufactures products used in the drilling, production and transportation of oil and gas

JAMES M. TIDWELL [2, 4]
President and Chief Executive Officer
WEDGE Group Incorporated
Private investment company with holdings in manufacturing, hotels, commercial real estate and oilfield services

THOMAS L. WILLIAMS [3, 4]
Executive Vice President and
Operating Officer
Parker Hannifin Corporation
Manufacturer of motion and control products

[1] Lead Independent Director
[2] Audit Committee
[3] Compensation Committee
[4] Nominations and Corporate Governance Committee

SHAREHOLDER INFORMATION

REGISTRAR & TRANSFER AGENT
For inquiries about share certificates, stock transfers or address changes, shareholders should contact:
Computershare Investor Services
7530 Lucerne Drive, Suite #305
Cleveland, OH 44130
440.239.7361
sharon.boughter@computershare.com

CORPORATE HEADQUARTERS
Chart Industries, Inc.
One Infinity Corporate Centre Drive
Garfield Heights, OH 44125
P 440.753.1490 F 440.753.1491
www.chart-ind.com

ANNUAL MEETING OF SHAREHOLDERS
The Annual Meeting of Shareholders will be held at Chart Industries, Inc., Corporate Headquarters, One Infinity Corporate Centre Drive, 1st floor, Garfield Heights, OH 44125, on May 26, 2011, at 9:00 a.m. ET.

INVESTOR CONTACTS
Michael F. Biehl
Executive Vice President,
Chief Financial Officer and Treasurer
216.626.1216

Kenneth J. Webster
Vice President,
Chief Accounting Officer and Controller
216.626.1216

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
Ernst & Young LLP, Cleveland, OH

ANALYST COVERAGE
Barclays Capital
James C. West
212.526.8796

CL King & Associates
Gary Farber
212.364.1812

Craig-Hallum Capital Group LLC
Robert D. Brown
612.334.6376

Dougherty & Company LLC
Gregory J. McKinley
612.376.4143

Madison Williams and Company
Jeffrey Spittel
713.220.5109

Morgan Stanley
Ole Slorer
212.761.6198

Northland Capital Markets
Eric Stine
612.851.5930

Piper Jaffray & Co.
Thomas L. Hayes
612.303.6927

FORM 10-K
The Chart Industries Annual Report on Form 10-K for 2010 also may be accessed electronically on our website, www.chart-ind.com.

COMMON SHARE DATA
Nasdaq Global Select Market Symbol: GTLS

GTLS NASDAQ LISTED

Chart Industries trades under the symbol GTLS on the Nasdaq Global Select Market. The high and low sales prices for shares of our common stock for 2010 and 2009 are set forth in the table below.

2010	High	Low
First quarter	$21.80	$15.50
Second quarter	26.43	15.44
Third quarter	20.69	13.85
Fourth quarter	35.34	19.89
Year	35.34	13.85

2009	High	Low
First quarter	$12.09	$ 5.17
Second quarter	24.62	7.39
Third quarter	22.75	15.36
Fourth quarter	23.92	15.60
Year	24.62	5.17

GTLS: GAS TO LIQUID SYSTEMS

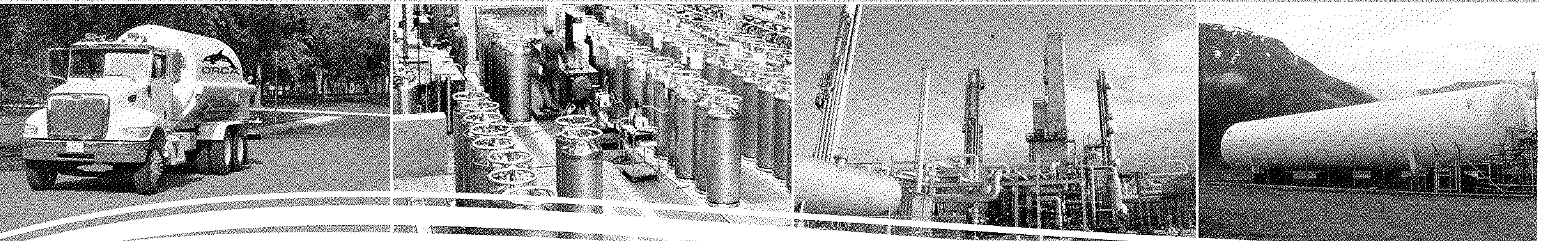

CHART INDUSTRIES, INC.
One Infinity Corporate Centre Drive
Garfield Heights, OH 44125
440.753.1490 www.chart-ind.com

GTLS
NASDAQ
LISTED