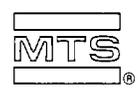


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ENGINEERING MARKET-DRIVEN EXCELLENCE

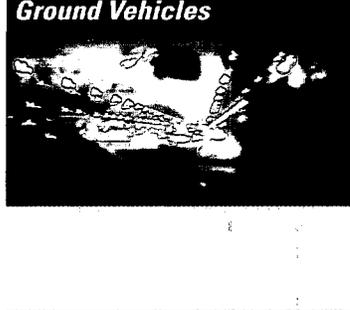
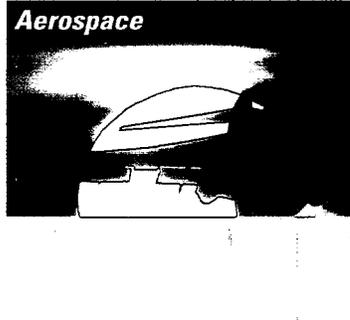
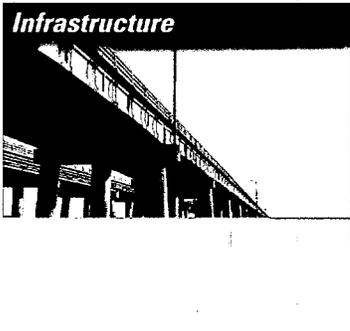
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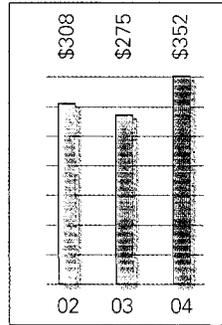
	Business Description	Competitive Advantage	Products/Applications	Customers
 <p>Ground Vehicles</p>	<p>Automated test and simulation systems, analysis software and specialized services that accelerate the product development of passenger cars, trucks, motorcycles, construction, agricultural and recreational vehicles.</p>	<ul style="list-style-type: none"> • Breadth of offerings • Worldwide support • Customized solutions • Advanced technology • Application expertise 	<p>Integrated equipment, software and services to test ground vehicle safety, noise vibration, durability and performance.</p>	<p>Audi, BMW, Daimler Chrysler, Ferrari, Ford, General Motors, Honda, Hyundai, Nissan, Renault, Toyota, Volkswagen, Volvo, American Axle, Bridgestone/Firestone, Delphi, Goodyear, TRW, Visteon</p>
 <p>Aerospace</p>	<p>Automated test and simulation systems, software and support to all phases of aerospace structural design and certification. Advanced welding technology for aircraft.</p>	<ul style="list-style-type: none"> • Breadth of offerings • Worldwide support • Customized solutions • Advanced technology • Application expertise 	<p>Integrated equipment, software and services to test aerospace vehicle durability, strength, noise and vibration; process development and production welding equipment for aircraft structures.</p>	<p>Airbus, Boeing, Cessna, Eclipse, Embraer, Japan Defense Agency, Lockheed Martin, GE Engines, Pratt & Whitney</p>
 <p>Infrastructure</p>	<p>Testing hardware and software for evaluating the physical properties, strength and durability of materials, structures and products.</p>	<ul style="list-style-type: none"> • Breadth of offerings • Worldwide support • Customized solutions • Advanced technology • Application expertise 	<p>Integrated equipment, software and services to test the effects of forces and motion on materials and structures including durability, strength, flexibility, and performance.</p>	<p>Guidant, Japan National Research Institute, Lawrence Livermore National Laboratory, Medtronic, Sandia National Labs, State University of New York, Taiwan National Center of Research for Earthquake Engineering</p>
 <p>Industrial</p>	<p>Rugged, high-performance magnetostrictive sensors that measure position and velocity.</p>	<ul style="list-style-type: none"> • High-performance sensor products • Speed of new application development • Integrated sensor solutions • Reduced cost of ownership • Worldwide manufacturing and support • Application expertise 	<p>Applications include:</p> <ul style="list-style-type: none"> • Metal and plastics manufacturing machinery • Mobile construction and agricultural equipment • Wood processing equipment • Aircraft assembly equipment • Fluid level measurement • Medical products equipment 	<p>Bosch Rexroth, Claas, CNA Manufacturing Systems, CNH, Eaton, DeMag Plastics, Heil, Husky Injection Molding, Negri Bossi, Nissei Plastics, Parker, Sinopec, Stryker</p>



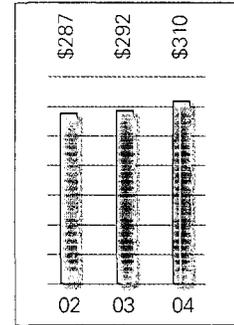
at a glance

test

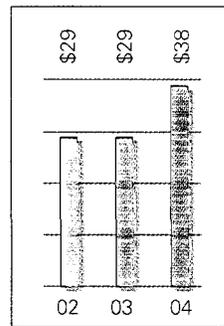
TEST SEGMENT provides integrated test equipment, software, and services that help customers enhance and accelerate product design and development by determining the physical behavior of materials, components, sub-systems and full product prototypes.



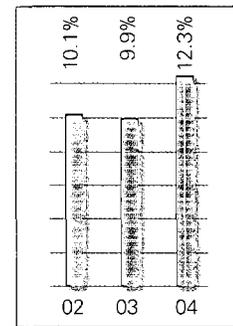
Orders
\$ Million



Revenue
\$ Million



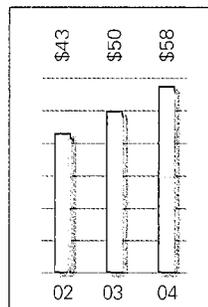
Income from Operations
\$ Million



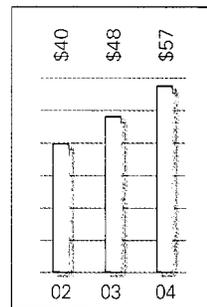
Income from Operations
as percent of Revenue

Industrial

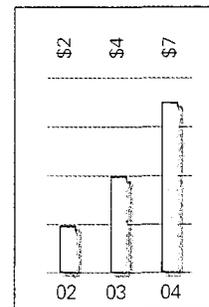
INDUSTRIAL SEGMENT provides precise and rugged position and velocity sensors that help automate machines and machine tools by making them faster, safer and more efficient.



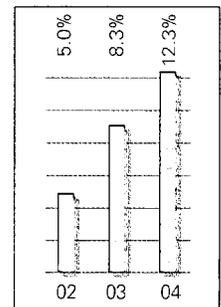
Orders
\$ Million



Revenue
\$ Million



Income from Operations
\$ Million



Income from Operations
as percent of Revenue

ENGINEERING - As an innovator, MTS is a worldwide leader in designing solutions to complex technical problems. Over the past 38 years, our engineers have established our reputation as one of the world's leading developers of test and sensing solutions.

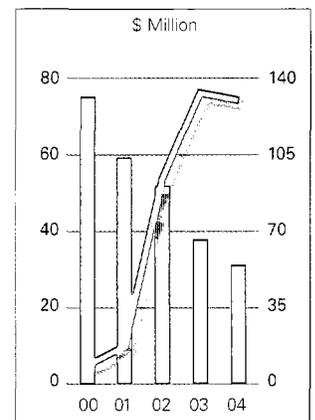
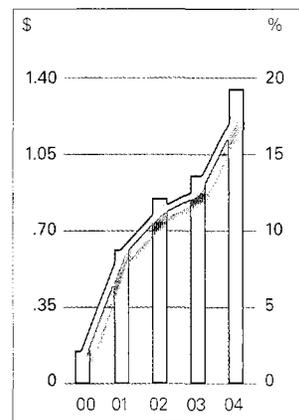
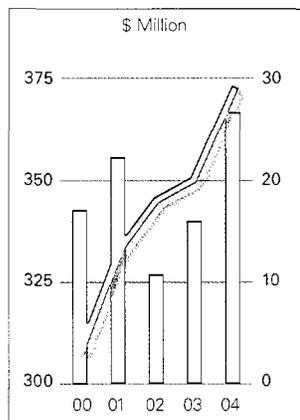
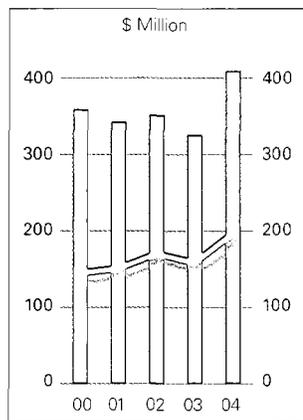
MARKET-DRIVEN - As an enterprise, MTS is driven by market needs, focusing its efforts on solving testing and sensing challenges for existing and potential markets.

EXCELLENCE - As a company, MTS is dedicated to excellence in business execution – bringing results to the marketplace that exceed the expectations of our shareholders, our customers, our employees and our communities.



ENGINEERING MARKET-DRIVEN EXCELLENCE

Financial Highlights



Orders
Backlog of Orders

Revenue
Income before cumulative effect of accounting change⁽¹⁾

Earnings per Share⁽¹⁾
Return on Equity⁽¹⁾

Total Debt
Cash, Cash Equivalents and Short-Term Investments

⁽¹⁾ See item 6 "Selected Financial Data" in the enclosed Form 10-K for information on this non-GAAP measure.



Sidney W. Emery, Jr. - Chairman and Chief Executive Officer

To Our Shareholders

In fiscal year 2004 MTS Systems Corporation strengthened its worldwide market leadership in both our Test and Industrial segments by aggressively engineering market-driven business excellence.

Financially, we continued our commitment of predictable, profitable growth. This fiscal year, MTS delivered:

- A 26 percent increase in orders to \$410 million;
- An 8 percent increase in revenue to \$367 million;
- A record orders backlog of \$199 million at fiscal year-end;
- Record net income of \$29 million, or \$1.35 per share;
- A return of cash to our shareholders through the repurchase of two million shares and a 33 percent increase in our dividend; and
- A strong financial position with continued reduction in debt and \$129 million in cash and cash equivalents at fiscal year-end.

	2003	2004
(Expressed in thousands except per share data)		
Revenue	\$ 340,087	\$ 366,969
Net income	\$ 20,313	\$ 28,983
Earnings per share, diluted	\$ 0.95	\$ 1.35
Net cash provided by operating activities	\$ 55,342	\$ 45,883
Return on sales	6.0%	7.9%
Return on equity	12.5%	16.5%
Dividends per share	\$ 0.24	\$ 0.26
Weighted average shares outstanding, diluted	21,474	21,464
Orders	\$ 324,237	\$ 409,532
Backlog of orders at year-end	\$ 159,252	\$ 198,617

Our Sharpened Strategic Focus

While pleased to deliver these financial results, we are truly excited about the groundwork we laid for future profitable growth by leveraging our core businesses and bolstering our premier engineering competencies with enhanced market focus and business process excellence.

During the year we completed a comprehensive strategic plan, validated with an external consulting firm. The results of this strategic planning process confirmed our focus on our core Test and Industrial segments, and identified significant opportunities in mobile hydraulic sensors, powertrain testing, noise and vibration testing, and integrated mechanical and electronic system testing. Each of these opportunities represents a sizable, growing market where MTS can make a strong, differentiated contribution.

In the Industrial segment, we invested in engineering to continually lower costs, opening new applications for the superior accuracy and toughness of our magnetostrictive sensing technology. We introduced the G-Series and R-Series sensor lines, which capitalize on advances in electronics and manufacturing to offer increased functionality at a more competitive price. To leverage this effort, we invested more significantly in marketing to focus on target markets with the largest growth opportunities. We increased orders by 300 percent for sensor applications for mobile hydraulic equipment – one of the market opportunities validated in our strategic plan. We anticipate further investment and revenue growth in this developing market.

In the Test segment, we began the year with a new organization, having combined eight divisions into two, thus streamlining our internal communications and allowing us to better align our people and priorities across our ground vehicles, aerospace and infrastructure markets. Throughout 2004 we built a stronger marketing team, considerably enhancing our understanding of the markets and competitive situation. This has led to improved linkage between product development and

market needs and economics, as well as initiatives to streamline our sales, product development and order fulfillment processes. These efforts are focused on delivering the right product with the right features at the right price to the market faster than ever before. Overall, we made significant progress in building a cost advantage that will both protect our market leadership and allow us to grow faster than the markets we serve, profitably increasing our market share.

To further the noise and vibration market opportunity identified in our strategic plan, we formed a partnership with National Instruments Corporation to deliver a low-cost framework for standardized noise and vibration testing. This partnership combines National Instruments' leading position in data acquisition hardware and its LabVIEW® software platform with MTS' noise and vibration application expertise and broad software offerings. While the new platform is scheduled for release early in 2006, we have already reached an agreement with a leading manufacturer in the ground vehicles market to migrate to this platform. Together with National Instruments we expect to substantially increase our presence in this significant, growing part of the test market.

Financial Overview

Orders increased by 26 percent in fiscal year 2004, primarily reflecting steady growth in our sensor business and two large Test segment orders totaling \$48 million. Orders were up a healthy 12 percent even without these two orders. Restrictions on customers' capital spending continued to limit the number of large order opportunities below historical levels. With fewer opportunities, pricing pressure and competition sharpened throughout the year. Geographically North America continued to be weak by historical standards, accounting for 37 percent of consolidated orders, compared to 31 percent in Europe and 32 percent in Asia. A surge in small system and after-market orders late in the year may indicate the beginning of a cyclical recovery in the Test segment markets. By contrast, the Industrial segment has now enjoyed four quarters of year-over-year growth in orders.

Revenue increased 8 percent to \$367 million during the fiscal year, reflecting a 6 percent increase in our Test segment to \$310 million and an 18 percent increase in the Industrial segment to \$57 million. The favorable impact of foreign currency translation on revenue was an estimated \$17 million, reflecting the weaker dollar. Our backlog of \$199 million at fiscal year-end was up 25 percent from \$159 million at the end of fiscal year 2003.

The combination of operating leverage inherent in the company, favorable product mix, currency translation, and early results from our initiatives to build cost advantage allowed us to leverage the 8 percent increase in revenue to a 43 percent increase in net income.

The Company generated \$46 million in cash from operations during the year, ending the year with \$129 million in cash and cash equivalents. We returned \$44 million in cash to shareholders through stock repurchases, as well as \$7 million through dividend payments. In the third quarter, our Board of Directors increased the dividend by 33 percent to an annual rate of \$0.32 per share, consistent with increased earnings and our dividend payout policy of 25 percent of earnings over time. While we plan to invest capital in profitable growth via internal initiatives and acquisitions, we anticipate our liquidity and capital structure will continue to enable MTS to return capital to shareholders.

Outlook

Based upon a strong backlog, the prospects of a modest market recovery, and our strategic initiatives, we expect continued growth in both revenue and earnings in the years to come.

We have a solid financial foundation. We remain focused on market leadership in our core Test and Industrial segments. We will continue to strengthen our external market focus and operating excellence to complement our superb engineering competencies. And our people are committed to market-driven business excellence around the globe, wherever customers take us.



Sidney W. Emery, Jr.
Chairman and Chief Executive Officer

Our Mission

We are a technology-based, market-driven company providing hardware, software and services to researchers, designers and manufacturers.

Our mission is to help our customers design, develop and produce their products faster, with higher quality and at a lower cost.

Growing

...GEOGRAPHIES
 ...PRODUCT OFFERINGS
 ...MARKET SHARE

Leading a New Era of Sound and Vibration Engineering

To meet increased consumer demand for a high level of sound and vibration performance, MTS introduced a new era in sound and vibration engineering. Featuring such products as MTS Sound Camera™ software, MTS' broad array of software solutions deliver faster, more dependable product development cycles, increased savings and better overall product designs.

Engineering Innovation with Tire Testing Solution

MTS introduced its upgraded Model 860 RoadWheel™ Treadwear Tire Test System, setting new standards for laboratory-based tread wear and advanced endurance testing of passenger car and light truck tires. MTS' new RoadWheel platform directly responds to market demands for a tire testing platform that embodies both innovative engineering and cost-effectiveness.

Expanding High-End Performance with New Dynamometer Technology

Ferrari S.p.A. ordered MTS' new dynamometer technology and two test rigs for its Formula 1 and passenger cars. This solution enables precise laboratory replication of the power, speed, torque, acceleration and inertia of a Formula 1 engine, building on MTS' presence in the high-end performance market.

Streamlining Aerospace Structural Testing with Enhanced Software

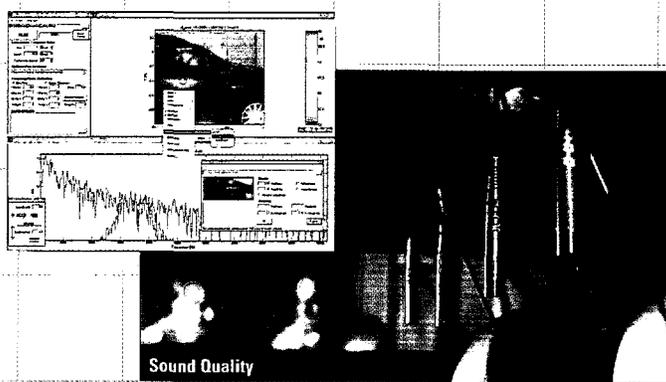
MTS Systems released its AeroPro™ 4.0 software, a new and enhanced version of its proven data acquisition and control software for aerospace structural testing. Offering an array of advanced features, AeroPro 4.0 streamlines and simplifies structural test definition and execution, effectively increasing users' confidence in test results.

Engineering Power with One of the World's Largest Load Frames

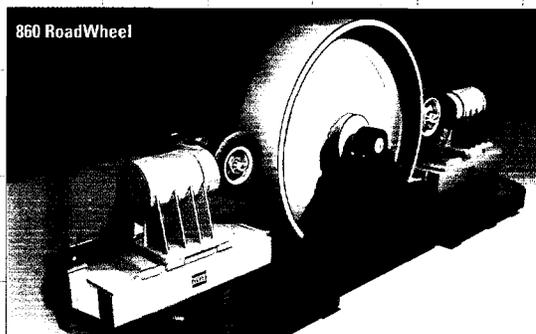
Constructed for the Architecture & Building Research Institute in Taiwan, MTS shipped one of the largest load frames in the world. The system produces up to 4.4 million pounds of tension for use in static and cyclic testing in civil engineering projects.

Introducing a New Family of High Performance Sensors

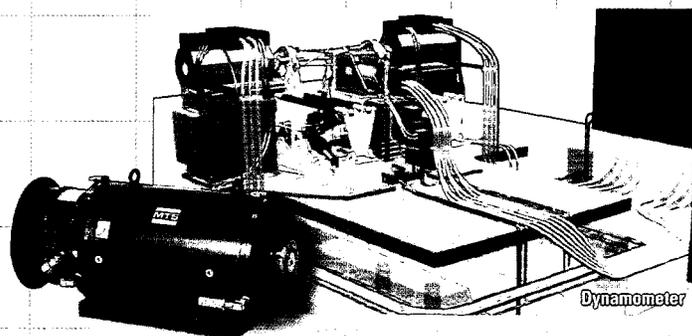
Addressing a significant market opportunity, MTS introduced its G-Series and R-Series Temposonics® sensors – a new family of high-performance position sensors. Both the new G-Series and R-Series were developed to meet customers' needs for additional functionality at a lower total cost.



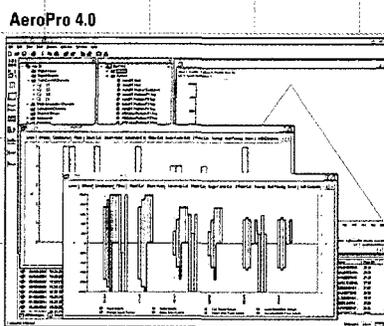
Sound Quality



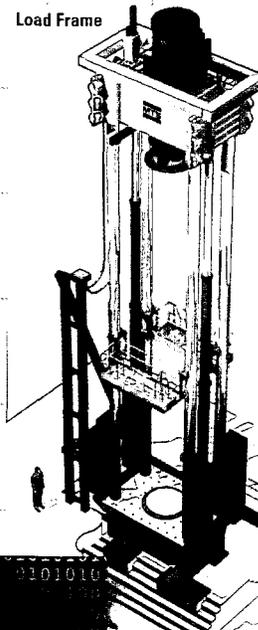
860 RoadWheel



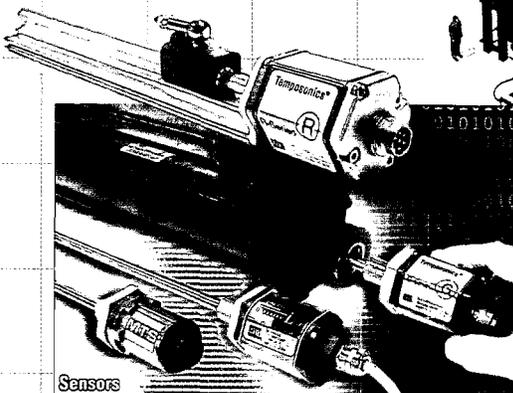
Dynamometer



AeroPro 4.0



Load Frame



Sensors



Annual Report on Form 10-K

MTS Systems Corporation

MTS Systems Corporation
Annual Report on Form 10-K

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SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended October 2, 2004

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. 0-2382

MTS SYSTEMS CORPORATION

(Exact Name of Registrant as Specified in its Charter)

Minnesota

(State or other jurisdiction of
incorporation or organization)

41-0908057

(I.R.S. Employer
Identification No.)

14000 Technology Drive

Eden Prairie, MN

(Address of Principal Executive Offices)

55344

(Zip Code)

Registrant's telephone number, including area code: (952) 937-4000

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

Securities registered pursuant to Section 12(g) of the Act: Common Stock, \$.25 par value per share

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 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.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act): Yes No

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter: \$566,761,213.

As of December 6, 2004, the registrant had outstanding 19,861,180 shares of Common Stock.

DOCUMENTS INCORPORATED BY REFERENCE: Portions of the Proxy Statement for the Registrant's Annual Meeting of Shareholders to be held January 25, 2005 are incorporated by reference into Part III of this Form 10-K, to the extent described in such Part.

PART I

Item 1. Business

MTS Systems Corporation (hereafter called "MTS," "the Company," or "the Registrant") is a global supplier of testing products that help customers accelerate and improve their design, development, and manufacturing processes. MTS products are used for determining the mechanical behavior of materials, products, and structures and include computer-based testing and simulation systems, modeling and testing software, and consulting services. The Company is also a leading manufacturer of industrial position sensors. The Company's mission is to help its customers design, develop, and produce their products faster, with higher quality and at a lower cost. The Company was incorporated on September 12, 1967.

Customers and Products by Business Segment

The Company's operations are organized into two business segments: the Test segment and the Industrial segment. The operational alignment of these segments allows the Company to maintain a strategic focus on markets having different product and market applications for the Company's technologies.

Test Segment: Customers of this segment use the Company's products, systems, software, and services for research, product development, and quality control to determine the mechanical properties and performance of materials, products, and structures. In addition to standard products, the Company offers highly customized systems for simulation and testing. These systems frequently contain "first of kind" advances that are new to a specific application. Products include rolling road simulators, friction stir welding machines, and earthquake simulation systems. Many of the segment's products and services support its customers' mechanical design automation processes. The Test segment serves customers in the following markets:

Ground Vehicles: This market consists of automobile, truck, motorcycle, construction, agricultural equipment, and off-road vehicle manufacturers and their suppliers. Equipment, software, and consulting services are used to test vehicular safety, noise, vibration and harshness, durability, performance, powertrain, and materials. This represents the largest market segment within the Test segment.

Aerospace: This market consists of manufacturers of commercial, military, and general aviation aircraft and their suppliers, including engine manufacturers. These customers use the Company's products, systems, and software for full-scale structural tests on aircraft and aerospace vehicles and components, subsystems, and materials.

Infrastructure: This market consists of construction and mineral/petroleum production companies and test laboratories owned and/or operated by universities or governmental entities. Equipment, software, and consulting services are used to test effects of seismic activity, effects of forces on structures, characteristics of materials, and biomechanical properties. These customers also use the Company's nanomechanical, biomechanical, and servo-hydraulic material testing products and systems in research and product development where a high degree of precision quality control is required during research and production. The nanomechanical test products address the needs of the highly precise semiconductor industry. Biomechanical applications include implants, prostheses, and other medical and dental devices and materials. Material producers include metal, ceramic, composite, paper, and plastic manufacturers.

Services offered to customers in the above markets include on-site installation, training of customer personnel, and after-market support and maintenance.

The Test segment typically represents approximately 85% of the Company's total revenue and provides the principal markets for the Company's technologies.

Industrial Segment: Customers of the Industrial segment use the Company's measurement and control instrumentation products to measure process variables and to automate production processes. Typical customers include injection molding manufacturers, mobile equipment producers, sawmill manufacturers, and semiconductor and medical equipment companies. Products in the Industrial segment include:

Displacement Position and Liquid Level Sensors based on Magnetostrictive Technology: Displacement sensors accurately measure position and are often used where accurate positioning and continuous control are critical, such as in discrete (piece part) manufacturing machinery, mobile equipment, process control elements and continuous measurement devices. Displacement sensors are also used in high-volume applications requiring low-cost position feedback. MTS has the capability of manufacturing low-cost sensor products in various lengths and configurations, while maintaining an extremely high degree of accuracy. Liquid level sensors accurately measure the level of liquids in tanks and other vessels. These types of products are marketed to the ultimate end users, such as chemical-producing companies, and to original equipment manufacturers that design level measurement or leak detection into their control systems or accessories for remote indication.

Titanium Part Formation: The Company, through its wholly owned subsidiary AeroMet Corporation, has developed an innovative, laser-directed metal deposition process for manufacturing parts made of titanium and other metals. This computer-driven process uses a laser to fuse titanium powder or powder of other metals, layer-by-layer, into solid structures. The process significantly reduces the time and amount of material required to produce complex parts used in the aircraft and aerospace industries.

The Industrial segment typically represents approximately 15% of the Company's total revenue.

For additional information regarding the Company's revenue from external customers and measures of profit and loss and total assets, see the Consolidated Financial Statements and accompanying Notes to Consolidated Financial Statements appearing under Item 8 of this Form 10-K.

Common Technologies

MTS specializes in the control and measurement of forces and motion. Technologies include sensors for measuring machine and process parameters, control technologies for test and process automation, hydraulic and electric servodrives for precise actuation, and application software to tailor a test or automation system to a specific customer's needs and to analyze test results. In combination, these technologies and products provide integrated solutions to customers in a variety of markets. The Company's manufacturing capability includes the production of low to medium volume standard and custom products and systems.

Product Development Highlights for Fiscal Year 2004

MTS invests in product, system, and application development. A combination of internal and customer funding enables MTS to advance the application of its existing technology and develop new capabilities. Selected highlights of product developments that were in progress or completed during fiscal year 2004 include the following:

- **SWIFT[®] Product Family Extensions** – The SWIFT Wheel Force Transducer family of products was extended to include the new AccuPhase[™] telemetry system, offering data acquisition with a vehicle on the road without use of protruding assemblies that could be damaged by obstructions or other vehicles. The product family was also extended to include a heavy truck capability to test vehicles with wheels up to 24 inches.
- **MAST** – The general purpose MAST (Multi-Axis Simulation Table) product family was extended to test a wide variety of applications in NVH (Noise, Vibration and Harshness), durability, and squeak and rattle applications, including testing of vehicle electronic components.

- **Passenger Car and Light Truck Rolling Road** – The Rolling Road product family was extended from the racing car aerodynamic wind tunnel applications to test a wide variety of passenger cars and light trucks in the automotive industry. The aerodynamic data is used by customers to improve the fuel economy and road stability of vehicles.
- **AeroPro™ Version 4.0** software was introduced, which provides customers with a single integrated user interface platform to perform data acquisition and control functions.
- **The Aero ST Controller** was enhanced for high channel count applications. Up to 360 control channels can be linked together to maximize the test system functionality.
- **MTS CAE Calibrator** software was introduced to support MSC and UGS NX NASTRAN® users in the aerospace, automotive and consumer goods industries. This allows users to gain modeling insight to update their dynamic NASTRAN models to better correlate with experimental data as well as to control or tune the response of a product for better performance.
- **MTS Safepass™ 201** software was introduced to reduce the effort required to comply with automotive interior head impact regulations by standardizing, automating, and increasing the accuracy of the entire process.
- **MTS Safedesign™ Insight** software for automotive safety engineering was introduced to provide a CAE and test validation environment incorporating video overlay technology to make model correlation intuitive and reduce testing costs.
- **MTS RPC® Pro** software for durability testing was enhanced to provide French and German language support, spectral monitoring for understanding changes occurring during a durability test, test profile selection to speed test preparation, and data management to store high-value results and test information.
- **R-Series Temposonics® sensors** were introduced to increase the performance and features and reduce the cost of existing sensor products.
- **The Temposonics R-Series** is a rod and piston sensor product that includes enhanced mechanical performance.
- Several new technology enhancements were made in the **Friction Stir Welding (FSW)** product family. The I-Stir™ Product Development System, first of its kind in the marketplace, enables customers to make 2-D and 3-D welds over a wide range of material thicknesses. A new I-Stir Mid-Range Weld Head was developed to provide three modes of welding. This head uses an electric drive instead of a hydraulic drive, which reduces the need for a large hydraulic power unit and the associated cooling system. The I-Stir Aero Production System control software was enhanced to enable better control of multiple weld schedules and the associated data acquisition requirements.

MTS, RPC, SWIFT, and Temposonics are registered trademarks, and AccuPhase, AeroPro, I-Stir, Safedesign, Safepass, and Sound Camera are trademarks of MTS Systems Corporation. NASTRAN is a registered trademark of the National Aeronautics and Space Administration.

Characteristics of Sales

The Company's systems and products are sold worldwide to a large variety of industrial companies, government agencies, and academic and other research institutions. MTS is generally not dependent on any single customer for a significant portion of its business. However, approximately 50% of the

Company's revenue is associated with the ground vehicles market, and approximately 60% of the Company's revenue is from customers outside the United States.

Test segment products and services range in price from less than \$20,000 to over \$20 million. The majority of Test segment revenue is generated by contracts valued at less than \$10 million. The timing and volume of contracts valued at \$10 million or greater may produce volatility in orders, backlog, and quarterly operating results. The majority of customer orders are based on fixed-price quotations and typically have an average sales cycle of six to nine months due to the technical nature of the products and systems. The production cycle for a typical system ranges from one to twelve months, depending on the complexity of the system and the availability of components. The production cycle for larger, more complex systems may be up to three years.

Industrial segment products are sold in quantity at unit prices ranging from \$100 to \$10,000. Production cycles generally vary from several days to several months, depending on the degree of product customization and manufacturing capacity.

During fiscal year 2004, the Company's products were shipped to North America, Europe, Asia, and Latin America. The Company's foreign operations and revenue derived from customers located in foreign countries may be affected by local political conditions, export licensing issues and restrictions, and foreign currency exchange rates and volatility.

Sales Channels: The Company sells its products, systems, and services through a direct sales force, independent sales representatives, and, to a much lesser extent, via the Internet and catalog. The sales channels for the Test and Industrial segments are separate. The direct sales force is generally staffed by engineers or highly skilled technicians who are trained to sell MTS equipment, software, and services. The direct sales force is compensated through salary and sales incentives programs, while independent sales representatives are paid on a commission basis.

A list of major domestic and international sales offices for the Company is as follows:

Domestic Sales Offices:

Akron, Ohio	Los Angeles, California
Austin, Texas	Milwaukee, Wisconsin
Baltimore, Maryland	Minneapolis, Minnesota
Boston, Massachusetts	Newark, New Jersey
Charlotte, North Carolina	Philadelphia, Pennsylvania
Chicago, Illinois	Pittsburgh, Pennsylvania
Cincinnati, Ohio	Raleigh, North Carolina
Dallas, Texas	Rockford, Illinois
Dayton, Ohio	San Francisco, California
Denver, Colorado	Seattle, Washington
Detroit, Michigan	Washington, D.C

International Sales Offices:

Beijing, Hong Kong, and Shanghai, People's Republic of China	Paris, France
Berlin and other cities, Germany	Seoul, South Korea
Gloucester, United Kingdom	Tokyo and other cities, Japan
Gothenburg, Sweden	Turin, Italy

The Company also has independent sales and service representative organizations in nearly all industrialized countries of the world and in many of the developing countries of Latin America, Asia, Africa, and the Middle East. The Company offers a mail-order catalog of standard material testing components, accessories, and products.

For additional information regarding the Company's operations by geographic area, see Note 4 to the Consolidated Financial Statements, "Business Segment Information," appearing under Item 8 of this Form 10-K.

Export Licensing: During the fiscal year ended October 2, 2004 and in prior years, MTS made various export sales that required the Company to obtain approval from the United States government. Although the Company typically does not undertake manufacturing on custom systems or projects until it is assured that the appropriate governmental units will grant export approval, initial design and development work may be performed on certain systems concurrent with the license approval process. Changes in political relations between the United States and foreign countries and/or specific potential customers for which export licenses may be required, as well as various other factors, can adversely affect the Company's ability to complete a shipment should a license application be denied or a previously issued license be unexpectedly withdrawn. Political activities in various regions of the world may result in dramatic changes in export control regulations and restrictions within a relatively short period of time. In addition, the United States government maintains multilateral controls in its agreements with allies and unilateral controls based on U.S. initiatives and foreign policy that may, in certain situations, cause delays or cancellations of the Company's orders or shipments.

Backlog

The Company's revenue backlog, defined as firm orders from customers that remain unfilled, totaled approximately \$199 million, \$159 million, and \$170 million at October 2, 2004, September 27, 2003, and September 28, 2002, respectively. Based on anticipated production schedules and other factors, the Company estimates that approximately \$168 million of the backlog at October 2, 2004 will be converted to revenue during fiscal year 2005. Delays may occur as a result of technical difficulties, export licensing or other approvals, changes in scope, manufacturing capacity, or the availability of the customer installation sites. Such delays may affect the period in which the backlog is recognized as revenue. The Company's backlog is subject to order cancellations.

Competition

Test Segment: Equipment, software, and services produced by the Test segment are produced by several other companies throughout the world. The product availability and the intensity of competition vary by product line and by geographic area. The Company's major competitors include, among others, Instron Corporation, FCS Test Systems B.V., Saginomiya Seisakusho Inc., Schenck Pegasus Corporation, and AVL. Customers will consider such factors, among others, as engineering capabilities, quality, technical features of the equipment, overall responsiveness to customer needs, service, and price as they evaluate supplier options.

Alternatively, in lieu of purchasing equipment, software, or services from MTS or its competitors, customers may elect to contract with testing laboratories, including those operated by certain universities and/or governmental units, or they may choose to construct their own testing equipment from commercially available components.

Industrial Segment: The Company competes directly with small-to-medium sized specialty suppliers and also with divisions of large companies specializing in measurement and control instrumentation products. Competitors include Balluff Inc., Ametek Inc., and Novotechnik.

Manufacturing and Engineering

The Company conducts a significant portion of its manufacturing and engineering activities for the Test segment from its corporate headquarters in Minneapolis, Minnesota. The Test segment also has manufacturing plants in Ann Arbor, Michigan and Oak Ridge, Tennessee. In addition, engineering, project management, final systems assembly, and service may be performed in Berlin, Germany; Tokyo, Japan; Paris, France; Turin, Italy; Gloucester, United Kingdom; and Gothenberg, Sweden. Manufacturing and engineering in the Industrial Segment are located in Raleigh, North Carolina; Luedenscheid, Germany; Tokyo, Japan; and Minneapolis, Minnesota.

Patents and Trademarks

The Company relies on a combination of patents, trademarks, copyrights, trade secrets, and confidentiality agreements to establish and protect its proprietary technology. The Company has filed and obtained numerous patents in the U.S. and abroad and regularly files patent applications worldwide in its continuing effort to establish and protect its proprietary technology. In addition, the Company has entered into exclusive and non-exclusive licenses relating to certain third-party technologies. The Company has also obtained certain trademarks for its products, and the Company maintains certain details about its processes, products and strategies as trade secrets. The Company's efforts to protect its intellectual property and avoid disputes over proprietary rights have included ongoing review of third-party patents and patent applications.

There can be no assurance that pending patent applications will result in issued patents, that patents or trademarks issued to the Company will not be challenged or circumvented by competitors, or that such patents or trademarks will be found to be valid or sufficiently broad to protect the Company's proprietary technology or to provide it with a competitive advantage.

Research and Development

MTS generally does not perform basic research, but the Company does invest in significant product, system, and software application developments. Costs associated with these development programs are expensed as incurred and aggregated \$13.2 million, \$14.7 million, and \$14.7 million for the fiscal years ended October 2, 2004, September 27, 2003, and September 28, 2002, respectively. From time to time, the Company also contracts with its customers to advance the state of technology and increase product functionality.

Executive Officers

The Executive Officers of the Registrant on the date of this report were:

<u>Name</u>	<u>Office</u>	<u>Officer Since</u>	<u>Age</u>
Sidney W. Emery, Jr.	Chairman, President and Chief Executive Officer	1998	58
Laura B. Hamilton	Senior Vice President Test	2000	43
Joachim Hellwig	Vice President Sensors	2003	55
Susan E. Knight	Vice President and Chief Financial Officer	2001	50
Douglas E. Marinaro	Vice President Software and Consulting	2002	43
Kathleen M. Staby	Vice President Human Resources	2000	58

Executive Officers serve at the discretion of and are elected annually by the Company's Board of Directors. Business experience of the Executive Officers (consisting of positions with the Company, unless otherwise indicated) for the last five years, at a minimum, is as follows:

<u>Officer</u>	<u>Business Experience</u>
S. W. Emery, Jr.	Chairman since January 1999. President and Chief Executive Officer since March 1998. Various management and executive positions with Honeywell Inc. (manufacturer of control systems) from 1985 to 1997 (Area Vice President, Western and Southern Europe, from 1994 to 1997; Group Vice President, Military Avionics Systems, from 1989 to 1994; Vice President and General Manager, Space Systems Division, from 1988 to 1989; Vice President Operations, Process Controls Division, from 1985 to 1988).

- L. B. Hamilton Senior Vice President of Test since May 2003. Vice President, Material Testing, Aerospace, and Manufacturing Operations from 2001 to 2003. Vice President, Material Testing and Aerospace Divisions, from 2000 to 2001. Director of Re-engineering from 1999 to 2000. Prior thereto, Vice President of Anatomic Pathology Business for Quest Diagnostics Incorporated (a clinical laboratory) from 1997 to 1999. Executive Director Revenue Services, Quest Diagnostics, from 1995 to 1997.
- J. Hellwig Vice President of the Company's Sensors division since January 2003. Vice President from 1993 to January 2003 and General Manager from 1989 to January 2003 of MTS Sensor Technologie GmbH and Co. KG (formerly, Hellwig GmbH). Prior thereto, Co-owner of Hellwig GmbH from 1980 to 1989 and Sales and Development Engineer at Hellwig GmbH from 1976 to 1980.
- S. E. Knight Vice President and Chief Financial Officer since October 2001. Prior thereto, various management and executive positions with Honeywell Inc. (manufacturer of control systems) from 1977 to 2001 (Chief Financial Officer of the Home and Building Control global business unit from 2000 to 2001; Chief Financial Officer of the North American Home and Building Control business unit from 1995 to 2000, and prior to 1995, various other management positions, including Corporate Director of Financial Planning and Analysis).
- D. E. Marinaro Vice President of Software and Consulting since November 2002. Prior thereto, Vice President, Marketing of Toolwire, Inc. (provider of Internet based training services) from 2000 to 2002. Various management positions at MSC Software Corp. (manufacturer of software) from 1990 to 1999 (Director Sales/Marketing and Business Development for Engineering-e.COM in 1999, Director CAE Data Management from 1996 to 1998, and Manager MVISION Business Unit/PDA Engineering from 1990 to 1996).
- K. M. Staby Vice President of Human Resources since 2000. Prior thereto, various management positions at Medtronic, Inc. from 1974 to 1999 (Vice President, Human Resources for Cardiac Rhythm Management from 1991 to 1999 and for Worldwide Distribution from 1989 to 1991).

Employees

MTS had 1,615 employees at October 2, 2004, including approximately 427 employees located outside the United States. None of the Company's employees in the United States are currently covered by collective bargaining agreements. In the past, the Company has not experienced any work stoppages at any of its U.S. locations.

Sources and Availability of Raw Materials and Components

A major portion of products and systems delivered to customers may consist of equipment and component parts purchased from third-party vendors. The Company promotes a partnership relationship with its vendors, with an emphasis on continuous improvement in a number of critical areas including, but not limited to, quality, performance and technological advances. The Company is dependent, in certain situations, on a limited number of vendors to provide computing hardware and software devices and raw materials. However, MTS has not experienced significant issues in procuring any essential materials, parts, or components needed in its engineering or production processes.

Since the Company generally sells its products based on fixed price contracts, fluctuations in the cost of materials or components between the date of order and the delivery date may impact the expected profitability of any project. The Company believes that such fluctuations in the cost of raw materials and components have not had a material effect on reported operating results.

Available Information

MTS' web site address is www.mts.com. MTS makes available on its web site annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports as soon as reasonably practical after it electronically files such material with, or furnishes it to, the Securities and Exchange Commission (the "SEC"). The MTS Code of Business Conduct, as well as any waivers from and amendments to the Code, are also posted on the Company's web site.

Environmental Matters

Management believes that the Company's operations are in compliance with federal, state, and local provisions relating to the protection of the environment.

Item 2. Properties

Properties Located in the United States:

The Company's corporate headquarters and major Test segment manufacturing, assembly, and research facility, occupying 420,000 square feet, is located on 56 acres of land in the City of Eden Prairie, Minnesota, a suburb of Minneapolis, Minnesota. Since the original plant was placed in service in 1967, six additions of various sizes, with the most recent addition being completed in 1997, have occurred. At the current time, approximately 50% of this facility is used for manufacturing and assembly, while the remainder is used as general office space.

The Industrial segment has a Company-owned 65,000 square foot, combination office and light manufacturing facility in Cary, North Carolina, a suburb of Raleigh, North Carolina. This facility was originally constructed in 1988 and was expanded in 1992.

In addition to the Minneapolis, Minnesota facility, the Test Segment has five other domestic locations. The Company leases 29,000 square feet in two facilities located in Madison Heights, Michigan and Milford, Ohio. The lease agreements for these facilities terminate in 2006. The Company owns a 57,200 square foot facility in Ann Arbor, Michigan and has an additional 13,000 square feet in Ann Arbor under lease through 2004. MTS sold a 27,000 square foot facility in Cary, North Carolina in April 2004 for \$2.1 million. The Company also leases 15,400 square feet in two facilities located in Oak Ridge, Tennessee.

The Company also has a five-year lease agreement that terminates in 2006 for a 90,000 square foot office, light manufacturing, and warehousing facility in Montgomeryville, Pennsylvania, a suburb of Philadelphia. This facility was used by the Company's Automation division, which was sold in fiscal year 2003. The Company is currently subleasing a portion of this facility to a third party.

MTS also leases space in various other cities in the United States that serves primarily as sales and service offices. Neither the amount of leased space nor the rental obligations are significant individually or in the aggregate. The agreements pertaining to each of its leased facilities in the United States contain conventional operating lease terms.

International Facilities:

MTS has manufacturing, assembly, warehousing, and/or office facilities in several European countries to support its international operations:

Berlin, Germany – an 80,000 square foot Company-owned Test segment facility, of which a portion is leased to non-MTS entities. This facility is situated on land leased from the city government. The lease expires in 2052.

Paris, France – a 22,000 square foot leased Test segment facility used for warehousing, service, and administrative functions. The lease expires in 2009.

Luedenscheid, Germany – a 35,000 square foot leased Industrial segment facility located on six acres of land and used for light manufacturing and administrative functions. The lease expires in 2009.

Tokyo, Japan – a 900 square foot leased Industrial segment facility used for light manufacturing and administrative functions. The lease expires in 2005.

The Company also leases small office and general-purpose space for its sales and service subsidiaries in Gloucester, United Kingdom; Gothenburg, Sweden; Turin, Italy; Seoul, South Korea; Tokyo and other cities in Japan; and Beijing and other cities in the People's Republic of China. No manufacturing is conducted at these locations.

The Company considers its current facilities adequate to support its operations during fiscal 2005.

Item 3. Legal Proceedings

From time to time, the Company is party to various claims, legal actions, and complaints arising in the ordinary course of business. Management believes the final resolution of these matters will not have a material adverse effect on the consolidated financial position or results of operations of the Company.

Item 4. Submission of Matters to a Vote of Security Holders

No matters were submitted for a vote of stockholders during the fourth quarter of the fiscal year ended October 2, 2004.

PART II

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

Shares of the Company's common stock are traded on The Nasdaq Stock Market's National Market under the symbol "MTSC."

The following table sets forth the high and low sale prices for the periods indicated:

<u>Quarter Ended</u>	<u>Low *</u>	<u>High *</u>
December 28, 2002	\$ 8.30	\$12.00
March 29, 2003	\$ 9.87	\$11.92
June 28, 2003	\$ 9.75	\$15.25
September 27, 2003	\$12.88	\$15.75
December 27, 2003	\$14.40	\$19.79
March 27, 2004	\$18.91	\$28.77
June 26, 2004	\$21.00	\$29.21
October 2, 2004	\$18.95	\$23.85

* Source: The Nasdaq Stock Market, Inc.

At December 6, 2004, there were 1,613 holders of record of the Company's common stock. This number does not reflect shareholders who hold their shares in the name of broker dealers or other nominees.

Purchases of Company Equity Securities:

Fiscal Month	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet be Purchased Under the Plans or Programs
June 27, 2004 - July 31, 2004	195,000	\$ 21.73	195,000	1,893,238
August 1, 2004 - August 28, 2004	353,400	\$ 20.15	353,400	1,539,838
August 29, 2004 - October 2, 2004	277,765	\$ 22.55	277,765	1,262,073
Total	826,165	\$ 21.33	826,165	

During fiscal year 2004, the Company completed repurchases under a 1.5 million share repurchase program authorized by its Board of Directors and publicly announced in May 2002. On January 27, 2004, the Company publicly announced the approval by the Board of Directors of an additional repurchase program for 2.5 million shares. Authority over pricing and timing under the program have been delegated to management. There is no expiration date for the program.

During fiscal year 2004, the Company repurchased 2.0 million shares of its common stock at an average cost of \$22.53 per share. The Company repurchased 1.2 million shares of its common stock at an average cost of \$13.21 per share in fiscal year 2003 and 0.1 million shares in fiscal year 2002 at an average cost of \$10.23 per share.

The Company purchases Company common stock to offset the new shares created by employee equity compensation such as stock options, restricted stock and employee stock purchase programs, and as a means of returning excess cash to shareholders.

The Company's dividend policy is to maintain a payout ratio of 25% of net earnings over the long term. In fiscal years 2002 and 2003 and through the third quarter of fiscal year 2004, the Company paid quarterly cash dividends of \$.06 per share to holders of its common stock. In the fourth quarter of fiscal year 2004, the Company increased the quarterly dividend by 33% to \$.08 per share.

The Company's committed bank credit facility and long-term note agreements have requirements on the minimum level of net worth (as defined therein) that restrict the Company's ability to repurchase stock or pay dividends. At October 2, 2004, the Company was in compliance with all such requirements. Subsequent to the fourth quarter the Company reached an agreement with the holders of the notes, reducing the minimum net worth requirement to provide the Company additional capacity for dividends and share repurchases.

Item 6. Selected Financial Data

The table below provides selected historical financial data for the Company, which should be read in conjunction with the Consolidated Financial Statements, the Notes to the Consolidated Financial Statements, and "Management's Discussion and Analysis of Financial Condition and Results of Operations," which are included elsewhere in this report. The statement of income data for each of the three fiscal years ended October 2, 2004, September 27, 2003, and September 28, 2002 and the balance sheet data at October 2, 2004 and September 27, 2003 are derived from the audited Consolidated Financial Statements included elsewhere in this report. The statement of income data for the fiscal years ended September 30, 2001 and 2000 and the balance sheet data at September 28, 2002 and September 30, 2001 and 2000 are derived from financial statements of the Company that are not included in this report.

Five-Year Financial Summary

(October 2, 2004, September 27, 2003, September 28, 2002, and September 30, 2001 and 2000)

(expressed in thousands except per share data and numbers of shareholders and employees)

	2004 ¹	2003	2002	2001	2000
Operations					
Revenue	\$ 366,969	\$ 340,087	\$ 327,185	\$ 355,859	\$ 342,631
Gross profit	148,358	126,404	125,028	129,341	112,659
Gross profit as a % of revenue	40.4%	37.2%	38.2%	36.3%	32.9%
Research and development expense	\$ 13,196	\$ 14,690	\$ 14,696	\$ 16,686	\$ 19,703
Research and development as a % of revenue	3.6%	4.3%	4.5%	4.7%	5.8%
Effective income tax rate	36.7%	34.1%	31.5%	33.8%	30.6%
Income before discontinued operations and cumulative effect of accounting changes	\$ 28,983	\$ 21,291	\$ 22,270	\$ 15,556	\$ 1,627
Net income	28,983	20,313	4,282	10,614	3,170
Net income as a % of revenue	7.9%	6.0%	1.3%	3.0%	0.9%
Diluted earnings per share of common stock before discontinued operations and cumulative effect of accounting changes	\$ 1.35	\$ 1.00	\$ 1.04	\$ 0.74	\$ 0.08
Diluted earnings per share of common stock	1.35	0.95	0.20	0.50	0.15
Weighted average dilutive shares outstanding during the year ²	21,464	21,474	21,433	21,070	20,935
Net interest expense	\$ 930	\$ 1,452	\$ 3,002	\$ 4,691	\$ 4,852
Depreciation and amortization	9,290	9,772	9,971	12,180	13,590
Financial Position					
Cash, cash equivalents and short-term investments	\$ 129,303	\$ 132,743	\$ 97,550	\$ 17,336	\$ 7,921
Property and equipment, net	52,775	56,204	56,884	61,834	66,088
Total assets	341,635	330,378	325,571	337,443	333,653
Interest-bearing debt ³	30,718	37,709	51,992	59,305	75,712
Total shareholders' investment	171,796	176,106	162,265	160,738	153,629
Interest-bearing debt as a % of shareholders' investment	17.9%	21.4%	32.0%	36.9%	49.3%
Return on equity ⁴	16.5%	12.5%	2.7%	6.9%	2.0%
Non-GAAP Financial Measures and Other Statistics					
Income before cumulative effect of accounting changes ⁵	\$ 28,983	\$ 20,313	\$ 18,003	\$ 13,106	\$ 3,170
Income before cumulative effect of accounting changes as a % of revenue ^{5,6}	7.9%	6.0%	5.5%	3.7%	0.9%
Diluted earnings per share of common stock before cumulative effect of accounting changes ⁵	\$ 1.35	\$ 0.95	\$ 0.84	\$ 0.62	\$ 0.15
Return on equity excluding cumulative effect of accounting changes ^{5,7}	16.5%	12.5%	11.2%	8.5%	2.0%
Number of common shareholders of record at year-end ⁸	1,644	1,907	2,058	2,086	2,229
Number of employees at year-end	1,615	1,630	1,698	1,993	2,088
Orders	\$ 409,532	\$ 324,237	\$ 351,583	\$ 341,663	\$ 359,297
Backlog of orders at year-end	198,617	159,252	169,993	146,157	145,281
Cash dividends paid per share	0.26	0.24	0.24	0.24	0.24

¹The fiscal year ended October 2, 2004 was a 53-week fiscal year, whereas all other fiscal years presented were 52-week periods.

²Assumes the conversion of potential common shares using the treasury stock method.

³Consists of notes payable and the current and non-current portion of long-term debt.

⁴Calculated by dividing net income by beginning shareholders' investment.

⁵The measure "Income before cumulative effect of accounting changes" is not a measure of performance presented in accordance with Generally Accepted Accounting Principles (GAAP). The measures "earnings before cumulative effect of accounting changes," "income before cumulative effect of accounting changes as a percent of revenue," and "return on equity before cumulative effect of accounting changes" are derived from the non-GAAP measure "income before cumulative effect of accounting changes" and thus are also non-GAAP financial measures. Fiscal year 2002 amounts for these measures exclude the negative impact, net of tax, of the cumulative effect of the adoption of Statement of Financial Accounting Standard (SFAS) No. 142, "Goodwill and Other Intangible Assets," of \$13,721 (of which \$9,198 and \$4,523 were associated with discontinued operations and continuing operations, respectively), or \$0.64 per diluted share. The Company discontinued a portion of its operations in fiscal year 2003, requiring prior years' financial information to be restated. Because a portion of the Company's fiscal year 2002 goodwill write-off resulting from the adoption of SFAS 142 was within the discontinued business, the measure "income before cumulative effect of accounting changes" is no longer presented on the income statement, making it a non-GAAP financial measure. Income before cumulative effect of accounting changes is utilized by management to measure the results of the Company's operations, including the contribution of the discontinued business, before the effect of the goodwill write-off. Management views this measure as a valuable performance indicator because management was responsible for the operating results of both the Company's continuing and discontinued operations during fiscal year 2002, whereas management was not able to influence the financial impact of the accounting change. Management believes this measure is useful to an investor in evaluating the Company's operating performance because it helps investors more meaningfully evaluate and compare the results of operations from period to period by removing the impact of the cumulative effect of the accounting change, which reflects a one-time non-recurring charge unrelated to the operation of the business. Management therefore uses this measure to compare the Company's year-over-year operating performance on a consistent basis. This measure should not be construed as an alternative to net income or any other measure determined in accordance with GAAP.

Reconciliation of the non-GAAP financial measures to the nearest GAAP measures:

	2004	2003	2002	2001	2000
	(expressed in thousands except per share data)				
Income before cumulative effect of accounting changes	\$ 28,983	\$ 20,313	\$ 18,003	\$ 13,106	\$ 3,170
Cumulative effect of accounting changes, net of tax	-	-	(13,721)	(2,492)	-
Net Income	\$ 28,983	\$ 20,313	\$ 4,282	\$ 10,614	\$ 3,170
Diluted earnings per share:					
Earnings before cumulative effect of accounting changes	\$ 1.35	\$ 0.95	\$ 0.84	\$ 0.62	\$ 0.15
Cumulative effect of accounting changes, net of tax	-	-	(0.64)	(0.12)	-
Earnings per share	\$ 1.35	\$ 0.95	\$ 0.20	\$ 0.50	\$ 0.15
Income before cumulative effect of accounting changes	\$ 28,983	\$ 20,313	\$ 18,003	\$ 13,106	\$ 3,170
Revenue	366,969	340,087	327,185	355,859	342,631
Income before cumulative effect of accounting changes as a % of revenue	7.9%	6.0%	5.5%	3.7%	0.9%
Cumulative effect of accounting changes, net of tax, as a % of revenue	-	-	(4.2%)	(0.7%)	-
Net income as a % of revenue	7.9%	6.0%	1.3%	3.0%	0.9%

Income before cumulative effect of accounting changes	\$ 28,983	\$ 20,313	\$ 18,003	\$ 13,106	\$ 3,170
Beginning shareholders' investment	176,106	162,265	160,738	153,629	159,088
Return on equity (excluding cumulative effect of accounting changes)	16.5%	12.5%	11.2%	8.5%	2.0%
Return on equity from cumulative effect of accounting changes	-	-	(8.5%)	(1.6%)	-
Return on equity	16.5%	12.5%	2.7%	6.9%	2.0%

⁶Calculated by dividing income before cumulative effect of accounting changes by revenue.

⁷Calculated by dividing income before cumulative effect of accounting changes by beginning shareholders' investment.

⁸Does not include shareholders whose stock is held in the name of broker dealers or other nominees.

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

MTS Systems Corporation is a global supplier of testing products that help customers accelerate and improve their design, development, and manufacturing processes. MTS products are used for determining the mechanical behavior of materials, products, and structures and include computer-based testing and simulation systems, modeling and testing software, and consulting services. The Company is also a leading manufacturer of industrial position sensors. MTS had 1,615 employees and revenue of \$367 million for the fiscal year ended October 2, 2004.

Fiscal Year

The Company's fiscal year ends on the Saturday closest to September 30. The fiscal year ended October 2, 2004 consisted of 53 weeks. The fiscal years ended September 27, 2003 and September 28, 2002 consisted of 52 weeks.

Overall Results

Orders during fiscal year 2004 increased 26.3% to \$409.5 million, compared to \$324.2 million in fiscal year 2003. In fiscal year 2002, orders totaled \$351.6 million. The increase in orders from fiscal year 2003 is partially the result of two multi-year international contracts totaling in excess of \$48 million, booked in the first quarter of fiscal year 2004. Excluding these two contracts, orders for fiscal year 2004 increased 11.5%, driven by increased volume in both the Test and Industrial segments across all geographies and an estimated \$17.4 million of favorable currency translation. Excluding the impact of currency, fiscal year 2004 orders would have been an estimated \$392.1 million. The decrease in fiscal year 2003 from fiscal year 2002 was primarily the result of economic weakness in the Test segment market in North America and Asia, partially offset by increased volume in Europe.

Backlog of undelivered orders at October 2, 2004 increased 24.7% to \$198.6 million, compared to backlog of \$159.3 million at September 27, 2003. Backlog at the end of fiscal year 2002 totaled \$170.0 million. The current year increase in backlog from fiscal year 2003 is attributable to increased order volume, partially offset by the cancellation in January 2004 of a \$10.4 million customer order that was included in backlog at September 27, 2003.

Revenue of \$367.0 million for fiscal year 2004 increased 7.9%, compared to \$340.1 million for fiscal year 2003. Revenue for fiscal year 2002 totaled \$327.2 million. The increase in revenue in fiscal year 2004 was primarily due to higher orders, an increase in aftermarket product volume, and an estimated \$17.1 million favorable impact from currency translation, partially offset by lower beginning backlog. The increase in fiscal year 2003 revenue from fiscal year 2002 was primarily driven by increased volume in the Industrial segment, higher beginning backlog in fiscal year 2003, and an estimated \$17.6 million favorable impact of currency translation, partially offset by lower order volume in the Test segment and the timing of large custom projects.

Income before income taxes, discontinued operations, and cumulative effect of accounting changes of \$45.8 million for fiscal year 2004 increased 41.8%, compared with \$32.3 million for fiscal year 2003, primarily driven by increased volume and high-margin product mix, partially offset by an estimated \$2.3

million favorable impact of currency translation. Income before taxes, discontinued operations and cumulative effect of accounting changes for fiscal year 2003 was relatively flat compared to fiscal year 2002, as increased revenue and income from operations in fiscal year 2003 was offset by the impact of the one-time gain on sale of an investment recorded in fiscal year 2002.

Net income was \$29.0 million, or \$1.35 per diluted share, for fiscal year 2004, an increase of 42.9% compared to \$20.3 million, or \$0.95 per diluted share, for fiscal year 2003 and increased from \$4.3 million, or \$0.20 per diluted share, for fiscal year 2002. The increase in net income for fiscal year 2004 from fiscal year 2003 was primarily due to increased income from operations, an estimated \$1.4 million favorable impact of currency translation, and a \$1.0 million loss from discontinued operations in fiscal year 2003. These increases were partially offset by a higher effective income tax rate, primarily resulting from higher earnings and an unfavorable geographic mix of income in higher income tax jurisdictions for fiscal year 2004. The increase in net income for fiscal year 2003 compared to fiscal year 2002 was primarily the result of a \$13.7 million cumulative effect of accounting changes, net of tax, and a \$4.3 million loss from discontinued operations in fiscal year 2002.

Critical Accounting Policies

The Consolidated Financial Statements are prepared in accordance with U.S. generally accepted accounting principles, which require the Company to make estimates and assumptions in certain circumstances that affect amounts reported. In preparing these financial statements, management has made its best estimates and judgments of certain amounts, giving due consideration to materiality. The Company believes that of its significant accounting policies, the following are particularly important to the portrayal of the Company's results of operations and financial position and may require the application of a higher level of judgment by the Company's management, and as a result are subject to an inherent degree of uncertainty. Further information is provided in Note 1 to the Consolidated Financial Statements.

Revenue Recognition. Due to the diversity of its products, the Company is required to comply with a variety of technical accounting requirements in order to achieve consistent and accurate revenue recognition. This requires a certain amount of judgment in the evaluation of completed contract versus percentage-of-completion accounting, the determination of estimated costs to complete contracts, and evaluation of customer acceptance terms.

Inventories. The Company maintains a material amount of inventory to support its engineering and manufacturing operations, and a certain amount of judgment is required in determining the appropriate level of inventory valuation reserves. While the Company expects its sales to grow, a reduction in its sales could reduce the demand for the Company's products, and additional inventory valuation adjustments may be required.

Warranty Obligations. The Company is subject to warranty guarantees on sales of its products. A certain amount of judgment is required in determining appropriate reserve levels for anticipated warranty claims. While these reserve levels are based on historical warranty experience, they may not reflect the actual claims that will occur over the upcoming warranty period, and additional warranty reserves may be required.

Orders and Backlog

	2004	2003	2002
	(expressed in thousands)		
Orders	\$ 409,532	\$ 324,237	\$ 351,583
Backlog of			
Undelivered Orders	\$ 198,617	\$ 159,252	\$ 169,993

Orders during fiscal year 2004 totaled \$409.5 million, an increase of \$85.3 million, or 26.3%, compared to orders of \$324.2 million for fiscal year 2003. In fiscal year 2002, orders totaled \$351.6 million. The increase in orders from fiscal year 2003 is partially the result of two multi-year international contracts totaling in excess of \$48 million, booked in the first quarter of fiscal year 2004. Excluding these two contracts, orders for fiscal year 2004 increased 11.5%, driven by increased volume in both the Test and

Industrial segments across all geographies and an estimated \$17.4 million of favorable currency translation. Excluding the impact of currency translation, fiscal year 2004 orders would have been an estimated \$392.1 million. The decrease in fiscal year 2003 orders from fiscal year 2002 was primarily the result of Test segment market weakness in North America and Asia, partially offset by increased volume in Europe and an estimated \$12.2 million impact of favorable currency translation. Excluding the impact of currency translation, fiscal year 2003 orders would have been an estimated \$312.0 million.

Orders for the Test segment totaled \$352.0 million for fiscal year 2004, an increase of \$77.4 million, or 28.2%, compared to orders of \$274.6 million for fiscal year 2003. Test segment orders for fiscal year 2002 totaled \$308.2 million. The Test segment booked 86.0% of total Company orders for fiscal year 2004, compared to 84.7% for fiscal year 2003 and 87.7% for fiscal year 2002. The increase in fiscal year 2004 orders from fiscal year 2003 is principally due to the two large international orders totaling in excess of \$48 million. Excluding these bookings, orders for fiscal year 2004 increased 10.7%, driven by increased volume across all geographies and an estimated \$14.1 million impact of favorable currency translation. Excluding the impact of currency translation, fiscal year 2004 orders would have been an estimated \$337.9 million. The decrease in fiscal year 2003 orders from fiscal year 2002 was primarily the result of reduced demand in the global aerospace and infrastructure markets due to customer restrictions on new capital spending, partially offset by an estimated \$8.9 million impact of favorable currency translation. Excluding the impact of currency translation, fiscal year 2003 orders would have been an estimated \$265.7 million.

Orders for the Industrial segment totaled \$57.5 million for fiscal year 2004, an increase of \$7.9 million, or 15.9%, compared to orders during fiscal year 2003 of \$49.6 million. Orders for the Industrial segment in fiscal year 2002 totaled \$43.4 million. The increase in fiscal year 2004 orders from fiscal year 2003 reflects increased Sensors business volume across all geographies and an estimated \$3.3 million impact of favorable currency translation. Excluding the impact of currency translation, fiscal year 2004 orders would have been an estimated \$54.2 million. The increase in fiscal year 2003 orders from fiscal year 2002 primarily resulted from volume increases in Europe and an estimated \$3.3 million impact of favorable currency translation. Excluding the impact of currency translation, fiscal year 2003 orders would have been an estimated \$46.3 million. This segment accounted for 14.0% of total Company orders during fiscal year 2004, compared to 15.3% and 12.3% in fiscal years 2003 and 2002, respectively.

Orders from customers located in North America totaled \$150.2 million during fiscal year 2004, an increase of \$3.5 million, or 2.4%, compared to orders of \$146.7 million for fiscal year 2003. Orders received in North America during fiscal year 2002 totaled \$175.2 million. International orders received during fiscal year 2004 of \$259.3 million increased by \$81.8 million, or 46.1%, compared to orders received during fiscal year 2003 of \$177.5 million. International orders in fiscal year 2002 totaled \$176.4 million.

Backlog of undelivered orders at October 2, 2004 totaled \$198.6 million, an increase of approximately \$39.3 million, or 24.7%, compared to backlog of \$159.3 million at September 27, 2003. Backlog at the end of fiscal year 2002 totaled \$170.0 million. The increase in backlog from fiscal year 2003 is attributable to increased order volume, partially offset by the cancellation in January 2004 of a \$10.4 million order that was included in backlog at September 27, 2003. However, the Company believes backlog is not an absolute indicator of its future revenue because a substantial portion of the orders constituting this backlog could be cancelled at the customers' discretion. However the Company seldom experiences cancellations of orders larger than \$1.0 million. Based on anticipated production schedules and other factors, the Company believes that approximately \$168 million of the backlog at October 2, 2004 will be converted to revenue during fiscal year 2005.

Revenue

	2004	2003	2002
	(expressed in thousands)		
Revenue	\$ 366,969	\$ 340,087	\$ 327,185

Revenue of \$367.0 million for fiscal year 2004 increased \$26.9 million, or 7.9%, compared to \$340.1 million for fiscal year 2003. Revenue for fiscal year 2002 totaled \$327.2 million. The increase in revenue in fiscal year 2004 was primarily due to higher orders, an increase in aftermarket product volume, and an estimated \$17.1 million favorable impact of currency translation, partially offset by lower beginning backlog. Excluding the impact of currency translation, revenue for fiscal year 2004 would have been an estimated \$349.9 million. The increase in fiscal year 2003 revenue from fiscal year 2002 was primarily driven by increased volume in the Industrial segment, higher beginning backlog in fiscal year 2003, and an estimated \$17.6 million favorable impact of currency translation, partially offset by lower order volume in the Test segment and the timing of large custom projects. Excluding the impact of currency translation, revenue for fiscal year 2003 would have been an estimated \$322.5 million.

Revenue for the Test segment in fiscal year 2004 totaled \$310.4 million, compared to revenue of \$292.0 million and \$287.0 million for fiscal years 2003 and 2002, respectively. The increase in revenue for fiscal year 2004 was principally due to higher orders, increased aftermarket product volume, and an estimated \$13.7 million favorable impact from currency translation, partially offset by lower beginning backlog. Excluding the impact of currency translation, revenue for fiscal year 2004 would have been an estimated \$296.7 million. The increase in revenue for fiscal year 2003 from fiscal year 2002 was principally driven by higher beginning backlog and an estimated \$14.2 million favorable impact of currency translation, partially offset by timing of large custom projects and the decline in capital spending in worldwide industrial and ground vehicles markets. Excluding the impact of currency translation, revenue for fiscal year 2003 would have been an estimated \$277.8 million.

Revenue in the Industrial segment totaled \$56.6 million for fiscal year 2004, compared to \$48.1 million for fiscal year 2003 and \$40.2 million for fiscal year 2002. Revenue increased in fiscal year 2004 compared to fiscal year 2003, largely due to increased order volume in the Sensors business across all geographies as well as an estimated \$3.4 million favorable impact of currency translation. Excluding the impact of currency translation, revenue for fiscal year 2004 would have been an estimated \$53.2 million. The increase in fiscal year 2003 revenue from fiscal year 2002 was principally driven by sales into new markets, customer inventory replenishment in the European Sensors business, \$1.9 million increased development revenue in the AeroMet business and an estimated \$3.4 million favorable impact of currency translation. Excluding the impact of currency translation, revenue for fiscal year 2003 would have been an estimated \$44.7 million.

Revenue of \$155.1 million in North America for fiscal year 2004 was relatively flat compared with revenue of \$157.3 million and \$157.9 million for fiscal years 2003 and 2002, respectively. Revenue in Europe of \$112.9 million for fiscal year 2004 decreased \$6.5 million, or 5.4%, compared to \$119.4 million for fiscal year 2003. Revenue in Europe for fiscal year 2002 totaled \$92.3 million. Revenue of \$95.6 million in Asia for fiscal year 2004 increased \$35.1 million, or 58.0%, compared to \$60.5 million for fiscal year 2003. Revenue in Asia for fiscal year 2002 totaled \$76.6 million. Other international revenue totaled \$3.4 million, \$2.9 million, and \$0.4 million, respectively, for fiscal years 2004, 2003, and 2002.

Although selective product price changes were implemented during each of the three fiscal years, the overall impact of pricing changes did not have a material effect on reported revenue.

Gross Profit

	2004	2003	2002
	(expressed in thousands)		
Gross Profit	\$ 148,358	\$ 126,404	\$ 125,028
% of Revenue	40.4%	37.2%	38.2%

Gross profit as a percentage of revenue increased to 40.4% for fiscal year 2004 from 37.2% and 38.2% for fiscal years 2003 and 2002, respectively. The increase in gross profit rate for fiscal year 2004 was primarily driven by favorable product mix in both the Test and Industrial segments, partially offset by an unfavorable impact of currency translation of an estimated 0.5 percentage points, or \$5.1 million. Excluding the impact of currency translation, gross profit as a percentage of revenue for fiscal year 2004 would have been an estimated 40.9%. The decrease in gross profit as a percentage of revenue for fiscal

year 2003 from fiscal year 2002 was primarily driven by unfavorable product mix in both the Test and Industrial segments and an unfavorable impact of foreign currency translation of an estimated 0.5 percentage points, or \$4.8 million, partially offset by increased sales volume in the Industrial segment. Excluding the impact of currency translation, gross profit as a percentage of revenue for fiscal year 2003 would have been an estimated 37.7%.

Gross profit as a percentage of revenue for the Test segment was 38.8% for fiscal year 2004, an increase from 35.4% and 36.9% for fiscal years 2003 and 2002, respectively. The increase in gross profit rate in fiscal year 2004 was primarily due to product mix, partially offset by an unfavorable impact of currency translation of an estimated 0.6 percentage points. Excluding the impact of currency translation, gross profit as a percentage of revenue for fiscal year 2004 would have been an estimated 39.4%. The decrease in gross profit rate for the Test segment in fiscal year 2003 from fiscal year 2002 was primarily due to product mix and an unfavorable impact of currency translation of an estimated 0.5 percentage points. Excluding the impact of currency translation, gross profit as a percentage of revenue for the Test segment for fiscal year 2003 would have been an estimated 35.9%.

Gross profit as a percentage of revenue for the Industrial segment was 49.4% for fiscal year 2004, up from 48.0% and 47.7% for fiscal years 2003 and 2002, respectively. The gross profit rate increased in fiscal year 2004 primarily due to favorable product mix. The increase in fiscal year 2003 gross profit from fiscal year 2002 was primarily due to increased sales volume, partially offset by unfavorable product mix. There was no significant impact on gross profit from currency translation in fiscal years 2004 and 2003.

Selling, General, and Administrative Expense

	2004	2003	2002
	(expressed in thousands)		
Selling	\$ 61,578	\$ 52,210	\$ 51,120
General & Administrative	28,411	26,388	27,924
Total	\$ 89,989	\$ 78,598	\$ 79,044
% of Revenue	24.5%	23.1%	24.2%

Selling, general and administrative ("SG&A") expense as a percentage of revenue increased 1.4 percentage points in fiscal year 2004 compared to fiscal year 2003, primarily due to increased investment in marketing initiatives and an estimated \$2.4 million unfavorable impact of currency translation. Excluding the impact of currency translation, selling expense for fiscal year 2004 would have been an estimated \$59.2 million. Selling expense increased in fiscal year 2003 compared to fiscal year 2002 primarily due to an estimated \$2.3 million unfavorable impact of currency translation, partially offset by the benefit of headcount reductions made in late fiscal year 2002. Excluding the impact of currency translation, selling expense for fiscal year 2003 would have been an estimated \$49.9 million.

General and administrative expense increased during fiscal year 2004 primarily due to \$2.0 million of increased consulting, legal and other professional fees, as well as an estimated \$0.4 million unfavorable impact of currency translation. Excluding the impact of currency translation, general and administrative expense for fiscal year 2004 would have been an estimated \$28.0 million. General and administrative expense decreased in fiscal year 2003 compared to fiscal year 2002, primarily due to \$0.8 million of non-recurring audit and related fees in fiscal 2002 associated with the Company's fiscal year 2002 and prior year restatement activity and the recovery of \$0.5 million in bad debt previously written off in fiscal year 2003, partially offset by an estimated \$0.5 million unfavorable impact of currency translation. Excluding the impact of currency translation, general and administrative expense for fiscal year 2003 would have been an estimated \$25.9 million.

SG&A expense in the Test segment increased to \$72.0 million in fiscal year 2004 from \$62.7 million and \$64.9 million in fiscal years 2003 and 2002, respectively. The increase in fiscal year 2004 was primarily due to increased investment in marketing initiatives, consulting expense, sales force expansion, and other professional fees. In addition, fiscal year 2004 SG&A expense included an estimated \$1.9 million

unfavorable impact of currency translation. Excluding the impact of currency translation, SG&A expense for fiscal year 2004 would have been an estimated \$70.1 million. SG&A expense decreased in fiscal year 2003 compared to fiscal year 2002, primarily due to \$0.8 million non-recurring audit and related fees in fiscal year 2002 and a bad debt recovery of \$0.5 million in fiscal year 2003, partially offset by an estimated \$1.9 million unfavorable impact of currency translation. Excluding the impact of currency translation, SG&A expense for fiscal year 2003 would have been an estimated \$60.8 million.

SG&A expense in the Industrial segment in fiscal year 2004 increased to \$18.0 million from \$15.9 million for fiscal year 2003 and \$14.1 million for fiscal year 2002. The increase in fiscal year 2004 from fiscal year 2003 was primarily due to an increase in selling expense, consistent with the increase in revenue in the Sensors business. Selling expense as a percentage of revenue was 18.1% for fiscal year 2004, relatively flat with 18.3% for fiscal year 2003. Fiscal year 2003 selling expense decreased from 19.7% in fiscal year 2002 due to the benefit of headcount reductions in fiscal year 2002. In addition, fiscal year 2004 SG&A expense included an estimated \$0.9 million unfavorable impact of currency translation. Excluding the impact of currency translation, SG&A expense for fiscal year 2004 would have been an estimated \$17.1 million.

Research and Development Expense

	2004	2003	2002
	(expressed in thousands)		
Research & Development	\$ 13,196	\$ 14,690	\$ 14,696
% of Revenue	3.6%	4.3%	4.5%

Research and development ("R&D") expense includes expenses for both equipment and software development in the Test and Industrial segments. During fiscal year 2004, approximately 78.4% of R&D spending was in the Test Segment, compared to 78.8% and 80.8%, respectively, in fiscal years 2003 and 2002.

The decrease in R&D spending as a percentage of revenue in fiscal year 2004 is primarily due to management initiatives to focus spending on enhancements of the Company's marketing capabilities as well as on R&D developments with the greatest market potential and the highest return opportunity. As a result of these initiatives, R&D spending as a percentage of revenue decreased to 3.6% in fiscal year 2004 compared to 4.3% and 4.5%, respectively, in fiscal years 2003 and 2002.

Interest Income (Expense)

	2004	2003	2002
	(expressed in thousands)		
Interest Expense	\$ (2,784)	\$ (3,621)	\$ (4,203)
Interest Income	\$ 1,854	\$ 2,169	\$ 1,201

Interest expense of \$2.8 million for fiscal year 2004 decreased compared to interest expense of \$3.6 million and \$4.2 million for fiscal years 2003 and 2002, respectively, primarily due to reduced long-term debt obligations throughout the three-year period. Interest income of \$1.9 million for fiscal year 2004 decreased compared to interest income of \$2.2 million for fiscal year 2003 and increased compared to \$1.2 million for fiscal year 2002. The decrease in fiscal year 2004 interest income from fiscal year 2003 reflects a shift to short-term, tax-exempt investments with lower tax-exempt interest rates, partially offset by a higher average balance in fiscal year 2004 compared to fiscal year 2003. The increase in fiscal year 2003 interest income from fiscal year 2002 resulted from an increase in the average balance of short-term investments in fiscal year 2003 compared to fiscal year 2002.

Gain on Sale of Investment

During fiscal year 2002 the Company liquidated its investment in Mechanical Dynamics, Inc. The Company sold securities and recorded proceeds of \$4.9 million from the sale, which produced a gain of \$2.6 million. This transaction represented the entire amount of the Company's equity investment holdings.

Other Income, net

Other income, net for fiscal years 2004, 2003, and 2002 was \$1.6 million, \$0.6 million, and \$1.6 million, respectively. Other income for fiscal year 2004 primarily consisted of foreign currency exchange gains on the settlement of transactions. Other income for fiscal year 2003 was primarily derived from non-recurring proceeds of \$1.3 million from penalties associated with a canceled customer contract, partially offset by the negative impact of foreign currency exchange losses on the settlement of transactions. Other income for fiscal year 2002 was primarily derived from the positive impact of foreign currency exchange gains on the settlement of transactions.

Operating Results

	2004	2003	2002
	(expressed in thousands except per share)		
Income Before Income Taxes, Discontinued Operations, and Cumulative Effect of Accounting Changes	\$ 45,821	\$ 32,297	\$ 32,533
% of Revenue	12.5%	9.5%	9.9%
Effective Income Tax Rate	36.7%	34.1%	31.5%
Income Before Discontinued Operations and Cumulative Effect of Accounting Changes	\$ 28,983	\$ 21,291	\$ 22,270
Income Before Discontinued Operations and Cumulative Effect of Accounting Changes per Diluted Share	\$ 1.35	\$ 1.00	\$ 1.04

Income before income taxes, discontinued operations, and cumulative effect of accounting changes totaled \$45.8 million for fiscal 2004, compared with \$32.3 million for fiscal year 2003, primarily driven by increased volume and favorable product mix and an estimated \$2.3 million favorable impact of currency translation. Excluding the impact of currency translation, income before income taxes, discontinued operations, and cumulative effect of accounting changes for fiscal year 2004 would have been an estimated \$43.5 million. Income before income taxes, discontinued operations and cumulative effect of accounting changes for fiscal year 2003 of \$32.3 million was relatively flat compared to \$32.5 million for fiscal year 2002. The increase in revenue and income from operations in fiscal year 2003 was more than offset by the one-time gain of \$2.6 million on sale of an investment recorded in fiscal year 2002.

Income from operations for the Test segment was \$38.1 million for fiscal year 2004, an increase of \$9.0 million compared to \$29.1 million for fiscal year 2003, primarily due to stronger revenue and a higher margin rate, partially offset by increased SG&A expense in fiscal year 2004 of \$9.3 million. Income from operations for fiscal year 2003 was flat compared to \$29.0 million for fiscal year 2002, primarily due to lower gross margin rates in fiscal year 2003, offset by reduced general and administrative expense in fiscal year 2003 of \$2.4 million. Income from operations for the Industrial segment increased to \$7.1 million for fiscal year 2004 from \$4.0 million for fiscal year 2003, primarily due to increased revenue and a higher margin rate. Income from operations for the Industrial segment totaled \$2.2 million for fiscal year 2002.

The effective tax rate for each of the years presented is impacted by the Company's geographic mix of income, with foreign income generally taxed at higher rates than domestic income. In addition, the effective tax rate is favorably impacted by the Company's foreign exports and qualified R&D expenses. A greater percentage of the Company's income was earned in higher tax jurisdictions in fiscal year 2004 compared to fiscal years 2003 and 2002.

Fiscal year 2004 income before discontinued operations and the cumulative effect of accounting changes, net of tax, increased to \$29.0 million, or \$1.35 per diluted share, from \$21.3 million, or \$1.00 per diluted share, and \$22.3 million, or \$1.04 per diluted share, for fiscal years 2003 and 2002, respectively.

Discontinued Operations

During the second and third quarters of fiscal year 2003, the Company sold its Automation division, which was based in New Ulm, Minnesota and also maintained operations in Montgomeryville, Pennsylvania and Freiburg and Straslund, Germany. On March 31, 2003, the Company sold substantially all of the net assets and intellectual property associated with the Automation division's gradient amplifier product line. On April 11, 2003, the Company sold all the remaining net assets of the North American Automation division, based in New Ulm, Minnesota and on April 30, 2003 sold, to the same buyer, its stock in the Automation division's German operations, which completed the sale of the Company's entire Automation division and its exit from the motor and amplifier business. In March 2003 the Company discontinued the custom military business of its Automation division. As a result of these sales, the Company recorded a loss of \$1.2 million, net of tax.

The Automation division was historically included in the Company's Industrial segment for financial reporting, and the results of the operations of the Automation division have been reported as discontinued operations.

Following are the operating results of the discontinued operations included in the Company's results for the respective fiscal years:

	2003	2002
	(expressed in thousands)	
Revenue	\$ 15,756	\$ 26,686
Income (loss) on discontinued operations before taxes, loss on sale and cumulative effect of accounting change	\$ 353	\$ (6,961)

At September 28, 2002, assets of discontinued operations consisted primarily of inventory, accounts receivable and property and equipment of \$6.6 million, \$4.7 million, and \$2.7 million, respectively, and liabilities of discontinued operations of \$1.8 million consisted primarily of accounts payable and accrued payroll and related costs.

Cash Flow

The increase in total cash for fiscal year 2004 of \$55.1 million compared to \$11.7 million increase in fiscal year 2003 was primarily due to conversion of short-term investments to cash and cash equivalents, reduction in long-term debt payments, proceeds received from the exercise of stock options, and improved earnings, partially offset by the fiscal year 2004 increase in share repurchases and dividend payments and significant prior year decrease in accounts receivable and inventory as compared to fiscal year 2004. Fiscal year 2002 cash increased \$45.1 million, primarily due to significant improvements in working capital, partially offset by purchases of short-term investments and long-term debt payments.

Cash flow from operating activities provided cash of \$45.9 million during fiscal year 2004, compared to \$55.3 million and \$84.3 million generated in fiscal years 2003 and 2002, respectively. Operating cash flow in fiscal year 2004 primarily resulted from strong earnings during the year and improvements in working capital of \$1.7 million. Fiscal year 2003 operating cash flow of \$55.3 million was primarily due to strong earnings and significant improvements in working capital of \$21.7 million. Fiscal year 2002 operating cash flow was principally derived from \$57.6 million in working capital improvements. The decrease in cash provided by operating activities during fiscal year 2004 was primarily due to significant improvements in accounts receivable and inventory in fiscal year 2003, totaling \$41.5 million, which more than offset increased advance payments from customers of \$7.7 million, accrued payments to vendors of \$7.6 million and improved earnings of \$8.7 million in fiscal year 2004. The decrease in cash provided by operating activities during fiscal year 2003 compared to fiscal year 2002 was principally due to significant improvements in accounts receivable and inventory made during fiscal year 2002, totaling \$25.7 million. During fiscal year 2002, the Company commenced a number of initiatives to reduce working capital. While these efforts continue, the rate of improvement in fiscal year 2004 has slowed relative to the significant improvements made in fiscal years 2003 and 2002.

Cash flow from investing activities provided cash of \$54.6 million during fiscal year 2004, compared to cash usage of \$17.4 million in fiscal year 2003 and \$35.3 million in fiscal year 2002. During fiscal year 2004, the Company received net proceeds of \$58.6 million and \$2.0 million from the conversion of short-term investments to cash and cash equivalents and sale of property and equipment, respectively, and invested \$5.9 million in property and equipment. During fiscal year 2003, the Company invested \$23.5 million in short-term investments, net of sale proceeds, and \$6.6 million in property and equipment, partially offset by \$12.6 million received from the sale of discontinued businesses. During fiscal year 2002, the Company invested \$35.1 million in short-term investments and \$5.1 million in property and equipment and realized proceeds of \$4.9 million from the sale of its investment in Mechanical Dynamics, Inc. stock.

Cash flow from financing activities represented a usage of cash of \$47.7 million, primarily the result of repurchases of the Company's common stock of \$44.3 million, net repayment of interest-bearing debt of \$6.7 million, and payment of cash dividends of \$6.6 million, partially offset by \$10.0 million received from employees' exercise of stock options and purchases under the Company's employee stock purchase plan. During fiscal year 2003, the Company used \$29.9 million of cash for financing activities, primarily for repurchases of the Company's common stock of \$16.5 million, repayment of interest-bearing debt of \$15.4 million, and payment of cash dividends of \$5.1 million, partially offset by \$7.0 million received in connection with employees' exercise of stock options and purchases under the Company's employee stock purchase plan. During fiscal year 2002, the Company used \$11.5 million of cash for financing activities, primarily for the net repayment of interest-bearing debt of \$7.0 million, payment of cash dividends of \$5.1 million, and repurchases of its common stock of \$1.5 million, partially offset by funds received in connection with employees' exercise of stock options and purchases under the Company's stock purchase plan.

Liquidity and Capital Resources

At October 2, 2004, the Company's capital structure was comprised of \$1.5 million in short-term debt, \$29.2 million in long-term debt and \$171.8 million in shareholders' investment. Total interest-bearing debt was \$30.7 million, down from \$37.7 million at September 27, 2003 due to scheduled amortization and early payment of long-term debt, partially offset by increased short-term debt offshore. Shareholders' investment decreased by \$4.3 million during fiscal year 2004, primarily the result of \$44.3 million in repurchases of the Company's common stock and \$5.3 million in payment of cash dividends. This decrease was partially offset by profitable operating results, employee purchases of the Company's stock under its stock purchase plans of \$9.3 million, funds and related tax benefits received from the exercise of employee stock options of \$11.9 million, and foreign currency translation gains of \$3.5 million.

The Company had cash and cash equivalents of \$129 million at October 2, 2004. Of this amount, approximately \$69 million was located in North America, \$43 million in Europe, and \$17 million in Asia. The North American balance was primarily invested in U.S. state and local municipal securities with original maturities less than 90 days not subject to federal taxation, as well as in taxable and tax-free money market funds. In Europe, the balances were primarily invested in Euro-denominated money market funds and bank deposits. In Asia, the balance was primarily invested in bank deposits.

The Company believes its cash and cash equivalents, anticipated funds from operations, and unused bank credit facilities are adequate to fund ongoing operations, capital expenditures, and share repurchases, as well as to fund opportunities to grow its business organically and through business acquisitions.

At October 2, 2004, the Company's contractual obligations were as follows:

Contractual Obligations	Total	Payments Due by Period (expressed in thousands)			
		Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Notes Payable	\$ 1,501	\$ 1,501	\$ -	\$ -	\$ -
Long-Term Debt Obligations	29,217	6,841	13,386	8,990	-
Capital Lease Obligations	175	66	93	16	-
Operating Lease Obligations	13,542	4,449	5,607	1,485	2,001
Other Long-Term Obligations	9,303	224	555	717	7,807
Total	\$ 53,738	\$ 13,081	\$ 19,641	\$ 11,208	\$ 9,808

The Company had no amounts outstanding on its primary \$25 million revolving bank credit facility during fiscal year 2004. The Company's primary foreign subsidiaries also have committed and uncommitted bank facilities available on either a freestanding basis or with guarantees from the Company. At October 2, 2004, the Company was in compliance with the financial terms and conditions of each of its debt and credit facility agreements. The Company's operating leases are primarily for office space related to sales and service offices.

Letters of credit and guarantees are primarily issued to secure advance payments received and performance on project contracts. At October 2, 2004, the Company had letters of credit outstanding totaling \$46.1 million and guarantees totaling \$9.1 million.

Changes in Foreign Currency Exchange Rates

The Company exports product outside the United States and often invoices customers in foreign currencies. The Company's international subsidiaries may also transact business in currencies other than their functional currencies. The operating results and financial position of the Company's international subsidiaries are reported on a consolidated basis in U.S. dollars. Thus, the Company has expected cash flows, assets and liabilities denominated in currencies other than the U.S. dollar or the functional currencies of its international subsidiaries. This exposes the Company to market risk related to the market value of foreign currencies versus the functional currencies of the subsidiaries. To mitigate this risk, the Company manages these non-functional currency exposures. The Company also enters into contracts with banks to exchange currencies at exchange rates set on future dates to offset gains or losses on specifically identified exposures.

Historically, approximately 50-60% of the Company's revenue results from shipments to customers outside the U.S., and about 65% of this revenue (approximately 35% of the Company's total revenue) is denominated in currencies other than the U.S. dollar. As a result, a strengthening of the U.S. dollar relative to foreign currencies decreases the foreign currency-denominated revenue and earnings when they are translated to U.S. dollars. Conversely, a weakening of the U.S. dollar has a favorable effect on revenue and earnings.

The gains and losses on foreign currency transactions are included in Other Income, net in the accompanying Consolidated Statements of Income. Mark-to-market gains and losses on transactions designated as exposures in the Company's currency hedging program, as well as on the translation of non-current assets and liabilities, are recorded within Accumulated Other Comprehensive Income on the Consolidated Balance Sheet.

Restructuring and Other Charges

In fiscal year 2004 the Company had no significant restructuring activities related to business consolidation. In fiscal year 2003, the Company had no significant restructuring activities related to business consolidation other than the discontinuation of its Automation division operations (see Note 2 to the Consolidated Financial Statements).

During fiscal year 2002, the Company consolidated its Electromechanical Testing division into its Minneapolis, Minnesota operations from Raleigh, North Carolina. The physical move of the business and the facility closure were completed during fiscal year 2002. As a result of this consolidation, the Company recorded a \$0.4 million charge for severance-related costs and a \$0.6 million charge to write down inventory. Substantially all of the severance costs were paid during fiscal year 2002. For the fiscal years ended September 27, 2003 and September 28, 2002, the reserve for restructuring was as follows:

Year	Beginning Balance	Provision	Write-off	Ending Balance
	(expressed in thousands)			
2002	\$ 221	\$ 1,019	\$ (1,219)	\$ 21
2003	21	-	(21)	-

Recent Accounting Pronouncements

In December 2003 the FASB issued revisions to SFAS No. 132, "Employers' Disclosures about Pensions and Other Postretirement Benefits." These revisions require changes to existing disclosures as well as new disclosures related to pension and other postretirement benefit plans. The annual disclosure requirements for the Company's foreign retirement plans have been incorporated in Note 8 to the Consolidated Financial Statements.

Emerging Issues Task Force ("EITF") Issue No. 03-01, "Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments," provides detailed criteria to evaluate whether to record a loss and addresses both qualitative and quantitative disclosures required for marketable equity and debt securities accounted for under FASB Statement No. 115, "Accounting for Certain Investments in Debt and Equity Securities." This impairment accounting guidance is effective for reporting periods beginning after June 15, 2004; the disclosure requirements are effective for fiscal years ending after December 15, 2003. EITF Issue No. 03-01 did not have an impact on the Company's disclosures.

Quarterly Financial Information

Revenue and operating results reported on a quarterly basis do not necessarily reflect changes in demand for the Company's products or its operating efficiency. Revenue and operating results in any quarter may be significantly affected by customer shipments and/or installation timing or the timing of the completion of one or more contracts where revenue is recognized upon shipment or customer acceptance rather than on the percentage-of-completion accounting method. The Company's use of the percentage-of-completion revenue recognition method for large, long-term projects generally has the effect of smoothing significant fluctuations from quarter to quarter. See Note 1 to the Consolidated Financial Statements for additional information on the Company's revenue recognition policy. Quarterly earnings also vary as a result of the use of estimates including, but not limited to, the rates used in recording federal, state, and foreign income tax expense. See Notes 1 and 6 to the Consolidated Financial Statements for additional information on the Company's use of estimates and income tax related matters, respectively.

Selected quarterly financial information for the fiscal years ended October 2, 2004 and September 27, 2003 is as follows:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
(expressed in thousands except per share data)					
2004					
Revenue	\$ 84,631	\$ 88,239	\$ 91,528	\$ 102,571	\$ 366,969
Gross profit	34,413	33,893	36,586	43,466	148,358
Income before income taxes and discontinued operations	11,533	9,633	10,609	14,046	45,821
Net income	\$ 7,577	\$ 6,541	\$ 6,628	\$ 8,237	\$ 28,983
Earnings per share					
Basic	\$ 0.37	\$ 0.30	\$ 0.32	\$ 0.41	\$ 1.40
Diluted	\$ 0.35	\$ 0.29	\$ 0.31	\$ 0.40	\$ 1.35
2003					
Revenue	\$ 84,439	\$ 93,236	\$ 79,312	\$ 83,100	\$ 340,087
Gross profit	31,050	33,106	30,528	31,720	126,404
Income before income taxes and discontinued operations	8,467	9,567	6,097	8,166	32,297
Income before discontinued operations	5,700	6,383	4,085	5,123	21,291
Discontinued Operations, net of tax	(203)	(2,419)	1,644	-	(978)
Net income	\$ 5,497	\$ 3,964	\$ 5,729	\$ 5,123	\$ 20,313
Earnings per share					
Basic					
Income before discontinued operations	\$ 0.27	\$ 0.30	\$ 0.20	\$ 0.24	\$ 1.01
Discontinued Operations, net of tax	(0.01)	(0.11)	0.07	-	(0.05)
Earnings per share	\$ 0.26	\$ 0.19	\$ 0.27	\$ 0.24	\$ 0.96
Diluted					
Income before discontinued operations	\$ 0.27	\$ 0.30	\$ 0.19	\$ 0.24	\$ 1.00
Discontinued Operations, net of tax	(0.01)	(0.12)	0.08	-	(0.05)
Earnings per share	\$ 0.26	\$ 0.18	\$ 0.27	\$ 0.24	\$ 0.95

Forward-Looking Statements

Statements included or incorporated by reference in this Management's Discussion and Analysis of Financial Condition and Results of Operations, elsewhere in this Form 10-K, in the Company's 2004 Annual Report to Shareholders, in the proxy statement for the annual meeting to be held in January 2005, and in the Company's press releases and oral statements made with the approval of an authorized executive officer, which are not historical or current facts are "forward-looking" statements, as defined in the Private Securities Litigation Reform Act of 1995, and are subject to certain risks and uncertainties that could cause actual results to differ materially from historical results and those presently anticipated or projected. The following important factors, among others, could affect the Company's actual results in the future and could cause the Company's actual financial performance to differ materially from that expressed in any forward-looking statements:

- (i) With regard to the Company's new product developments, there may be uncertainties currently unknown to the Company concerning the expected results. In addition, the Company may not be aware of the introduction of new products or product enhancements by its competitors.

- (ii) Possible significant volatility in backlog and/or quarterly operating results may result from the timing of individual large, fixed-price orders in connection with sales of Test segment systems.
- (iii) Order volumes and other operating considerations may be directly or indirectly impacted by economic conditions generally and/or in various geographic areas in which the Company operates. The Company derives significant revenue from the global ground vehicles and aerospace industries, and therefore is subject to economic cycles affecting these customers.
- (iv) Export controls based on U.S. initiatives and foreign policy, as well as import controls imposed by foreign governments, may cause delays in certain shipments or the rejection of orders by the Company. Such delays could create material fluctuations in quarterly operating results and could have a material adverse effect on results of operations. Local political conditions and/or currency restrictions may also affect foreign revenue.
- (v) Delays in realization of orders in backlog may occur due to technical difficulties, export licensing approval, or the customer's preparation of the installation site, any of which can affect the quarterly or annual period when backlog is recognized as revenue and could materially affect the results of any such period.
- (vi) The Company experiences competition on a worldwide basis. Customers may choose to purchase equipment from the Company or from its competitors. For certain of the Company's products, customers may contract with testing laboratories or construct their own testing equipment from commercially available components. Factors that may influence a customer's decision include price, service, and required level of technology.
- (vii) The Company operates internationally and thus is subject to foreign currency exchange rate changes, which can affect its results from operations and financial condition.
- (viii) The Company's short-term investments and borrowings carry floating interest rate risk. The Company has minimal earnings and cash flow exposure due to market risks on its long-term debt obligations as a result of the primarily fixed-rate nature of its debt.

The foregoing list is not exhaustive, and the Company disclaims any obligation to revise any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The Company is exposed to market risks from changes in foreign exchange and interest rates. Additional information relative to these risks is included in Management's Discussion and Analysis of Financial Condition and Results of Operations on page 22 and in Note 1 to the Consolidated Financial Statements included in Item 8 of this Form 10-K.

Foreign Currency Exchange Risk

The Company is directly exposed to the financial impact of market changes in currency exchange rates on orders, revenue, and net income, as well as on the translation of foreign currency-denominated assets and liabilities into U.S. dollars. This is in addition to the indirect impact of changes in currency exchange rates on interest rates and overall business activity.

Gains and losses from the settlement of foreign currency-denominated transactions are recorded within Other Income, net in the Consolidated Statements of Income included in Item 8 of this Form 10-K. Currency gains and losses on specifically identified and hedged transactions, as well as changes in the

translated value of long-term assets and liabilities denominated in foreign currency, are recorded within Accumulated Other Comprehensive Income on the Consolidated Balance Sheet.

The following table restates financial results utilizing currency exchange rates from the prior year to hypothetically estimate the impact of currency on the following financial items:

	2004	2003	2002
	(expressed in thousands)		
Increase (Decrease) from currency translation on:			
Orders	\$ 17,414	\$ 12,245	\$ (1,213)
Revenue	17,059	17,563	(765)
Net Income	1,448	1,073	(69)
Transaction gain (loss)			
included in "Other income, net"	\$ 1,138	\$ (740)	\$ 1,974

A weakening of the U.S. dollar relative to foreign currencies increases the value of foreign currency-denominated revenue and earnings translated into U.S. dollars. Conversely, strengthening of the U.S. dollar decreases the value of foreign currency-denominated revenue and earnings. During fiscal year 2004, the U.S. dollar was generally weaker against other major currencies, declining by approximately 15% against the Euro and 9% against the Japanese Yen. Gains and losses attributed to translating the financial statements for all non-U.S. subsidiaries are included in the currency translation adjustments recorded within Accumulated Other Comprehensive Income on the Consolidated Balance Sheet.

A hypothetical 10% appreciation in foreign currencies against the U.S. dollar, assuming all other variables were held constant, would have resulted in an increase in fiscal year 2004 revenue and asset balances of approximately \$14.4 million. A hypothetical 10% depreciation in foreign currencies against the U.S. dollar, assuming all other variables were held constant, would have resulted in a decrease in fiscal year 2003 revenue and asset balances of approximately \$14.4 million.

The Company regularly assesses its exposure to changes in market currency rates and employs certain practices to mitigate possible adverse effects of this risk. The Company utilizes forward currency forward exchange contracts to hedge the functional currency value of foreign currency-denominated transactions, assets and liabilities. See Note 1 to the Consolidated Financial Statements included in Item 8 of this Form 10-K.

Interest Rates

The Company is also directly exposed to changes in market interest rates on monetary assets and liabilities such as cash, short-term investments, and debt, as well as indirectly exposed to the impact of market interest rates on currency rates and overall business activity.

On floating-rate investments, increases and decreases in market interest rates will increase or decrease future interest income, respectively. On floating-rate debt, increases or decreases in market interest rates will increase or decrease future interest expense, respectively. On fixed-rate investments, increases or decreases in market interest rates do not impact future interest income but may decrease or increase the fair market value of the investment, respectively. For fixed-rate debt or other interest-bearing obligations, increases or decreases in market interest rates do not impact future interest expense, but may decrease or increase the fair market value of the debt, respectively.

At October 2, 2004, the Company had cash equivalent financial investments of \$129 million for which yield rates are reset every 1 to 49 days. A hypothetical increase or decrease of 100 basis points, or 1%, in market interest rates could increase or decrease interest income by \$1.29 million per annum. The Company had an insignificant amount of short-term debt outstanding at the end of fiscal year 2004 and therefore would not be materially impacted by increases or decreases in market interest rates on interest expense.

A discount rate of 5.5% and an expected rate of increase in future compensation levels of 3.1% were used in the calculation of the accrued pension liability related to one of the Company's international subsidiary's non-contributory, unfunded defined benefit retirement plan.

Item 8. Financial Statements and Supplementary Data

The Company's audited financial statements and notes thereto described in Item 15(1) of this report on Form 10-K and appearing on pages F-1 through F-22 of this report are incorporated by reference herein. See also "Quarterly Financial Data" appearing in Management's Discussion and Analysis under Item 7 of this 10-K, which is incorporated herein by reference.

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

None.

Item 9A. Controls and Procedures

The Company's management, including the Chief Executive Officer and Chief Financial Officer, have conducted an evaluation of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934 (the "1934 Act") as of October 2, 2004. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective in ensuring that information required to be disclosed by the Company in the reports it files or submits under the 1934 Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

There have been no changes in internal control over financial reporting during the fiscal quarter ended October 2, 2004 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors and Executive Officers of Registrant

The required information with respect to the directors of the Registrant, information regarding compliance with Section 16(a) of the Securities Exchange Act of 1934, and the Registrant's Code of Ethics is incorporated herein by reference to the information set forth under the headings "Election of Directors" and "General Section 16(a) Beneficial Ownership Reporting Compliance" in the Registrant's Proxy Statement for the Annual Meeting of Shareholders scheduled to be held on January 25, 2005. Information regarding the Company's executive officers is contained under Item 1 of this annual report.

Item 11. Executive Compensation

The information required by this Item is incorporated herein by reference to the information set forth under heading "Executive Compensation" (except as expressly set forth therein) in the Registrant's Proxy Statement for the Annual Meeting of Shareholders scheduled to be held on January 25, 2005.

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 the information set forth under headings "Security Ownership of Principal Shareholders and Management" and "Executive Equity

Compensation Plan Information" in the Registrant's Proxy Statement for the Annual Meeting of Shareholders scheduled to be held on January 25, 2005.

Item 13. Certain Relationships and Related Transactions

The information required by this Item is incorporated herein by reference to the information set forth under heading "Executive Compensation - Certain Transactions" in the Registrant's Proxy Statement for the Annual Meeting of Shareholders scheduled to be held on January 25, 2005.

Item 14. Principal Accountant Fees and Services

The information required by this Item is incorporated by reference to the information set forth under the heading "Approval of Auditors" in the Registrant's Proxy Statement for the Annual Meeting of Shareholders scheduled to be held on January 25, 2005.

PART IV

Item 15. Exhibits and Financial Statement Schedules

The following documents are filed as part of this report:

(1) Consolidated Financial Statements:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets – October 2, 2004
and September 27, 2003

Consolidated Statements of Income for the Years Ended
October 2, 2004, September 27, 2003, and September
28, 2002

Consolidated Statements of Shareholders' Investment for
the Years Ended October 2, 2004, September 27, 2003,
and September 28, 2002

Consolidated Statements of Cash Flows for the Years
Ended October 2, 2004, September 27, 2003, and
September 28, 2002

Notes to Consolidated Financial Statements

Financial Statement Schedule

(2) Financial Statement Schedules:

See accompanying Index to Financial Statements on page F-1.

(3) Exhibits:

Exhibit Number	Description
3.a	Restated and Amended Articles of Incorporation, incorporated herein by reference from Exhibit 3.a of the Registrant's Form 10-K for the fiscal year ended September 30, 1996.
3.b	Restated Bylaws, incorporated herein by reference from Exhibit 3.b of the Registrant's Form 10-K for the fiscal year ended September 27, 2003.
10.a	Proposed Executive Variable Compensation Plan, incorporated herein by reference to Exhibit 99.1 of the Registrant's Form 8-K filed on November 30, 2004.
10.b	1994 Stock Option Plan, as amended, incorporated herein by reference to Exhibit 10.e of the Registrant's Form 10-K filed for the fiscal year ended September 30, 1996.
10.c	1997 Stock Option Plan, as amended, incorporated herein by reference to Exhibit 10.p of the Registrant's Form 10-K filed for the fiscal year ended September 30, 1996 and Exhibit 10.p of the Registrant's Form 10-K filed for the fiscal year ended September 30, 1999.
10.d	2002 Employee Stock Purchase Plan, incorporated herein by reference to Exhibit 99.1 of the Registrant's Form S-8 filed on February 12, 2002.
10.e	Severance Agreement, dated March 16, 1998, between the Registrant and Sidney W. Emery, Jr., incorporated herein by reference to Exhibit 10.r of the Registrant's Form 10-K filed for the fiscal year ended September 30, 1998.
10.f	Severance Agreement dated January 3, 2000, between the Registrant and Kathleen M. Staby incorporated herein by reference to Exhibit 10.x of the Registrant's Form 10-K filed for the fiscal year ended September 30, 2000.
10.g	Change in Control Agreement, dated April 17, 2002, between the Registrant and Kathleen M. Staby incorporated herein by reference to Exhibit 10.i of the Registrant's Form 10-Q/A for the fiscal quarter ended June 30, 2002.
10.h	Change in Control Agreement, dated April 18, 2002, between the Registrant and Susan E. Knight incorporated herein by reference to Exhibit 10.k of the Registrant's Form 10-Q/A for the fiscal quarter ended June 30, 2002.
10.i	Change in Control Agreement, dated April 22, 2002, between the Registrant and Sidney W. Emery, Jr. incorporated herein by reference to Exhibit 10.l of the Registrant's Form 10-Q/A for the fiscal quarter ended June 30, 2002.
10.j	Change in Control Agreement, dated April 22, 2002, between the Registrant and Laura B. Hamilton incorporated herein by reference to Exhibit 10.m of the Registrant's Form 10-Q/A for the fiscal quarter ended June 30, 2002.

- 10.k Change in Control Agreement, dated June 1, 2002, between the Registrant and Donald G. Krantz incorporated herein by reference to Exhibit 10.p of the Registrant's Form 10-Q/A for the fiscal quarter ended June 30, 2002.
- 10.l Description of the terms of employment of Susan E. Knight, pursuant to an offer letter, incorporated by reference to Exhibit 10.r of the Registrant's Form 10-Q/A for the fiscal quarter ended December 31, 2001.
- 10.m Description of the terms of employment of Sidney W. Emery, pursuant to an offer letter dated March 3, 1998 incorporated by reference to Exhibit 10.s of the Registrant's Form 10-K for the fiscal year ended September 28, 2002.
- 10.n Change in Control Agreement, dated January 28, 2003, between the Registrant and Douglas E. Marinaro incorporated herein by reference to Exhibit 10.s of the Registrant's Form 10-K filed for the fiscal year ended September 27, 2003.
- 10.o Description of terms of employment of Douglas E. Marinaro, pursuant to an offer letter dated November 6, 2002 incorporated herein by reference to Exhibit 10.t of the Registrant's Form 10-K filed for the fiscal year ended September 27, 2003.
- 10.p Letter dated February 6, 1987 from MTS Sensor Technologie GmbH and Co. KG (formerly, Hellwig GmbH) regarding its pension commitment to Joachim Hellwig (Filed herewith).
- 10.q Employment Contract dated January 1, 1991 between MTS Sensor Technologie GmbH and Co. KG and Joachim Hellwig (Filed herewith).
- 21. Subsidiaries of the Registrant (Filed herewith).
- 23. Consent of Independent Registered Public Accounting Firm (Filed herewith).
- 31.1 Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Filed herewith).
- 31.2 Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Filed herewith).
- 32.1 Certification of the Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Filed herewith).
- 32.2 Certification of the Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Filed herewith).

SIGNATURES

Pursuant to the requirement 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.

MTS SYSTEMS CORPORATION

By: /s/ Sidney W. Emery, Jr.
Sidney W. Emery, Jr.
Chairman, Chief Executive Officer and President

Date: December 10, 2004

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 date indicated:

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Sidney W. Emery, Jr.</u> Sidney W. Emery, Jr.	Chairman, Chief Executive Officer and President	December 10, 2004
<u>/s/ Susan E. Knight</u> Susan E. Knight	Chief Financial Officer and Vice President	December 10, 2004
<u>/s/ Dugald K. Campbell</u> Dugald K. Campbell	Director	December 10, 2004
<u>/s/ Jean-Lou Chameau</u> Jean Lou Chameau	Director	December 10, 2004
<u>/s/ Merlin E. Dewing</u> Merlin E. Dewing	Director	December 10, 2004
<u>/s/ Brendan C. Hegarty</u> Brendan C. Hegarty	Director	December 10, 2004
<u>/s/ Barb J. Samardzich</u> Barb J. Samardzich	Director	December 10, 2004
<u>/s/ Linda Hall Whitman</u> Linda Hall Whitman	Director	December 10, 2004

MTS Systems Corporation and Subsidiaries

Index to Financial Statements

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Financial Statement Schedule

<u>Schedule</u>	<u>Description</u>	
II	Summary of Consolidated Allowances For Doubtful Accounts and Restructuring Reserves	S-1

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders MTS Systems Corporation:

We have audited the accompanying consolidated balance sheets of MTS Systems Corporation and subsidiaries as of October 2, 2004 and September 27, 2003 and the related consolidated statements of income, shareholders' investment and cash flows for each of the fiscal years in the three-year period ended October 2, 2004. In connection with our audits of the consolidated financial statements, we also have audited the financial statement schedule as listed in the accompanying index. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement 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 audits to obtain reasonable assurance about whether the consolidated 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of MTS Systems Corporation and subsidiaries as of October 2, 2004 and September 27, 2003 and the results of their operations and their cash flows for each of the fiscal years in the three-year period ended October 2, 2004, 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 consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/S/ KPMG LLP

Minneapolis, Minnesota,
November 17, 2004

Consolidated Balance Sheets

(October 2 and September 27, respectively)

Assets	2004	2003
	(expressed in thousands)	
Current Assets:		
Cash and cash equivalents	\$ 129,303	\$ 74,183
Short-term investments	-	58,560
Accounts receivable, net of allowance for doubtful accounts of \$1,235 and \$1,783, respectively	66,066	60,491
Unbilled accounts receivable	35,896	21,939
Inventories	37,736	34,709
Prepaid expenses	4,108	3,720
Current deferred tax assets	6,290	9,682
Other current assets	256	1,221
Total current assets	279,655	264,505
Property and Equipment:		
Land	2,478	3,247
Buildings and improvements	47,541	47,031
Machinery and equipment	87,265	84,834
Accumulated depreciation	(84,509)	(78,908)
Total property and equipment, net	52,775	56,204
Goodwill	4,447	4,383
Other assets	2,283	2,770
Non-current deferred tax assets	2,475	2,516
Total assets	\$ 341,635	\$ 330,378
Liabilities and Shareholders' Investment		
Current Liabilities:		
Notes payable	\$ 1,501	\$ 383
Current maturities of long-term debt	6,841	6,839
Accounts payable	15,675	10,483
Accrued payroll-related costs	31,966	25,589
Advance payments from customers	49,918	40,456
Accrued warranty costs	6,147	4,862
Accrued income taxes	3,857	5,571
Current deferred income taxes	7,101	-
Other accrued liabilities	13,887	14,991
Total current liabilities	136,893	109,174
Deferred income taxes	1,382	6,265
Long-term debt, less current maturities	22,376	30,487
Other long-term liabilities	9,188	8,346
Total liabilities	169,839	154,272
Shareholders' Investment:		
Common stock, 25¢ par value; 64,000 shares authorized: 19,652 and 20,720 shares issued and outstanding	4,913	5,180
Additional paid-in capital	-	1,534
Retained earnings	155,825	162,076
Accumulated other comprehensive income	11,058	7,316
Total shareholders' investment	171,796	176,106
Total liabilities and shareholders' investment	\$ 341,635	\$ 330,378

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Consolidated Statements of Income

(For the Years Ended October 2, September 27, and September 28, respectively)

	2004	2003	2002
	(expressed in thousands, except per share data)		
Revenue	\$ 366,969	\$ 340,087	\$ 327,185
Cost of Sales	218,611	213,683	202,157
Gross Profit	148,358	126,404	125,028
Operating Expenses:			
Selling	61,578	52,210	51,120
General and administrative	28,411	26,388	27,924
Research and development	13,196	14,690	14,696
Income From Operations	45,173	33,116	31,288
Interest expense	(2,784)	(3,621)	(4,203)
Interest income	1,854	2,169	1,201
Gain on sale of investment	-	-	2,630
Other income, net	1,578	633	1,617
Income Before Income Taxes, Discontinued Operations, and Cumulative Effect of Accounting Changes	45,821	32,297	32,533
Provision for Income Taxes	16,838	11,006	10,263
Income Before Discontinued Operations and Cumulative Effect of Accounting Changes	28,983	21,291	22,270
Discontinued Operations:			
Income (loss) from discontinued operations, net of tax	-	199	(4,267)
Loss on sale of discontinued businesses, net of tax	-	(1,177)	-
Cumulative effect of accounting change, net of tax	-	-	(9,198)
Loss from Discontinued Operations, net of tax	-	(978)	(13,465)
Income Before Cumulative Effect of Accounting Changes on Continuing Operations	28,983	20,313	8,805
Cumulative effect of accounting changes on continuing operations, net of tax	-	-	(4,523)
Net Income	\$ 28,983	\$ 20,313	\$ 4,282
Earnings Per Share			
Basic:			
Income Before Discontinued Operations and Cumulative Effect of Accounting Changes	\$ 1.40	\$ 1.01	\$ 1.06
Discontinued Operations:			
Income (loss) from discontinued operations, net of tax	-	0.01	(0.20)
Loss on sale of discontinued businesses, net of tax	-	(0.06)	-
Cumulative effect of accounting change, net of tax	-	-	(0.44)
Loss from Discontinued Operations, net of tax	-	(0.05)	(0.64)
Income Before Cumulative Effect of Accounting Changes on Continuing Operations	1.40	0.96	0.42
Cumulative effect of accounting changes on continuing operations, net of tax	-	-	(0.22)
Earnings Per Share	\$ 1.40	\$ 0.96	\$ 0.20
Diluted:			
Income Before Discontinued Operations and Cumulative Effect of Accounting Changes	1.35	1.00	1.04
Discontinued Operations:			
Income (loss) from discontinued operations, net of tax	-	0.01	(0.20)
Loss on sale of discontinued businesses, net of tax	-	(0.06)	-
Cumulative effect of accounting change, net of tax	-	-	(0.43)
Loss from Discontinued Operations, net of tax	-	(0.05)	(0.63)
Income Before Cumulative Effect of Accounting Changes on Continuing Operations	1.35	0.95	0.41
Cumulative effect of accounting changes on continuing operations, net of tax	-	-	(0.21)
Earnings Per Share	\$ 1.35	\$ 0.95	\$ 0.20

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Consolidated Statements of Shareholders' Investment

(For the Years Ended October 2, September 27, and September 28, respectively, expressed in thousands, except per share data)

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other	Total Shareholders' Investment
	Shares Issued	Amount			Comprehensive Income (Loss)	
Balance, September 30, 2001	21,044	\$ 5,261	\$ 9,040	\$ 147,635	\$ (1,198)	\$ 160,738
Net income	-	-	-	4,282	-	4,282
Foreign currency translation	-	-	-	-	1,419	1,419
Derivative instruments	-	-	-	-	(31)	(31)
Unrealized gain on investment, net of tax	-	-	-	-	146	146
Total comprehensive income	-	-	-	4,282	1,534	5,816
Exercise of stock options	214	54	1,364	-	-	1,418
Tax benefit from exercise of stock options	-	-	182	-	-	182
Issuance for employee stock purchase plan	96	24	677	-	-	701
Common stock repurchased and retired	(146)	(37)	(1,493)	-	-	(1,530)
Dividends, \$0.24 per share	-	-	-	(5,060)	-	(5,060)
Balance, September 28, 2002	21,208	5,302	9,770	146,857	336	162,265
Net income	-	-	-	20,313	-	20,313
Foreign currency translation	-	-	-	-	7,284	7,284
Derivative instruments	-	-	-	-	(304)	(304)
Total comprehensive income	-	-	-	20,313	6,980	27,293
Exercise of stock options	681	170	6,004	-	-	6,174
Tax benefit from exercise of stock options	-	-	1,127	-	-	1,127
Issuance for employee stock purchase plan	97	24	803	-	-	827
Common stock repurchased and retired	(1,266)	(316)	(16,170)	-	-	(16,486)
Dividends, \$0.24 per share	-	-	-	(5,094)	-	(5,094)
Balance, September 27, 2003	20,720	5,180	1,534	162,076	7,316	176,106
Net income	-	-	-	28,983	-	28,983
Foreign currency translation	-	-	-	-	3,520	3,520
Derivative instruments	-	-	-	-	222	222
Total comprehensive income	-	-	-	28,983	3,742	32,725
Exercise of stock options	851	213	9,123	-	-	9,336
Tax benefit from exercise of stock options	-	-	2,594	-	-	2,594
Issuance for employee stock purchase plan	47	12	634	-	-	646
Common stock repurchased and retired	(1,966)	(492)	(13,885)	(29,917)	-	(44,294)
Dividends, \$0.26 per share	-	-	-	(5,317)	-	(5,317)
Balance, October 2, 2004	19,652	\$ 4,913	\$ -	\$ 155,825	\$ 11,058	\$ 171,796

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Consolidated Statements of Cash Flows

(For the Years Ended October 2, September 27, and September 28, respectively)

	2004	2003	2002
	(expressed in thousands)		
Cash Flows from Operating Activities:			
Net income	\$ 28,983	\$ 20,313	\$ 4,282
Adjustments to reconcile net income to net cash provided by operating activities:			
Non-cash cumulative effect of accounting changes on continuing operations	-	-	4,523
Non-cash cumulative effect of accounting changes on discontinued operations	-	-	9,198
(Income) loss from discontinued operations	-	(199)	4,267
Loss on sale of discontinued businesses	-	1,177	-
Gain on sale of investment	-	-	(2,630)
Gain on sale of property and equipment	(363)	-	-
Depreciation and amortization	9,290	9,772	9,971
Deferred income taxes	5,233	2,354	(3,563)
Bad debt provision (benefit)	(343)	184	712
Changes in operating assets and liabilities, net of effects of businesses divested:			
Accounts, unbilled contracts, and retainage receivable	(16,758)	14,682	37,590
Inventories	(1,762)	8,335	11,104
Prepaid expenses	38	1,440	1,038
Other assets	1,234	(970)	2,023
Accounts payable	5,007	(2,576)	(796)
Accrued payroll-related costs	6,195	5,338	(12,170)
Advance payments from customers	7,879	154	4,976
Accrued warranty costs	1,180	185	113
Other current liabilities	70	(4,847)	13,702
Net Cash Provided by Operating Activities	45,883	55,342	84,340
Cash Flows from Investing Activities:			
Additions to property and equipment	(5,903)	(6,573)	(5,148)
Proceeds from sale of property and equipment	1,952	-	-
Proceeds from maturity of short-term investments	59,814	61,144	-
Proceeds from sale of short-term investments	-	-	4,920
Purchases of short-term investments	(1,254)	(84,610)	(35,094)
Net proceeds from sale of businesses	-	12,621	-
Net Cash Provided by (Used in) Investing Activities	54,609	(17,418)	(35,322)
Cash Flows from Financing Activities:			
Net (repayments) receipts under short-term borrowings	(374)	(264)	187
Proceeds received under notes payable	4,574	-	-
Payments of notes payable	(3,074)	-	-
Proceeds from issuance of long-term debt	-	-	589
Repayments of long-term debt	(7,866)	(15,093)	(7,822)
Cash dividends	(6,612)	(5,074)	(5,067)
Proceeds from exercise of stock options and employee stock purchase plan	9,982	7,001	2,119
Payments to purchase and retire common stock	(44,294)	(16,486)	(1,530)
Net Cash Used in Financing Activities	(47,664)	(29,916)	(11,524)
Net Cash Provided by Discontinued Operations	-	183	7,407
Effect of Exchange Rate Changes on Cash and Cash Equivalents	2,292	3,536	219
Cash and Cash Equivalents:			
Increase during the year	55,120	11,727	45,120
Balance, beginning of year	74,183	62,456	17,336
Balance, end of year	\$ 129,303	\$ 74,183	\$ 62,456
Supplemental Disclosures of Cash Flows:			
Cash paid during the year for:			
Interest	\$ 2,662	\$ 3,504	\$ 3,951
Income taxes	11,585	12,356	5,050

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements.

Notes to Consolidated Financial Statements

1. Summary of Significant Accounting Policies:

Fiscal Year

The Company's fiscal year ends on the Saturday closest to September 30. The Company's fiscal year ended October 2, 2004 consisted of 53 weeks. The Company's fiscal years ended September 27, 2003 and September 28, 2002 consisted of 52 weeks.

Consolidation

The Consolidated Financial Statements include the accounts of MTS Systems Corporation and its wholly and majority owned subsidiaries (the "Company"). Significant intercompany balances and transactions have been eliminated.

Revenue Recognition

Orders that are manufactured and delivered in less than six months with routine installations and no special acceptance protocol are considered to involve separable elements for revenue recognition purposes. Sufficient evidence of fair value of these elements exists to allow revenue recognition for these systems upon shipment, less the greater of the fair value associated with installation and training (if applicable) or the amount of revenue that is deemed contingent upon these elements, which is deferred until customer acceptance. In cases where special acceptance protocols exist, installation and training are not considered to be separable from the other elements of the arrangement. Accordingly, revenue for these systems is recognized upon the completion of installation and fulfillment of obligations specific to the terms of the arrangement.

Revenue on contracts requiring longer delivery periods, generally longer than six months (long-term contracts), is recognized using the percentage-of-completion method based on the cost incurred to date relative to estimated total cost of the contract. In most cases, orders with complex installations and/or unusual acceptance protocols involve long-term contracts for custom systems that follow the percentage-of-completion method of revenue recognition through customer acceptance. However, when elements that would not separately fall within the scope of accounting literature prescribing percentage-of-completion accounting are included in an arrangement, the fair value of these elements is separated from the arrangement and accounted for as such services are provided.

The Company enters into long-term contracts for customized equipment sold to its customers. Under the terms of such contracts, revenue recognized using the percentage-of-completion method may not, in certain circumstances, be invoiced until completion of contractual milestones, upon shipment of the equipment, or upon installation and acceptance by the customer. Unbilled amounts for these contracts appear in the Consolidated Balance Sheets as Unbilled Accounts Receivable.

Revenue for services is recognized as the service is performed and ratably over a defined contractual period for service maintenance contracts.

Research and Development

Research and development costs associated with new products are charged to operations as incurred.

Foreign Currency Translation

The financial position and results of operations of the Company's foreign subsidiaries are measured using local currency as the functional currency. Assets and liabilities are translated using period-end exchange rates, and statements of income are translated using average exchange rates for the fiscal year, with the resulting translation adjustments recorded as a separate component of shareholders' investment. The Company recorded gains on foreign currency translation in Comprehensive Income of \$3.5 million, \$7.3 million and \$1.4 million for fiscal years 2004, 2003 and 2002, respectively.

Cash Equivalents

Cash equivalents represent short-term, highly liquid investments maturing in three months or less at the time of purchase and are recorded at cost, which approximates fair value. Cash is invested in money market funds, tax-exempt securities issued by United States municipalities with high credit ratings, and

highly rated corporate obligations. Cash equivalents outside the United States are invested in local currency money market funds and bank deposits.

Short-Term Investments

The Company classifies its debt securities maturing in four to twelve months at the time of purchase as either held-to-maturity or available-for-sale investments. Held-to-maturity securities are carried at amortized cost, which approximates market value. All investments in available-for-sale securities are carried at fair value, and unrealized gains and losses are reported as a component of Accumulated Other Comprehensive Income. During fiscal year 2004, the Company converted all of its short-term investments to cash and cash equivalents. At September 27, 2003 the Company's held-to-maturity and available-for-sale investments totaled \$34.9 million and \$23.7 million, respectively. Held-to-maturity investments consisted of highly liquid United States government obligations, certificates of deposit, and highly rated corporate bonds with a carrying value of \$2.0 million, \$3.9 million, and \$29.0 million, respectively. Available-for-sale investments consisted entirely of United States government obligations. At October 2, 2004, there were no substantive unrealized gains or losses from the investment in held-to-maturity and available-for-sale securities, and the Company had no investments in equity securities.

Accounts Receivable and Long-Term Contracts

The Company grants credit to its customers but generally does not require collateral or other security from domestic customers. When deemed appropriate, receivables from customers located outside the United States are supported by letters of credit from financial institutions. The Company enters into long-term contracts for customized equipment sold to its customers. Under the terms of such contracts, revenue recognized using the percentage-of-completion method may be invoiced upon completion of contractual milestones, shipment to the customer, or installation and customer acceptance. Unbilled amounts relating to these contracts are reflected as Unbilled Accounts Receivable in the accompanying Consolidated Balance Sheets. Amounts unbilled at October 2, 2004 are expected to be invoiced during fiscal year 2005.

Inventories

Inventories consist of material, labor, and overhead costs and are stated at the lower of cost or market value, determined under the first-in, first-out accounting method. Inventories at October 2, 2004 and September 27, 2003 were as follows:

	2004	2003
	(expressed in thousands)	
Customer projects in various stages of completion	\$ 14,320	\$ 12,260
Components, assemblies and parts	23,416	22,449
Total	\$ 37,736	\$ 34,709

Property and Equipment

Property and equipment is stated at cost. Additions, replacements, and improvements are capitalized at cost, while maintenance and repairs are charged to operations as incurred. Depreciation is recorded over the following estimated useful lives of the property:

- Buildings and improvements: 10 to 40 years.
- Machinery and equipment: 3 to 15 years.

Building and equipment additions are generally depreciated on a straight-line basis for financial reporting purposes and on an accelerated basis for income tax reporting purposes.

The Company reviews the carrying value of long-lived assets when events or changes in circumstances such as market value, asset utilization, physical change, legal factors, or other matters indicate that the carrying value may not be recoverable. When this review indicates the carrying value of the asset or group of assets representing the lowest level of identifiable cash flows exceeds the sum of the expected

future cash flows (undiscounted and without interest charges), the Company recognizes an asset impairment charge against operations. The amount of the impairment loss is the amount by which the carrying value exceeds the fair value of the impaired asset or group of assets.

Goodwill

Goodwill represents the excess of acquisition costs over the fair value of the net assets of businesses acquired and is tested annually for impairment using a fair value approach. In July 2001 the Financial Accounting Standards Board ("FASB") issued two new statements, Statement of Financial Accounting Standard ("SFAS") No. 141, "Business Combinations," and SFAS No. 142, "Goodwill and Other Intangible Assets." See Note 3 to the Consolidated Financial Statements for additional information regarding the impact of the adoption of SFAS No. 141 and SFAS No. 142 in fiscal year 2002.

Other Assets

Other assets primarily consist of patents and other intellectual property. Other intangible assets are amortized on a straight-line basis over the expected period benefited by future cash inflows, up to 25 years. The Company periodically evaluates the recoverability of the carrying amount of other intangible assets when events or changes in circumstances indicate the carrying amount of an asset may not be fully recoverable. An impairment is assessed when the undiscounted expected future cash flows derived from an asset are less than its carrying amount. Impairment losses are measured as the amount by which the carrying value of an asset exceeds its fair value and are recognized in operating earnings. The Company also periodically evaluates the estimated useful lives of all intangible assets and periodically revises such estimates based on current events.

Warranty Obligations

Sales of the Company's products and systems are subject to limited warranty guarantees that are included in customer contracts. For sales that include installation services, warranty guarantees typically extend for a period of twelve months from the date of either shipment or acceptance. Product guarantees typically extend for a period of twenty-four months from the date of purchase. Under the terms of these warranties, the Company is obligated to repair or replace any components or assemblies it deems defective due to workmanship or materials. The Company reserves the right to reject warranty claims where it determines that failure is due to normal wear, customer modifications, improper maintenance, or misuse. The Company records warranty provisions monthly based on an estimated warranty expense percentage applied to current period revenue. The percentage applied reflects historical warranty incidence over the preceding twelve-month period. Both the experience percentage and the warranty liability are evaluated on an ongoing basis for adequacy. Warranty provisions and claims for the years ended October 2, 2004 and September 27, 2003 were as follows:

	2004	2003
	(expressed in thousands)	
Beginning balance	\$ 4,862	\$ 4,482
Warranty provisions	8,630	5,927
Warranty claims	(7,478)	(5,850)
Translation adjustment	133	303
Ending balance	\$ 6,147	\$ 4,862

Derivative Financial Instruments

The Company periodically enters into contracts with banks to exchange currencies at a set future date and rate to maintain the functional currency value of estimated cash flows from specifically identified foreign currency exposures. Because the market value of these contracts is derived from the current and expected exchange rate, these are classified as derivative financial instruments. The contracts are matched to the identified exposures and designated as foreign currency cash flow hedges. Subsequent changes in the market value of the contracts are recorded in Accumulated Other Comprehensive Income (Loss) on the Consolidated Balance Sheet until they are recognized in earnings at the time the forecasted transactions occur. The Company periodically assesses whether the contracts are effective in hedging the change in dollar value of the expected foreign currency exposures. When a contract is no longer effective as a hedge, the Company discontinues hedge accounting prospectively and reclassifies the unrealized gains or losses accumulated in Accumulated Other Comprehensive Income (Loss) to

Other Income, net on the income statement in the current period. Subsequent changes in the market value of the contract are recognized in current period earnings.

The Company also uses foreign currency forward exchange contracts to hedge the functional currency value of current assets and liabilities denominated in foreign currencies. The related gains and losses are included in Other Income, net on the income statement. The Company does not use foreign exchange contracts for speculative or trading purposes.

At October 2, 2004 and September 27, 2003, the Company had outstanding foreign currency forward exchange contracts with U.S. dollar notional equivalent amounts of \$39.1 million and \$21.0 million, respectively. At October 2, 2004 and September 27, 2003, the market value of the foreign currency forward exchange contracts was (\$0.2) million and (\$0.8) million, respectively. The amount recognized in earnings as a result of the ineffectiveness of cash flow hedges was not material for fiscal years 2004, 2003 and 2002. Approximately (\$0.2) million and (\$0.9) million was projected to be reclassified from Accumulated Other Comprehensive Income (Loss) into earnings in the next 12 months at October 2, 2004 and September 27, 2003, respectively. The maximum original maturity of any derivative was 1.75 years at October 2, 2004 and September 27, 2003.

Income Taxes

Deferred tax assets and liabilities are recognized for the expected future tax consequences attributed to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to reverse.

Earnings Per Share

Basic net earnings per share is computed by dividing net earnings by the weighted average number of common shares outstanding during the applicable periods. Diluted net earnings per share includes the potentially dilutive effect of common shares issued in connection with outstanding stock options using the treasury stock method. Options to acquire 0.2 million, 1.4 million, and 1.7 million weighted common shares have been excluded from the diluted weighted shares outstanding calculation for fiscal years 2004, 2003, and 2002, respectively, because the exercise price was more than the weighted average market value. The dilutive effect of common shares issued in connection with outstanding stock options is determined based on income before discontinued operations and cumulative effect of accounting changes. A reconciliation of these amounts is as follows:

	2004	2003	2002
	(expressed in thousands except per share data)		
Income before discontinued operations and cumulative effect of accounting changes	\$ 28,983	\$ 21,291	\$ 22,270
Loss from discontinued operations, net of tax	-	(978)	(13,465)
Income before cumulative effect of accounting changes on continuing operations	28,983	20,313	8,805
Cumulative effect of accounting changes on continuing operations, net of tax	-	-	(4,523)
Net income	\$ 28,983	\$ 20,313	\$ 4,282
Weighted average common shares outstanding	20,666	21,119	21,100
Dilutive potential common shares	798	355	333
Total dilutive common shares	21,464	21,474	21,433

Earnings per share:

Basic:

Income before discontinued operations and cumulative effect of accounting changes	\$	1.40	\$	1.01	\$	1.06
Loss from discontinued operations, net of tax		-		(0.05)		(0.64)
Income before cumulative effect of accounting changes on continuing operations		1.40		0.96		0.42
Cumulative effect of accounting changes on continuing operations, net of tax		-		-		(0.22)
Earnings per share	\$	1.40	\$	0.96	\$	0.20

Diluted:

Income before discontinued operations and cumulative effect of accounting changes	\$	1.35	\$	1.00	\$	1.04
Loss from discontinued operations, net of tax		-		(0.05)		(0.63)
Income before cumulative effect of accounting changes on continuing operations		1.35		0.95		0.41
Cumulative effect of accounting changes on continuing operations, net of tax		-		-		(0.21)
Earnings per share	\$	1.35	\$	0.95	\$	0.20

Stock-Based Compensation

The Company elects to follow Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees," in accounting for its employee stock-based compensation. Under APB 25, no compensation expense for stock-based compensation is recognized for shares granted at or above market value. Had the Company determined compensation cost based on the fair value at the grant date for stock options and the fair value of the discount related to the employee stock purchase plan under Statement of Financial Standards ("SFAS") No. 123, "Accounting for Stock Based Compensation," the Company's net income would have been reported as shown below:

	2004	2003	2002
Net Income	(expressed in thousands except per share data)		
As Reported	\$ 28,983	\$ 20,313	\$ 4,282
Deduct: fair value of employee stock-based compensation expense, net of tax	(3,497)	(2,589)	(2,268)
Pro Forma	\$ 25,486	\$ 17,724	\$ 2,014
Basic Earnings Per Share			
As Reported	\$ 1.40	\$ 0.96	\$ 0.20
Pro Forma	1.23	0.84	0.10
Diluted Earnings Per Share			
As Reported	\$ 1.35	\$ 0.95	\$ 0.20
Pro Forma	1.19	0.83	0.09

The estimated fair value of employee stock options granted at market price during fiscal years 2004, 2003, and 2002 averaged \$7.94, \$5.60, and \$3.66, respectively. The fair value of options granted under stock-based compensation has been estimated at the date of each grant using a Black-Scholes multiple option valuation model. The multiple option form of the model separately values each vesting increment of the stock grant. This application of the Black-Scholes model yields a lower valuation than other forms of the model but allocates proportionately more of the resulting cost to early vesting periods. In general, the fair value of a grant will increase or decrease based on certain assumptions summarized as follows:

	2004	2003	2002
Expected life (in years)	2.7	2.8	2.2
Risk-free interest rate	2.9%	1.6%	2.8%
Expected volatility	57.0%	65.5%	64.5%
Dividend yield	1.4%	1.7%	2.3%

Comprehensive Income (Loss)

Comprehensive Income (Loss) consists of net income, unrealized gains or losses on investments classified as available-for-sale, derivative instrument gains or losses, and foreign currency translation adjustments and is presented as a component of Shareholders' Investment. At October 2, 2004 the Company held no securities classified as available-for-sale. There were no substantive unrealized gains or losses from available-for-sale securities at September 27, 2003.

The accumulated balances for each component of Accumulated Other Comprehensive Income (Loss) were as follows:

	Derivative Financial Instrument Unrealized Gain (Loss)	Unrealized Gain (Loss) on Investments	Foreign Currency Translation Adjustment	Total Accumulated Other Comprehensive Income (Loss)
(expressed in thousands)				
Balances at September 30, 2001	\$ (29)	\$ (146)	\$ (1,023)	\$ (1,198)
Foreign exchange translation adjustments	-	-	1,419	1,419
Change in unrealized gain (loss), net of tax of \$0.4 million	583	-	-	583
Change in unrealized gain (loss), net of tax of \$1.1 million	-	1,750	-	1,750
Realized (gain) loss, net of tax of \$0.4 million	(614)	-	-	(614)
Realized (gain) loss, net of tax of \$1.0 million	-	(1,604)	-	(1,604)
Balances at September 28, 2002	\$ (60)	\$ -	\$ 396	\$ 336
Foreign exchange translation adjustments	-	-	7,284	7,284
Change in unrealized gain (loss), net of tax of (\$430)	(672)	-	-	(672)
Realized (gain) loss, net of tax of \$236	368	-	-	368
Balances at September 27, 2003	(364)	-	7,680	7,316
Foreign exchange translation adjustments	-	-	3,520	3,520
Change in unrealized gain (loss), net of tax of (\$279)	(436)	-	-	(436)
Realized (gain) loss, net of tax of \$421	658	-	-	658
Balances at October 2, 2004	\$ (142)	\$ -	\$ 11,200	\$ 11,058

Use of Estimates

The preparation of financial statements in accordance with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and reported amounts of revenue and expenses during the reporting period. Ultimate results could differ from those estimates. The Company frequently undertakes significant technological innovation on certain of its long-term contracts involving performance risk that may result in delayed delivery of product and/or revenue and gross profit variation due to changes in the estimate of the ultimate cost of such contracts.

Recent Accounting Pronouncements

In December 2003 the FASB issued revisions to SFAS No. 132, "Employers' Disclosures about Pensions and Other Postretirement Benefits." These revisions require changes to existing disclosures as well as new disclosures related to pension and other postretirement benefit plans. The annual disclosure requirements for the Company's foreign retirement plans have been incorporated in Note 8 to the Consolidated Financial Statements.

Emerging Issues Task Force ("EITF") Issue No. 03-01, "Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments," provides detailed criteria to evaluate whether to record a loss and addresses both qualitative and quantitative disclosures required for marketable equity and debt securities accounted for under FASB Statement No. 115, "Accounting for Certain Investments in Debt and Equity Securities." This impairment accounting guidance is effective for reporting periods beginning after June 15, 2004; the disclosure requirements are effective for fiscal years ending after December 15, 2003. EITF Issue No. 03-01 did not have a material impact on the Company's disclosures.

Reclassifications

Certain amounts included in the prior year Consolidated Financial Statements have been reclassified to conform to the current year presentation. These reclassifications had no effect on previously reported Shareholders' Investment or Net Income.

2. Discontinued Operations:

During the second and third quarters of fiscal year 2003, the Company sold its Automation division, which was based in New Ulm, Minnesota and also maintained operations in Montgomeryville, Pennsylvania and Freiburg and Straslund, Germany. On March 31, 2003, the Company sold substantially all of the net assets and intellectual property associated with the Automation division's gradient amplifier product line. On April 11, 2003, the Company sold all the remaining net assets of the North American Automation division, based in New Ulm, Minnesota and on April 30, 2003 sold, to the same buyer, its stock in the Automation division's German operations, which completed the sale of the Company's entire Automation division and its exit from the motor and amplifier business. In March 2003 the Company discontinued the custom military business of its Automation division. As a result of these sales, the Company recorded a loss of \$1.2 million, net of tax.

The Automation division was historically included in the Company's Industrial segment for financial reporting, and the results of the operations of the Automation division have been reported as discontinued operations.

Following are the operating results of the discontinued operations included in the Company's results for the respective periods:

	2003	2002
	(expressed in thousands)	
Revenue	\$ 15,756	\$ 26,686
Income (loss) on discontinued operations before taxes, loss on sale and cumulative effect of accounting change	\$ 353	\$ (6,961)

3. Goodwill and Other Intangible Assets:

Upon the Company's adoption of SFAS No. 141, "Business Combinations," and SFAS No. 142, "Goodwill and Other Intangible Assets," effective October 1, 2001, annual goodwill amortization of \$2.2 million ceased. Under SFAS No. 142, the Company assessed the recoverability of goodwill using a discounted cash flow methodology. An evaluation of the Automation division (reported as discontinued operations) and Vehicle Testing Systems reporting unit (included in the Company's Test segment) indicated that \$10.7 million and \$7.3 million of goodwill, respectively, was impaired. The performance in these acquired businesses did not meet management's original expectations due to ongoing weakness in the worldwide industrial manufacturing and ground vehicles markets. The Company's adoption of

SFAS No. 142 resulted in a non-cash transition charge to income in the first quarter of fiscal year 2002 of \$13.7 million, or (\$0.64) per diluted share, for impairment of goodwill, net of tax. The Company determined there was no impairment of its goodwill at October 2, 2004 or September 27, 2003. At both October 2, 2004 and September 27, 2003, \$2.9 million and \$1.5 million of goodwill was associated with the Test and Industrial segment, respectively. Goodwill activity, including activity associated with discontinued operations, for each of the fiscal years in the three-year period ending October 2, 2004 was:

Goodwill						
(expressed in thousands)						
Year	Beginning Balance	Amortization	Write-off	Translation	Ending Balance	
2002	\$ 22,545	\$ -	\$ (18,038)	\$ (239)	\$ 4,268	
2003	4,268	-	-	115	4,383	
2004	4,383	-	-	64	4,447	

Annual amortization of other intangible assets was \$0.5 million, \$1.1 million, and \$1.1 million in fiscal years 2004, 2003, and 2002, respectively. The anticipated amortization expense related to other intangible assets for the next five fiscal years is as follows:

	<u>Fiscal Year</u>				
	2005	2006	2007	2008	2009
	(expressed in thousands)				
Amortization of intangible assets	\$ 552	\$ 356	\$ 72	\$ 38	\$ -

4. Business Segment Information:

The Company's Chief Executive Officer and its management regularly review the available financial information for the Company's discrete business units. Based on similarities in economic characteristics, nature of products and services, production processes, type or class of customer served, method of distribution, and regulatory environments, the operating units have been aggregated for financial statement purposes into two reportable segments, Test and Industrial. The Test segment provides testing equipment, integrated software, and consulting services to the ground vehicles, aerospace, and infrastructure markets. The Industrial segment provides component solutions, such as position sensors, that automate machines and machine tools.

In evaluating each segment's performance, management focuses on income from operations. This measurement excludes interest income and expense, income taxes, and other non-operating items. Corporate expenses, including costs associated with various support functions such as human resources, information technology, finance and accounting, and general and administrative costs, are allocated to the reportable segments primarily on the basis of revenue.

Financial information by reportable segment for the fiscal years ended October 2, 2004, September 27, 2003, and September 28, 2002, was as follows:

	2004	2003	2002
	(expressed in thousands)		
Revenue by Segment			
Test	\$ 310,335	\$ 292,037	\$ 286,979
Industrial	56,634	48,050	40,206
Total Revenue	\$ 366,969	\$ 340,087	\$ 327,185
Income from Operations by Segment			
Test	\$ 38,031	\$ 29,079	\$ 29,041
Industrial	7,142	4,037	2,247
Total Income from Operations	\$ 45,173	\$ 33,116	\$ 31,288
Identifiable Assets by Segment			
Test	\$ 277,855	\$ 274,218	\$ 256,486
Industrial	63,780	56,160	53,774
Discontinued Operations	-	-	15,311
Total Assets	\$ 341,635	\$ 330,378	\$ 325,571
Other Segment Data			
Test:			
Capital expenditures	\$ 4,422	\$ 4,635	\$ 3,279
Depreciation and amortization	7,514	8,257	8,664
Industrial:			
Capital expenditures	\$ 1,481	\$ 1,938	\$ 1,869
Depreciation and amortization	1,776	1,515	1,307

Geographic information was as follows:

	2004	2003	2002
	(expressed in thousands)		
Revenue			
United States	\$ 141,026	\$ 146,607	\$ 145,982
Europe	112,931	119,382	92,269
Asia	95,587	60,506	76,584
Other	17,425	13,592	12,350
Total Revenue	\$ 366,969	\$ 340,087	\$ 327,185
Property and Equipment, Net			
United States	\$ 40,680	\$ 44,121	\$ 46,209
Europe	11,500	11,469	10,110
Asia	595	614	565
Other	-	-	-
Total Property and Equipment, Net	\$ 52,775	\$ 56,204	\$ 56,884

Revenue by geographic area is presented based on the customer's location. No country other than the United States has revenue in excess of 15% of the Company's total revenue. No single customer accounted for 10% or more of the Company's consolidated revenue for any of the periods presented.

5. Financing:

Information on short-term borrowings for the years ended October 2, 2004 and September 27, 2003 was as follows:

	2004	2003
	(expressed in thousands)	
Balance outstanding at year-end	\$ 1,501	\$ 383
Interest rate at year-end	1.4%	2.0%
Weighted-average interest rate during the year	0.9%	1.5%

The Company had no amounts outstanding on its \$25 million revolving bank credit facility during fiscal year 2004. The Company is required, among other restrictions, to maintain certain financial covenants under the \$25 million revolving bank facility. At October 2, 2004 the Company was in compliance with these financial covenants.

At October 2, 2004, the Company had letters of credit outstanding totaling \$46.1 million, primarily to bond customer advance payments and contract performance for projects in the Test segment.

Long-term debt at October 2, 2004 and September 27, 2003 was as follows:

	2004	2003
	(expressed in thousands)	
6.6% notes, unsecured, due in annual installments of \$4,375 beginning in July 2001	\$ 17,500	\$ 21,875
7.5% note, unsecured, due in semi-annual installments of \$1,153 beginning in July 2003	11,539	13,846
6.0% puttable note, unsecured, due in 2008	-	1,250
Other	178	355
Total Long-Term Indebtedness	\$ 29,217	\$ 37,326
Less Current Maturities of Long-Term Debt	(6,841)	(6,839)
Total Long-Term Debt	\$ 22,376	\$ 30,487

Aggregate annual maturities of long-term debt for the next five fiscal years are as follows:

Year	Maturity
	(expressed in thousands)
2005	\$ 6,841
2006	6,703
2007	6,683
2008	6,683
2009	2,307
	<u>\$ 29,217</u>

The Company prepaid the 6.0% puttable note in the fourth quarter of fiscal year 2004. The 6.6% and 7.5% notes have pre-payment penalties that make early payment economically disadvantageous to the Company based on current market interest rates. The Company estimates the fair market value of its long-term debt portfolio exceeds carrying value by \$2.0 million at October 2, 2004 due to lower market interest rates relative to interest rates at the time of issuance.

The Company is subject to financial covenants, among other restrictions, under the 6.6% and 7.5% notes. At October 2, 2004, the Company was in compliance with these financial covenants. Under these covenants the Company is required, among other matters, to maintain certain financial ratios and to meet certain indebtedness and restricted payment tests. Subsequent to October 2, 2004 the Company reached an agreement with the holders of the notes, reducing the minimum net worth requirement to provide the Company additional capacity for dividend payments and share repurchases.

6. Income Taxes:

The components of income before income taxes for the fiscal years ended October 2, 2004, September 27, 2003, and September 28, 2002 were as follows:

	2004	2003	2002
	(expressed in thousands)		
Income before income taxes, discontinued operations, and cumulative effect of accounting changes:			
Domestic	\$ 23,669	\$ 16,024	\$ 25,698
Foreign	22,152	16,273	6,835
Total	\$ 45,821	\$ 32,297	\$ 32,533

The provision for income taxes from continuing operations before cumulative effect of accounting changes for the fiscal years ended October 2, 2004, September 27, 2003, and September 28, 2002 was as follows:

	2004	2003	2002
	(expressed in thousands)		
Current provision (benefit):			
Federal	\$ 3,645	\$ 6,054	\$ 6,921
State	812	575	280
Foreign	7,238	2,850	3,542
Deferred	5,143	1,527	(480)
Total provision	\$ 16,838	\$ 11,006	\$ 10,263

A reconciliation from the federal statutory income tax rate to the Company's effective income tax rate for continuing operations before cumulative effect of accounting changes for the fiscal years ended October 2, 2004, September 27, 2003, and September 28, 2002, is as follows:

	2004	2003	2002
Statutory income tax rate	35%	35%	35%
Tax benefit of export sales	(3)	(4)	(6)
Foreign provision in excess of U.S. tax rate	3	4	4
State income taxes, net of federal benefit	1	1	2
Research and development tax credits	(1)	(3)	(4)
Meals and entertainment and other permanent items	2	1	1
Effective income tax rate	37%	34%	32%

A summary of the deferred tax assets and liabilities for the fiscal years ended October 2, 2004, September 27, 2003, and September 28, 2002, is as follows:

	2004	2003	2002
	(expressed in thousands)		
Deferred Tax Asset:			
Accrued compensation and benefits	\$ 3,435	\$ 3,345	\$ 3,621
Inventory reserves	3,139	3,650	5,305
Intangible assets	2,808	2,718	3,292
Allowance for doubtful accounts	159	367	371
Other assets	315	41	(87)
Net operating loss carryovers	980	1,343	-
Unrealized derivative instrument losses	91	233	-
Capital loss carryovers	588	608	-

Research and development and foreign tax credits	2,999	6,008	4,671
Less valuation allowance	(588)	(723)	-
Total Deferred Tax Asset	\$ 13,926	\$ 17,590	\$ 17,173
Deferred Tax Liability:			
Property and equipment	\$ 6,499	\$ 6,949	\$ 8,360
Foreign deferred revenue and other	7,145	4,708	-
Total Deferred Tax Liability	\$ 13,644	\$ 11,657	\$ 8,360
Net Deferred Tax Asset	\$ 282	\$ 5,933	\$ 8,813

At October 2, 2004 the Company had research and development credit carryovers for federal and state purposes of approximately \$1.5 million. These credits will expire between the years 2014 and 2019 if not used. The Company also had foreign tax credit carryovers of approximately \$1.5 million that, if not used, will expire between the years 2005 and 2007. The Company's French subsidiary has a \$2.6 million net operating loss carryover that will not expire under French law.

At September 27, 2003 and September 28, 2002, the amount of the research and development credit carryovers for federal and state purposes was \$4.8 million and \$4.0 million, respectively. The amount of the foreign tax credit carryover was \$1.2 million and \$0.6 million, respectively. Additionally, a \$1.1 million net operating loss carryforward subject to an annual Internal Revenue Code Section 382 limitation was fully utilized during the fiscal year ended September 28, 2002.

At September 27, 2003 the Company determined that it was more likely than not that it would be unable to realize the benefit of its Italian net operating loss carryforward of approximately \$0.4 million. Accordingly, the Company recorded a full valuation allowance against the net operating loss and did not recognize any benefit associated with that asset. During the year ended October 2, 2004, the Company determined the net operating loss will be fully utilized and therefore reversed the valuation allowance. The net change to the valuation allowance was \$0.1 million.

The Company has assessed its taxable earnings history and prospective future taxable income. Based upon this assessment, the Company has determined that it is more likely than not that its net deferred tax assets will be realized in future periods. The Company has also determined that it is not more likely than not that the Company will be able to utilize its \$1.6 million U.S. capital loss carryover. Accordingly, the Company recorded a valuation allowance against the full amount of the U.S. capital loss carryover, which expires in fiscal year 2008.

According to APB 23, "Accounting for Income Taxes – Special Areas," U.S. income taxes are not provided on undistributed earnings of international subsidiaries that are permanently reinvested. At October 2, 2004 undistributed earnings permanently reinvested in international subsidiaries were approximately \$71 million. The Company has not provided U.S. income taxes on these earnings. If these earnings were repatriated, the associated U.S. income taxes would be substantially offset by foreign tax credits.

In fiscal years 2004, 2003, and 2002, the Company recognized tax benefits of \$2.6 million, \$1.1 million, and \$0.2 million, respectively, relating to the Company's stock option plan. These benefits were directly allocated to Additional Paid-in Capital within Shareholders' Investment. Additionally, the deferred tax asset related to the Company's unrealized loss associated with derivative instruments is directly allocated to Accumulated Other Comprehensive Income within Shareholders' Investment.

7. Stock Plans:

The Company compensates officers, non-employee directors, and key employees with stock-based compensation under two stock plans approved by the Company's shareholders in 1994 and 1997, administered under the supervision of the Board of Directors. During the fiscal year ended October 2, 2004, the Company awarded incentive stock options and non-qualified stock options under these plans. Stock option awards are granted at exercise prices equal to the closing market value on the date of

grant. Generally, options vest proportionally over three years, beginning one year after grant date, and expire five years from the grant date. A status of the Company's stock option plans is summarized below (in thousands, except per share amounts):

	2004		2003		2002	
	Shares	WAEP*	Shares	WAEP*	Shares	WAEP*
Options outstanding at beginning of year	2,527	\$ 11.86	3,064	\$ 11.29	3,123	\$ 11.14
Granted	611	\$ 22.39	699	\$ 14.30	728	\$ 10.50
Exercised	(851)	\$ 10.92	(681)	\$ 9.44	(214)	\$ 6.57
Forfeited or expired	(58)	\$ 13.31	(555)	\$ 14.76	(573)	\$ 11.27
Options outstanding at end of year	2,229	\$ 15.07	2,527	\$ 11.86	3,064	\$ 11.29
Options subject to exercise at year-end	913	\$ 12.22	1,084	\$ 10.51	1,726	\$ 11.93

*Weighted Average Exercise Price

The following summarizes information concerning stock options outstanding at October 2, 2004 (in thousands, except per share amounts):

Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Subject to Exercise	Weighted Average Exercise Price
\$6.37-\$10.30	184	0.98	\$ 7.75	171	\$ 7.57
\$10.31-\$12.60	449	2.74	\$ 10.64	245	\$ 10.66
\$12.61-\$14.55	499	1.80	\$ 13.07	321	\$ 13.01
\$14.56-\$21.48	500	3.68	\$ 14.91	128	\$ 14.81
\$21.49-\$24.50	597	4.64	\$ 22.46	48	\$ 24.48
Total	2,229	3.10	\$ 15.07	913	\$ 12.22

At October 2, 2004, a total of 1,068,120 shares were available for future grant under the two stock plans.

In fiscal year 2002, the Company's shareholders authorized a new Employee Stock Purchase Plan, whereby 750,000 shares of the Company's common stock were reserved for purchase by employees. At October 2, 2004, 605,699 shares remained reserved for issuance. Purchases are funded by payroll deduction over six-month periods. The final purchase price is 85% of the lower of the market price at either the beginning or end of the period. The shares are required to be held by the employee for at least one year subsequent to the purchase. Two purchase periods closed in fiscal year 2004 with the issuance of 47,000 shares at an average price of \$13.71 per share. Approximately 97,000 shares were issued under this plan in fiscal year 2003. Approximately 96,000 shares were issued in 2002 under an employee stock purchase plan that terminated in fiscal year 2002.

The Company awarded two officers with restricted stock grants totaling 12,000 shares with an aggregate grant date fair value of \$0.1 million in fiscal year 2003. The grants vest over three years. No restricted stock grants were awarded in fiscal year 2004.

See Note 1 to the Consolidated Financial Statements for information regarding stock-based compensation.

8. Employee Benefit Plans:

The Company offers a retirement plan that has two components -- a 401(k) component with a Company match and a fiscal year Company contribution.

The 401(k) component of the retirement plan allows eligible U.S. employees to contribute a portion of their pre-tax income to the plan each pay period. The Company matches 50% of employees' pre-tax contributions up to 6% of compensation, subject to limitations imposed by federal law. In fiscal year 2002, the Company match was limited to \$500 per employee. Employees are immediately vested in their voluntary contributions and Company match. The Company's matching contribution was \$1.9 million,

\$1.8 million, and \$0.6 million in fiscal years 2004, 2003, and 2002, respectively. Employees may also contribute a percentage of their salary to the plan on an after-tax basis.

The Company also provides an annual fiscal year contribution to the retirement plan for eligible U.S. and certain international employees. Employees who have been paid for 1,000 hours or more of service during a plan year are eligible for a fiscal year contribution. After three years as a participant, employees have a vested interest equal to one-third of the total Company contributions. The vested interest increases each additional year by one-third of the total balance until total vesting is reached after five years of participation. The plan provides for a minimum fiscal year contribution of 3% of participant compensation below the Social Security taxable wage base and 6% of participant compensation in excess of the Social Security taxable wage base, up to the maximum contribution allowed by federal law. In fiscal year 2002, the Company contributions were 4% of participant compensation below the Social Security taxable wage base and 8% of participant compensation in excess of the Social Security taxable wage base. The Company's Board of Directors approves any changes to the contribution levels under the plan. The Company's contributions under the Company contribution plan totaled \$2.8 million, \$2.7 million, and \$4.2 million in fiscal years 2004, 2003, and 2002, respectively.

One of the Company's international subsidiaries has a non-contributory, unfunded defined benefit retirement plan for eligible employees. This plan provides benefits based on the employee's years of service and compensation during the years immediately preceding retirement, early retirement, termination, disability, or death, as defined in the plan. The Company uses a September 30 measurement date for this defined benefit retirement plan.

The cost for the plan included the following components:

	2004	2003	2002
	(expressed in thousands)		
Service cost-benefit earned during the period	\$ 307	\$ 237	\$ 183
Interest cost on projected benefit obligation	425	361	278
Net amortization and deferral	20	17	15
Net Periodic Retirement Cost	\$ 752	\$ 615	\$ 476

The following summarizes the change in benefit obligation and the change in plan assets:

	2004	2003
	(expressed in thousands)	
Change in benefit obligation:		
Projected benefit obligation, beginning of year	\$ 7,413	\$ 5,482
Service cost	307	237
Interest cost	425	361
Translation change	601	1,016
Actuarial (gain) loss	(127)	393
Benefits paid	(187)	(76)
Projected benefit obligation, end of year	\$ 8,432	\$ 7,413
Change in plan assets:		
Fair value of plan assets, beginning of year	\$ -	\$ -
Actual return on plan assets	-	-
Employer contributions	187	76
Benefits paid	(187)	(76)
Fair value of plan assets, end of year	\$ -	\$ -

The funded status of the Company's defined benefit retirement plan at October 2, 2004 and September 27, 2003 was as follows:

	2004	2003
	(expressed in thousands)	
Funded status	\$ (8,432)	\$ (7,413)
Unrecognized net gain	664	736
Unrecognized net liability being amortized	66	73
Required adjustment to recognize minimum liability	-	6
Accrued Pension Liability	\$ (7,702)	\$ (6,598)
Major assumptions used in the above calculation include:		
Discount rate	5.5%	5.5%
Expected rate of increase in future compensation levels	3.1%	3.1%

Information regarding the Company's defined benefit retirement plan at October 2, 2004 and September 27, 2003 was as follows:

	2004	2003
	(expressed in thousands)	
Projected benefit obligation	\$ 8,432	\$ 7,413
Accumulated benefit obligation	7,522	6,595
Fair value of plan assets	-	-

The Company expects to contribute approximately \$0.2 million to its defined benefit retirement plan in fiscal year 2005. The future pension benefit payments, which reflect expected future service, are as follows:

Year	Pension Benefits
	(expressed in thousands)
2005	\$ 224
2006	266
2007	289
2008	329
2009	388
2010 through 2014	2,695
	<u>\$ 4,191</u>

9. Restructuring and Other Charges:

In fiscal year 2004 the Company had no significant restructuring activities related to business consolidation. In fiscal year 2003, the Company had no significant restructuring activities related to business consolidation other than the discontinuation of its Automation division operations (see Note 2 to the Consolidated Financial Statements).

During fiscal year 2002, the Company consolidated its Electromechanical Testing division into its Minneapolis, Minnesota operations from Raleigh, North Carolina. The physical move of the business and the facility closure were completed during fiscal year 2002. As a result of this consolidation, the Company recorded a \$0.4 million charge for severance-related costs and a \$0.6 million charge to write down inventory. Substantially all of the severance costs were paid during fiscal year 2002. For the fiscal years ended September 27, 2003 and September 28, 2002, the reserve for restructuring was as follows:

Year	Beginning Balance	Provision	Write-off	Ending Balance
(expressed in thousands)				
2002	\$ 221	\$ 1,019	\$ (1,219)	\$ 21
2003	21	-	(21)	-

10. Commitments and Contingencies:

Litigation: The Company is a party to various claims, legal actions, and complaints arising in the ordinary course of business. In the opinion of management, final resolution of these matters will not have a material adverse effect on the consolidated financial position or results of operations of the Company.

Leases: Total lease expense associated with continuing operations was \$5.0 million, \$5.3 million, and \$5.6 million in fiscal years 2004, 2003, and 2002, respectively. The Company has non-cancelable operating lease commitments for equipment and facilities that expire on various dates through 2052. Minimum annual rental commitments for the next five fiscal years and thereafter are as follows:

Year	Payments
(expressed in thousands)	
2005	\$ 4,449
2006	3,451
2007	2,156
2008	702
2009	783
Thereafter	2,001
	<u>\$ 13,542</u>

MTS SYSTEMS CORPORATION AND SUBSIDIARIES
SCHEDULE II - SUMMARY OF CONSOLIDATED ALLOWANCES
FOR DOUBTFUL ACCOUNTS AND RESTRUCTURING RESERVES
FOR THE YEARS ENDED OCTOBER 2, 2004, SEPTEMBER 27, 2003
AND SEPTEMBER 28, 2002

(expressed in thousands)

	<u>Balance Beginning of Year</u>	<u>Provisions (Benefit)</u>	<u>Amounts Written-Off/ Payments</u>	<u>Balance End of Year</u>
<u>Allowance for Doubtful Accounts:</u>				
2004	\$1,783	\$ (343)	\$ (205)	\$1,235
2003	2,432	184	(833)	1,783
2002	2,525	712	(805)	2,432
 <u>Restructuring Reserves:</u>				
2004	\$ -	\$ -	\$ -	\$ -
2003	21	-	(21)	-
2002	221	1,019	(1,219)	21

Corporate Information

Board of Directors

Sidney W. Emery, Jr.
Chairman and
Chief Executive Officer
MTS Systems Corporation

Dugald K. Campbell
Retired President and CEO,
Tower Automotive, Inc.

Jean-Lou Chameau
Provost, Vice President
Georgia Institute of Technology

Merlin E. Dewing
Chairman and Founder
Dewing Financial Services, Inc.

Brendan C. Hegarty
Consultant
Former Chief Executive Officer
NanoMagnetics

Barb J. Samardzich
Executive Director
Small FWD and RWD Vehicles
Ford Motor Company

Linda Hall Whitman
Chief Executive Officer
MinuteClinic, Inc.

Notice of Annual Meeting

The annual meeting of shareholders will be held at 5:00 p.m. (Central Standard Time) on Tuesday, January 25, 2005 at the Company's headquarters in Eden Prairie, Minnesota. Shareholders who cannot attend the meeting are urged to exercise their right to vote by proxy.

Common Stock

MTS Systems Corporation's common stock publicly trades on The Nasdaq Stock Market's National Market under the symbol "MTSC."

Executive Management

Sidney W. Emery, Jr.
Chairman and
Chief Executive Officer

Laura B. Hamilton
Senior Vice President
Test

Joachim Hellwig
Vice President
Sensors

Susan E. Knight
Vice President
Chief Financial Officer

Douglas E. Marinaro
Vice President
Software and Consulting Services

Kathleen M. Staby
Vice President
Human Resources

Corporate Officers

John R. Houston
Corporate Secretary
Partner, Robins, Kaplan,
Miller & Ciresi LLP

Paul T. Runice
Treasurer

Barbara J. Carpenter
Assistant Corporate Secretary

Investor Relations

Paul T. Runice
Treasurer
MTS Systems Corporation
14000 Technology Drive
Eden Prairie, Minnesota
55344-2290
Telephone: 952-937-4003
Email: paul.runice@mts.com

Dividend Reinvestment Plan

Shareholders can invest MTS Systems dividends in additional shares of MTS stock and make periodic cash investments toward the purchase of MTS stock. Shareholders may obtain a brochure giving further details by calling Wells Fargo Shareholder Services at 800-468-9716.

Trademarks

MTS and Temposonics are registered trademarks and Aero Pro, RoadWheel, and Sound Camera are trademarks of MTS Systems Corporation. LabVIEW is a registered trademark of National Instruments Corporation.

Corporate Headquarters

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North American Subsidiaries

AeroMet Corporation
MTS Testing Systems (Canada) Ltd.

European Subsidiaries

MTS Automotive Sensors GmbH
MTS Holdings France, SARL
MTS International Ltd.
MTS Powertrain Technology Ltd.
MTS Sensor Technologie und
Verwaltungs-GmbH
MTS Sensor Technologie
GmbH and Co. KG
MTS Systems SAS
MTS Systems GmbH
MTS Systems Ltd.
MTS Systems Norden AB
MTS Systems srl

Asian Subsidiaries

MTS (Japan) Ltd.
MTS Korea, Inc.
MTS Sensors Technology K.K.
MTS Systems (China), Inc.
MTS Systems (Hong Kong), Inc.



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