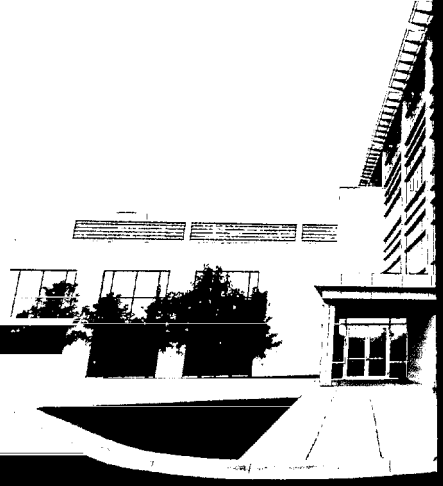
Cabot Microelectronics

2004 Annual Report

Shaping the Surface of Tomorrow

IGHLIGHTS



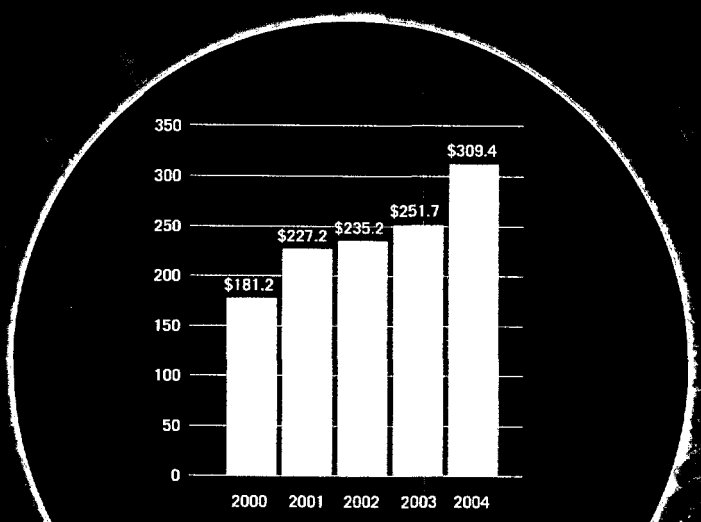
(amounts in millions, except for EPS and ROIC)

SELECTED INCOME STATEMENT DATA:	2004	2003	Increase
evenue	$309.4	$251.7	23%
erating Income	$69.7	$56.1	24%
t Income	$46.7	$37.7	24%
luted Earnings Per Share (EPS)	$1.88	$1.53	23%
l Assets	$363.3	$315.6	15%
ockholders' Equity	$315.6	$271.8	16%
sh Balance	$157.3	$111.3	41%
ur Year Return On Invested Capital (ROIC)	27%	24%	17%

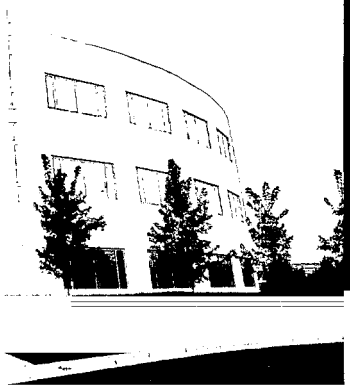
Cabot Microelectronics Corporation is the world's leading supplier of polishing slurries used in a process called Chemical Mechanical Planarization, or CMP, to polish various materials used in semiconductor manufacturing processes. Our products play a critical role in the production of the most advanced semiconductor devices, enabling the manufacture of smaller, faster and more complex devices by our customers.

Customers use our CMP solutions to polish advanced multi-layered integrated circuits (IC's) and data storage components to a planar, defect-free finish. As the pioneer and leader in the CMP slurry arena, our products enable customers to produce high-performance memory, logic and data storage devices with higher product yields, improved product performance, increased manufacturing throughput, and lower overall production costs.

FINANCIAL



REVENUE, $ million



2004 Annual Report

Cabot Microelectronics

EVOLVING WITH A GROWING AND CHANGING INDUSTRY

Consumers worldwide continue to demand products that are faster, smaller and more complex. The proliferation of electronic wireless and digital devices has resulted in rising global semiconductor demand and functionality. We believe these trends will increase the demand for CMP to enable the production of smaller, faster and better functioning semiconductor devices.

TECHNOLOGY LEADERSHIP

Through close partnerships with our customers, our team of world-class scientists and engineers is able to develop the customized solutions required to address our customers' needs for next generation technologies. Our strong balance sheet enables a commitment to R & D investment that we believe is unrivaled in our industry. We believe we are the only company today that is able to offer solutions for all CMP applications and technology nodes.

OPERATIONS EXCELLENCE

Our focus on operations excellence, including our recent company-wide implementation of Six Sigma, will enable us to continue to meet the ever higher quality, consistency and yield requirements of our customers, while also allowing us to improve our productivity and help identify opportunities for cost improvement.

EXPANSION IN ASIA

As semiconductor production and technology continue to grow and shift toward Asia, we are expanding our already strong presence and brand. We are adding additional production capacity to our largest volume manufacturing plant, located in Geino, Japan. In 2005, we plan to open a new Asia Pacific Technology Center to develop new products and solutions for our customers worldwide.

GETTING CLOSER TO OUR CUSTOMERS

We are strengthening our relationships with customers through our global sales, service and technical teams. By locating sales and technical support around the world, we are able to more closely and effectively collaborate with our customers globally.

TO OUR SHAREHOLDERS, CUSTOMERS AND EMPLOYEES:

Upon completion of my first year as CEO of Cabot Microelectronics Corporation, I can say to you with enthusiasm that I am proud of what has been a very successful year for our company. Our accomplishments over the past year are notable, yet I believe the important changes we have made throughout our organization to position us for continued success in the future are of even greater significance. As we continue to operate within a dynamic environment for our company and for our customers, I would like to address the key aspects of our business that form the foundation for our strategy for success going forward.

CONTINUED STRONG FINANCIAL PERFORMANCE

We are proud of our financial performance in fiscal 2004, which we believe demonstrates the continued financial strength and stability of our company. We achieved another record level of revenue, at $309 million, growing revenue by 23 percent compared to fiscal 2003, while maintaining a healthy gross profit margin of 49 percent of revenue. We also posted a record level of earnings per share at $1.88, reversing two prior years of decreasing earnings per share. We achieved these results through the hard work and dedication of our 585 employees worldwide, aided by the recovery of the semiconductor industry. We believe our financial results and solid balance sheet provide us with the flexibility to meet future opportunities and challenges.

OUR LEADERSHIP TEAM FOR THE FUTURE

To facilitate more effective execution of our strategies, this year I made a number of additions and changes to our executive leadership team. I am delighted with the leadership and fresh perspectives that our new leaders in Research and Development, Operations, Human Resources, Corporate Development, Quality and Asia Pacific have brought to our company. In conjunction with this realignment at the leadership level, we are also cultivating more disciplined approaches and processes within our business to capture quality and efficiency improvements, to become more innovative, to drive broad organizational development across our company, and to increase our overall leadership capability. These improvements have already begun to pay off for our company, and I am confident that they will continue to do so in the future.

THREE KEY STRATEGIES

Throughout the year we continued our execution of three key strategies – maintaining our technology leadership, achieving operations excellence, and getting closer to customers – which together continue to serve as the engine that drives our opportunities for future success.

TECHNOLOGY LEADERSHIP – Our customers' relentless pursuit of ever greater performance and lower costs is increasing the complexity of CMP technology, which is leading to a fragmentation of technical solutions and greater customization of products by customer, tool set and process integration approach. This customization represents a new dynamic in the industry and creates a unique opportunity for Cabot Microelectronics as the technology leader in CMP slurries. The capabilities and scale within our technology organization, which we believe are greater than any of our competitors, allow us to flexibly deploy our technical resources to provide more customer specific technical solutions on a cost-effective basis in partnership with our customers.

Our historical focus in research and development has been on innovating to achieve ever greater product performance. While we will continue this orientation, we are now also focusing on innovating to reduce the cost of ownership of our products to respond to customer needs for lower cost solutions.

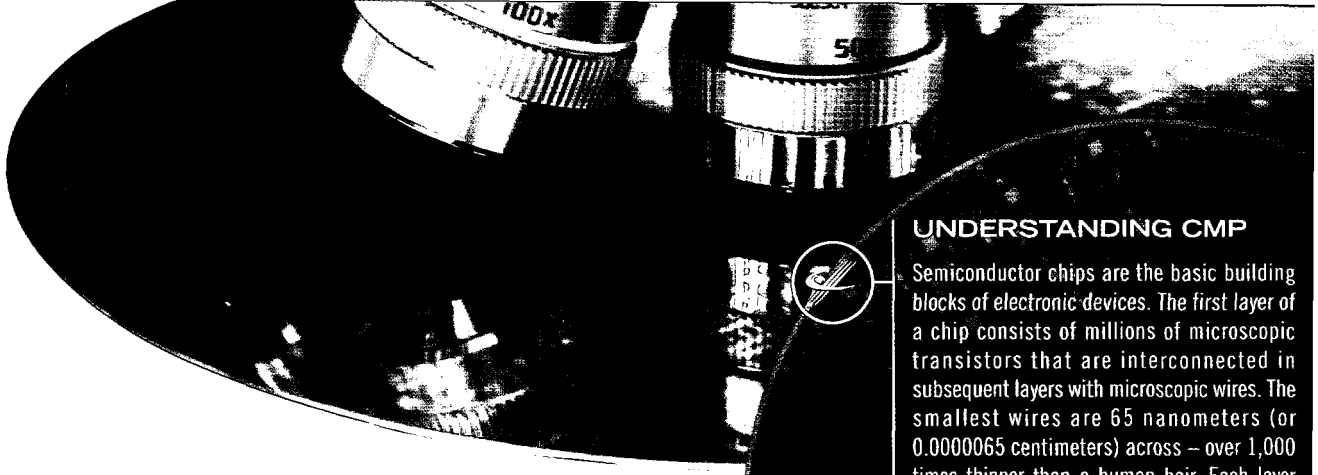
Within our technology team, we reorganized and refocused our efforts toward achieving excellence in three areas - robust development of new products for specific existing and emerging applications, process development to support rapid and effective commercialization of new products, and development of fundamental enabling technology to provide new CMP technology platforms for future generation products. We have also broadly implemented a Six Sigma initiative across the company that is bringing new focus on more disciplined and systematic methods of experimental design and data analysis. Our three-pronged approach to research and development, combined with our Six Sigma initiative, provides competitive strength that we are leveraging as we meet the needs of our customers.

OPERATIONS EXCELLENCE – As IC technology has advanced, semiconductor manufacturers' processes have become highly sensitive to CMP slurries and slurry performance, and customers now demand absolute consistency in slurry products, gallon to gallon, drum to drum, and lot to lot, across thousands of gallons of product. Further, in many cases product purity requirements are now measured at the "parts per billion" level, and we are finding that product quality and consistency have often become as important to our customers as ultimate product performance. This industry trend toward greater product quality and consistency demands ever-increasing manufacturing capabilities from us, as well as from our suppliers.

We are unique among CMP slurry providers by virtue of our established record of successfully delivering tens of millions of gallons of slurry to our customers on time and within specification. We believe we have the largest global manufacturing network for CMP slurries in the industry, producing products in five manufacturing facilities on three continents, which affords us access to efficiencies and economies of scale that we believe our competitors do not have. We have a very sophisticated quality process in our manufacturing operations, and an accompanying equally sophisticated supplier quality process, that have enabled us to meet the increasingly stringent requirements of our customers.

In further pursuit of operations excellence, implementation of our Six Sigma initiative is illuminating new and intriguing opportunities to further improve the quality of our products and services, and to capture productivity and efficiency gains. It has been energizing to see how fast this process has taken hold within our organization.

GETTING CLOSER TO CUSTOMERS – Over the last year we have focused a great deal of effort on building deeper and richer relationships with our customers around the world at multiple organizational levels. These efforts have involved some significant changes in the operating culture of our company. We have shown our customers a greater willingness to listen and respond to their requests, and to work collaboratively with them. We have made the customer the center of our programs and initiatives. Our actions and efforts in this area have prompted very supportive and complimentary feedback from our customers. Our goal is to achieve ever higher levels of trust and loyalty from all of our customers as we work together to develop the materials and process technologies for the future. Although we are pleased with our progress in this area, we are far from satisfied and we intend to continue to pursue this initiative relentlessly.



UNDERSTANDING CMP

Semiconductor chips are the basic building blocks of electronic devices. The first layer of a chip consists of millions of microscopic transistors that are interconnected in subsequent layers with microscopic wires. The smallest wires are 65 nanometers (or 0.0000065 centimeters) across – over 1,000 times thinner than a human hair. Each layer must be polished to maintain the structural and electrical integrity of the device. CMP, or chemical mechanical planarization, is a polishing process used by semiconductor manufacturers to planarize or flatten the multiple layers of material that are built upon silicon wafers in the production of advanced integrated circuits. CMP slurries are liquid formulations that enable this polishing process and generally contain engineered abrasives, high purity deionized water, and proprietary chemical additives.

EXPANSION IN THE ASIA PACIFIC REGION

A clear trend within the semiconductor industry is the ongoing shift of industry activity to the Asia Pacific region. Although North America is still a key region for the global semiconductor industry, most of the industry's growth is now concentrated in Asia. We believe we are well positioned to capitalize on this growth, both with our brand and our resources, and we are actively expanding our presence within the region.

We are growing our technology infrastructure in Asia with the design and construction of a new, state of the art technology center adjacent to our existing manufacturing facility in Geino, Japan. This technology center is our first research and development facility to be located outside of the United States, and it represents an important step in establishing full technology development capability within the Asia Pacific region to support our customers. This investment, in conjunction with our deployment of additional executive, senior management, and technical and commercial talent and attention in Asia, underscores the importance of the Asia Pacific market to our company.

OPPORTUNITIES WITHIN A DYNAMIC INDUSTRY

We expect continued rapid technical advancement and change within the semiconductor industry, and we anticipate that this dynamic environment will provide many continuing challenges and opportunities for CMP suppliers. The emerging digital technologies of today are enabling a new era in which computing, content and connectivity are becoming all pervasive. Advancement in the technologies that underpin this connectivity, including those for memory, broadband, networking and mobile applications, fueled by escalating demand for consumer devices, appear to be driving the next wave of growth in the semiconductor industry.

We believe that this new emphasis on connectivity and consumer devices will drive significant development of new CMP solutions, paralleling the traditional emphasis on CMP slurries for microprocessors. As the semiconductor industry advances the development and mass production of devices with feature sizes of 90 nanometers and smaller, we expect that the associated technical and materials challenges will continue to escalate and drive the need for innovative new CMP materials and process technologies.

WELL POSITIONED FOR THE FUTURE

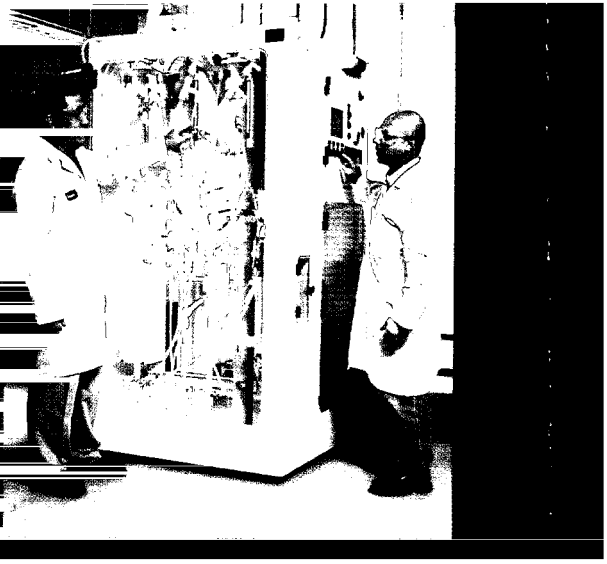
From our perspective, growth associated with the rapid incorporation of CMP technology, along with the challenges and rewards associated with meeting future requirements for CMP provide an attractive outlook for the CMP industry, which naturally has attracted competitors. However, we believe that Cabot Microelectronics is uniquely positioned for continued success and leadership. No other CMP slurry provider has our track record of developing products to meet the demands of advanced technology, improving existing technology and successfully meeting the ever more stringent product performance requirements of the IC industry through sustained high volume manufacturing. Further, in our view our technical capabilities and the quality and scale of our global supply chain and service infrastructure are unmatched in our industry. We believe we are the only CMP slurry supplier in the world today that offers and supports a full line of CMP products for all major applications and serves a broad range of customers globally, while successfully providing the attendant technical support.

Although there are indications that 2005 will be a year of moderating growth in semiconductor industry revenue and possibly even a contraction, we believe that we are well positioned for continued success in CMP slurries. We are excited about our opportunities, and are eager to tackle the challenges of the future.

In closing, I want to offer my thanks to our shareholders for their continued commitment and confidence in our company. My leadership team and I are your stewards and we take very seriously our responsibilities to you. I also thank our customers for their support and for their business. Finally, and most importantly, I thank all of our employees for their dedication and hard work without which our company could not be successful.

WILLIAM P. NOGLOWS
Chairman, President and Chief Executive Officer

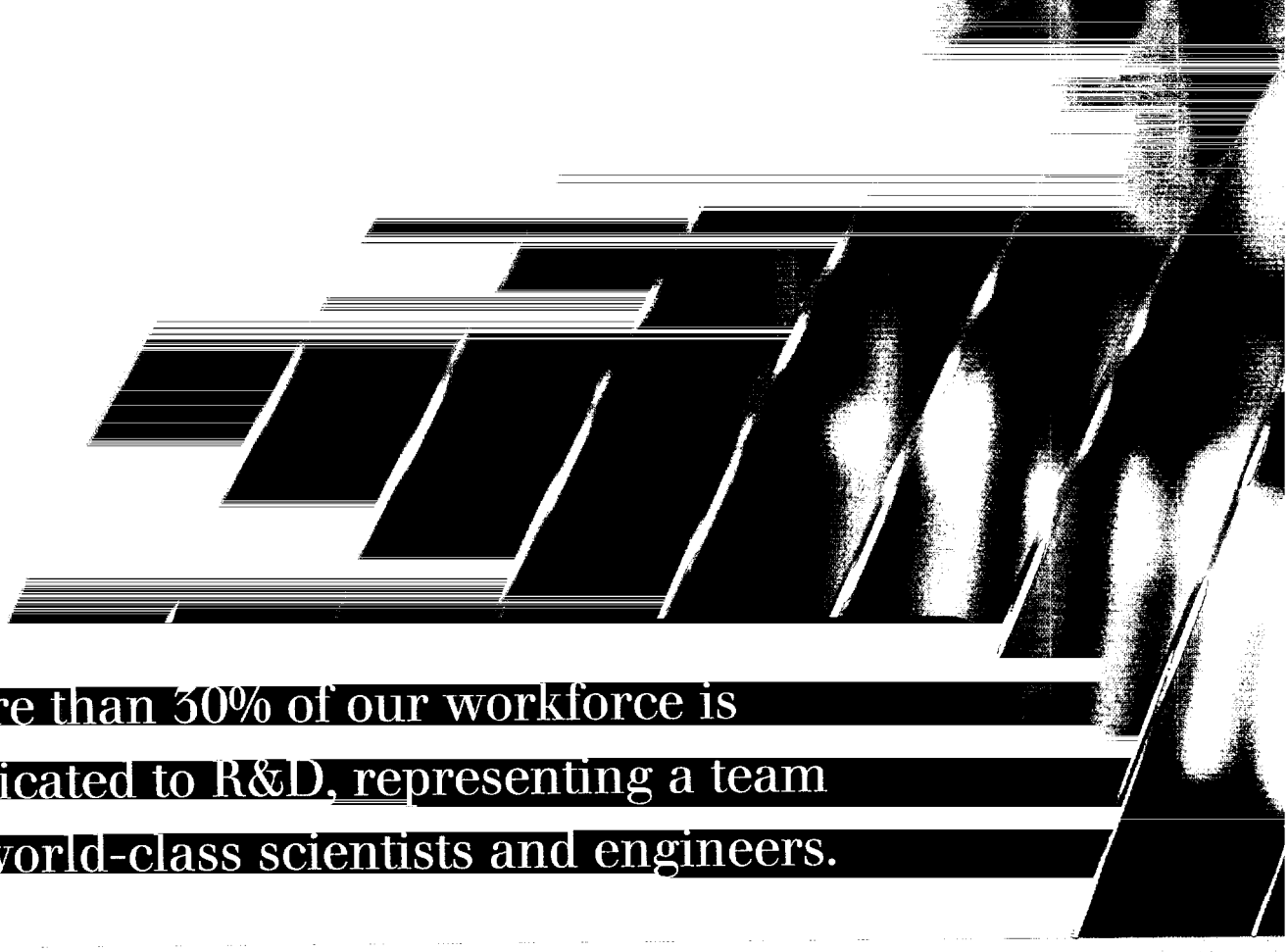
TECHNOLOGY LEADERSHIP



Semiconductor technology has become more advanced and device feature sizes continue to shrink, CMP solutions have become increasingly complex. Leading edge technologies now often require customization by customer, tool set and process integration approach. We believe that this trend toward greater customization will continue at the 65 nanometer technologies and beyond. To enable future success, we intend to fully leverage our technology infrastructure and resources, as well as our extensive capabilities in research and development to develop the CMP solutions of tomorrow.

Cabot Microelectronics has historically invested approximately 15 percent of revenue in research and development, and more than 50 percent of our workforce is dedicated to R & D. These world-class scientists and engineers are organized into teams that are focused on R & D for product development, process enhancement and platform technologies.

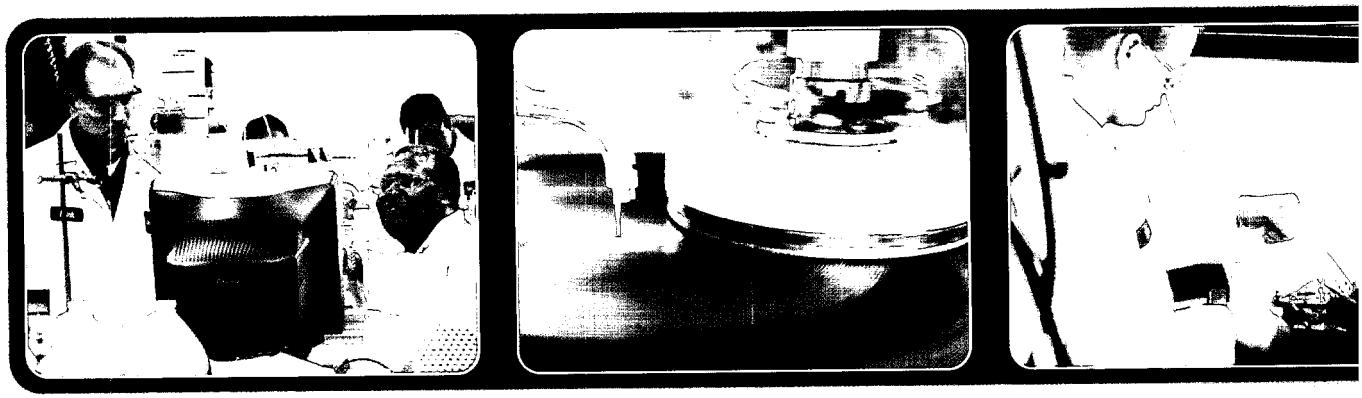
We also look outside our company for opportunities to further our technology leadership. Our recently announced strategic alliance with NanoProducts Corporation, a privately-held technology leader in nano-scale particles, is one example of this strategy. Nano-particles can be customized and highly engineered to deliver unique performance attributes and we believe that through collaboration with companies like NanoProducts Corporation we may be able to develop a range of nano-sized particles that will enable innovative CMP solutions to meet the needs of our customers' future generation technologies.



More than 30% of our workforce is dedicated to R&D, representing a team of world-class scientists and engineers.

We believe Cabot Microelectronics is the leader in all major application areas for CMP slurries, including copper, tungsten, and oxide, and our broad product portfolio includes solutions for all technology nodes. Our products are designed to enable optimal removal rates and cleanability, outstanding surface finish, proper selectivity for maximum planarization, and decreased dishing, erosion and defects.

Beyond the IC CMP industry, we have successfully translated our capabilities and technology in fine finish polishing into the data storage industry. Our highly engineered solutions play a critical role in enabling the production of rigid disks and magnetic heads, two critical components of hard disk drives. In the future, we plan to seek additional opportunities to grow our business by leveraging our capabilities into other demanding applications that require engineered surface finishes.

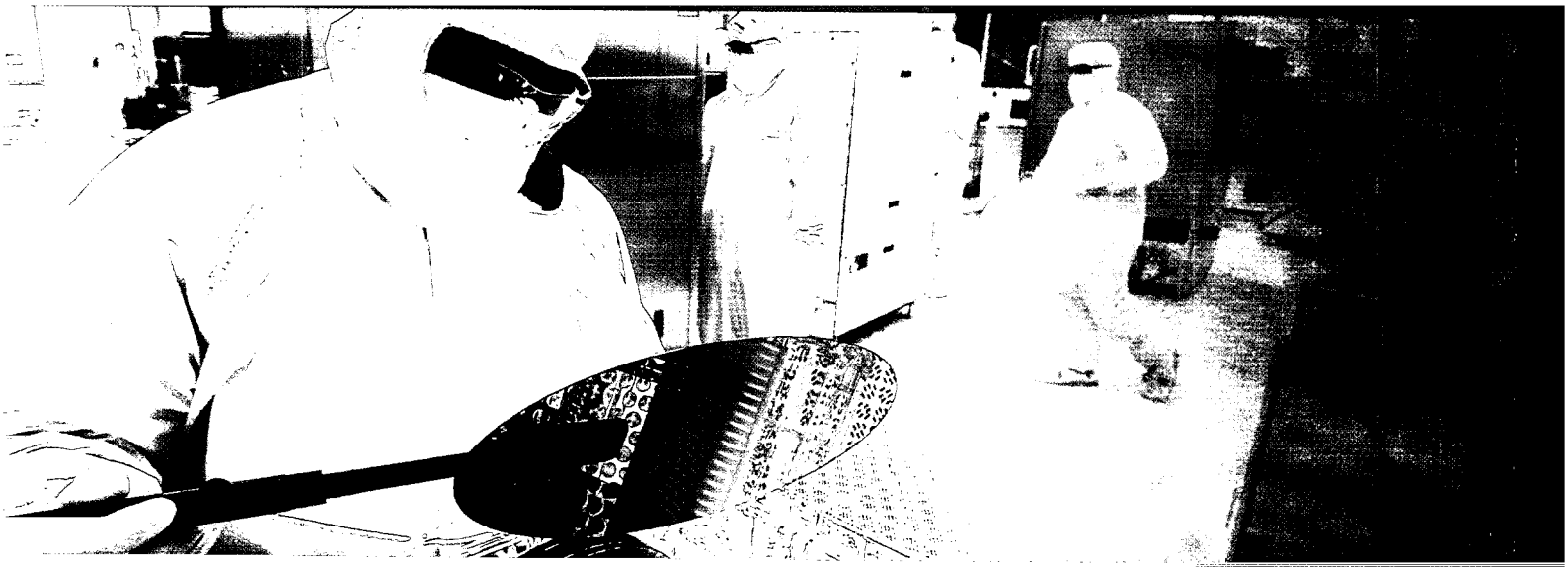


OPERATIONS EXCELLENCE

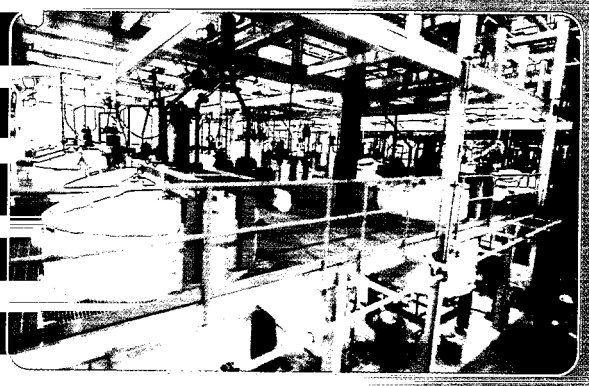
Cabot Microelectronics recognizes that as feature sizes continue to shrink, the quality and consistency requirements for our products become increasingly stringent. Our operations excellence initiative is focused on improving quality and productivity across our organization and through our supply chain. Our goal is to identify and eliminate sources of variation in order to provide the highest quality products with the lowest cost of ownership to our customers, while optimizing the utilization of our resources and infrastructure.

This past year we implemented a company wide Six Sigma initiative in order to more effectively identify and act upon improvement opportunities. Although early in the process, we are excited about our initial results and believe this effort will help identify opportunities for cost improvement through variability reduction as well as decrease the time to market for new products allowing us to deliver added value to our customers.

Our quality initiatives also include our suppliers' processes. We are partnering with our suppliers and using Six Sigma techniques to reduce variability and improve raw material quality. Our operations excellence initiative incorporates quality from the beginning to end of the process.



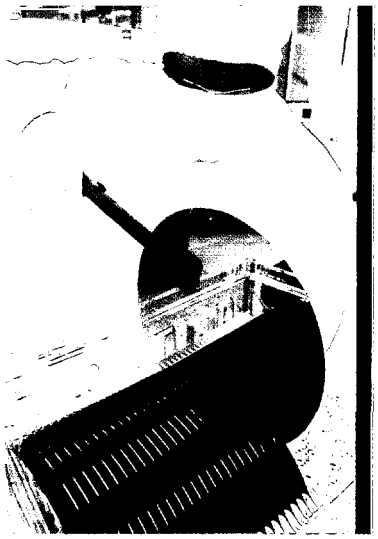
We are employing Six Sigma in combination with other quality process initiatives to deliver added value to our customers.



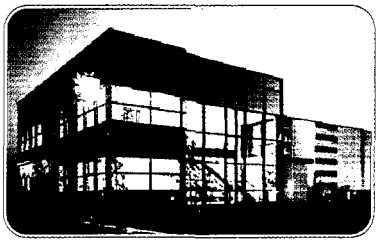
GETTING CLOSER TO OUR CUSTOMERS

As the semiconductor industry evolves, the relationship between customer and supplier has become even more important than in the past. We partner with our customers to anticipate industry changes and develop new solutions for advanced manufacturing processes.

We believe Cabot Microelectronics has world-class customer and applications support teams that are respected in the industry — across Asia, Europe and the U.S. Our financial strength and leadership in technology enable us to attract and retain the world's best scientists and engineers to deliver advanced technological applications to our customers.



EXPANSION IN ASIA



Cabot Microelectronics has a strong presence and brand in Asia, where the semiconductor industry continues to grow, and where production and technology advancements outpace all other regions. Nearly 65 percent of our revenue *in fiscal 2004 came from the Asia Pacific region.*

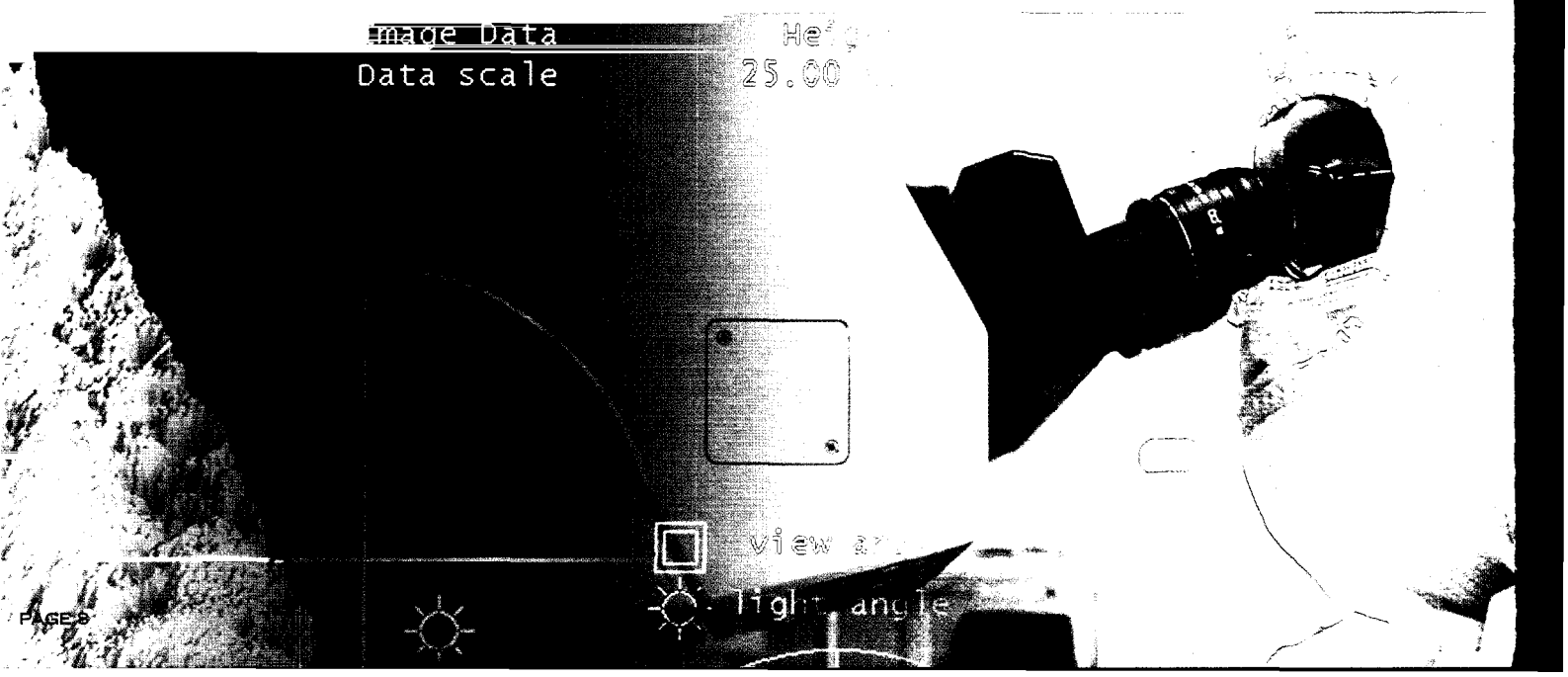
Our manufacturing plant in Geino, Japan has more than 120 employees and is our highest volume plant globally, with expansion efforts underway to further increase production. Expanding our existing capacity in Japan, combined with output from our other manufacturing facilities, will help us maintain supply flexibility and efficiency to respond to the growing Asia Pacific demand.

We are also expanding our footprint in Asia by building a new Asia Pacific Technology Center adjacent to our existing manufacturing site in Japan. This technology center will include a product development facility, along with a polishing and metrology clean room. The center is scheduled for start-up in 2005 and will allow us to develop and test new formulations and product platforms to support our customers worldwide.

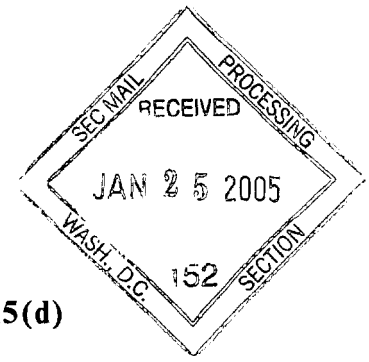
We also have sales and technical support staff in Japan, Taiwan, Korea, Singapore, and China, as well as analytical capabilities in Taiwan to serve and support our industry-leading customers throughout Asia.

In addition, we have put in place a focused management team for China and Southeast Asia to support market development in this significant region.

Nearly 65% of our revenue in fiscal 2004 came from the Asia Pacific region.



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



Form 10-K

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

For the fiscal year ended September 30, 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 number 000-30205

Cabot Microelectronics Corporation

(Exact name of registrant as specified in its charter)

Delaware	**36-4324765**
(State of Incorporation)	*(I.R.S. Employer Identification No.)*
870 North Commons Drive, Aurora, Illinois	**60504**
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code:
(630) 375-6631

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

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, $0.001 par value

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 Exchange Act Rule 12b-2). Yes ☑ No ☐

The aggregate market value of the registrant's Common Stock held beneficially or of record by stockholders who are not affiliates of the registrant, based upon the closing price of the Common Stock on March 31, 2004 as reported by the NASDAQ National Market, was approximately $1,045,000,000. For the purposes hereof, "affiliates" include all executive officers and directors of the registrant.

As of November 30, 2004, the Company had 24,649,518 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the Annual Meeting of Stockholders to be held on March 8, 2005 are incorporated by reference in Part III of this Form 10-K to the extent stated herein.

This Form 10-K includes statements that constitute "forward-looking statements" within the meaning of federal securities regulations. For more detail regarding "forward-looking statements" see item 7 of Part II of this Form 10-K

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CABOT MICROELECTRONICS CORPORATION
FORM 10-K
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2004

INDEX

PART I

Item 1. *Business*

Our Company

Cabot Microelectronics Corporation ("Cabot Microelectronics," "the Company," "us," "we," or "our") is the leading supplier of high-performance polishing slurries used in the manufacture of the most advanced integrated circuit ("IC") devices within the semiconductor industry, in a process called chemical mechanical planarization ("CMP"). CMP is a polishing process used by IC device manufacturers to planarize or flatten many of the multiple layers of material that are built upon silicon wafers in the production of advanced ICs. Planarization is a polishing process that uses CMP slurries and pads to level, smooth and remove excess material from the surfaces of these layers, while leaving minimal residue or defects on the surface. CMP slurries are liquid solutions generally composed of high-purity deionized water, proprietary chemical additives and engineered abrasives that chemically and mechanically interact with the surface material of the IC device at an atomic level.

CMP enables IC device manufacturers to produce smaller, faster and more complex IC devices with fewer defects. We believe CMP will become increasingly important in the future as manufacturers continue to shrink the size of these devices and to improve their performance. Our CMP products are used for a number of applications, such as polishing insulating oxide layers, the tungsten plugs that connect the multiple wiring layers of IC devices through these insulating layers, and copper wiring. In addition, we have developed and sell CMP slurries for polishing certain components in hard disk drives, specifically rigid disk substrates and magnetic heads, and we believe we are one of the leading suppliers in this area. We are continuing to develop new and improved products for these applications as well as improving existing products on an ongoing basis. In addition, we are developing polishing pads for use in the CMP process.

Prior to our initial public offering in April 2000, we operated as a division of Cabot Corporation ("Cabot Corporation"). In September 2000 we became a wholly independent entity upon Cabot Corporation's spin-off of its ownership in us that remained after the initial public offering.

IC Device Manufacturing

Advanced IC devices are composed of millions of transistors and other electronic components connected by miles of wiring. The wiring, composed primarily of either aluminum or copper, carries electric signals through the multiple layers of the IC device. Insulating material is used throughout the IC device to isolate the electronic components and the wiring, thereby preventing short circuiting and improving the efficiency of the travel of the electric signal within the device. To enhance performance, IC device manufacturers have progressively increased the number and density of transistors and other electronic components in each IC device. As a result, the number of wires and the number of layers have also increased. We expect this trend towards increased complexity to continue. In addition, we expect that in the future, other more advanced materials will be used in IC devices, and will need to be polished with CMP.

The multi-step manufacturing process for IC devices typically begins with a circular wafer of pure silicon. A large number of identical IC devices, or dies, are manufactured on each wafer at the same time. The first step in the manufacturing process builds transistors and other electronic components on the silicon wafer. These are then isolated from each other to prevent electrical signals from bridging from one transistor to another by using a technique called shallow trench isolation ("STI"). Once the transistors and other electronic components are in place on the silicon wafer, they are usually covered with a layer of insulating material, most often silicon dioxide. These components are then wired together using either aluminum or copper in a particular sequence to produce a functional IC device with particular characteristics; copper wiring currently is used in the most advanced devices. At the end of the process, the wafer is cut into the individual dies, which are then packaged to form individual chips.

The two major segments in the IC industry that use CMP are logic and memory. Logic devices include chips such as microprocessors, digital signal processors (DSP), microcomponents and microcontrollers. These are normally computing intensive devices that need to perform large numbers of processing steps every second.

As a result, these chips, particularly the leading microprocessors and DSPs, usually require use of the latest technology that increases speed of signal processing. The leading logic chips use copper wiring to provide that speed since copper wiring has lower resistance than aluminum wiring, which is used in older logic devices and in chips that do not require this speed. Memory devices, which include flash, DRAM and SRAM chips, function by reading, storing and writing data. Traditionally this segment has been highly cost sensitive and processing speed is not as critical. Therefore, memory devices tend to use aluminum wiring, which represents a lower cost approach than copper.

CMP is used to planarize the various insulating layers of an IC device and prepare them for a process known as metallization. During metallization, wiring is added to the surface of the insulating layer through a series of steps involving the following: deposition of a metal onto the surface of the layer; projection of an image of the desired wiring pattern on the layer using a process known as photolithography; and removal of the excess deposited metal from the surface of the insulating layer, which leaves behind the desired wiring pattern. If the IC device uses aluminum wiring, the excess metal is removed using a process called etching. If the IC device uses copper wiring, the excess metal is removed by a CMP process step.

When the wiring on a particular layer of the IC device is finished, another layer of insulating material is added and may be planarized using CMP. This process of alternating insulating and wiring layers is repeated until the desired wiring within the IC device is completed. The electronic components and wiring layers are connected by conductive plugs that are formed by making holes in the insulating layers and filling those holes with metal, usually tungsten for aluminum wiring or copper for copper wiring. After these holes have been filled with metal, either an etching process for aluminum wiring or CMP for copper wiring, is used to remove all the excess metal above the surface of the insulating layer so that the top of the plug is level with the surface of the insulating layer before the next wiring layer is built.

The number of transistors on a chip has increased exponentially since the inception of the IC industry, generally following what is referred to as "Moore's Law", in which the number of transistors on an integrated circuit historically has doubled every 12-18 months. This has driven relentless improvement in the speed and a reduction in the cost of computing power available today. As a result of this evolution, the number of wires and the number of wiring layers in an IC device have also increased. To accommodate and standardize these increases, the semiconductor industry follows generally accepted design rules that describe current and projected size and spacing of electronic components and wiring in IC devices. To date, the size and spacing in these design rules have been progressively decreasing to accommodate the demand for increased circuit density and transistor miniaturization. As the density has increased, the amount of wiring needed to connect the transistors and other electronic components to each other also has increased. As IC devices have become smaller, this increase in wiring has required tighter and more precise spacing of the wiring, and an increased number of wiring layers in IC devices. The industry uses the term "node" to define advancement of technology from one generation to the next. For example, in the present 130 nanometer node, the size of the smallest wire on the chip is 130 nanometers. Historically the industry has moved from one node to the next in a time frame of roughly two years. Today, the leading participants in the industry are migrating from the 130 nanometer to the 90 nanometer node. Although we expect technology to continue to advance in the future, we have recently observed that the time between adoption of one technology node to adoption of the next technology node appears to be increasing.

Most IC devices today are manufactured on 200 mm silicon wafers. However, a significant development for the IC industry is the transition to manufacturing IC devices using 300 mm wafers. The industry leaders are driving this change from 200 mm to 300 mm wafers to reduce the cost of making each chip. In general, 300 mm wafer manufacturing began in 2002 and this trend is expected to accelerate in the future. The larger 300 mm wafers contain more IC devices and typically use less CMP slurry per device.

Chemical Mechanical Planarization

The CMP process utilizes a combination of chemical reactions and mechanical abrasion to planarize the insulating and conductive layers of an IC device that are built upon a silicon wafer. During the CMP process the wafer is typically held on a rotating carrier, which is spun at high speed and pressed against a rotating polishing table. The portion of the table that comes in contact with the wafer is covered by a textured polishing pad. A

CMP slurry is continuously applied to the polishing pad to facilitate and enhance the polishing process. CMP slurries are liquid solutions generally composed of high-purity deionized water, proprietary chemical additives and engineered abrasives that chemically and mechanically interact with the surface material of the IC device at an atomic level. CMP pads are engineered polymeric materials designed to distribute and transport the slurry to the surface of the wafer and distribute it evenly across the wafer.

Benefits of CMP

CMP provides IC device manufacturers with a number of advantages. CMP enables IC device manufacturers to produce IC devices that are smaller and of greater density of transistors and other electronic components, both of which improve the performance and capabilities of the device. As IC devices shrink and become denser, they require smaller feature sizes and tighter spacing among the device wiring. If the surface is not level, the smaller feature size and tighter spacing make it more difficult for the photolithography equipment to focus accurately and create the desired wiring pattern. In addition, because today's smaller, denser IC devices have more layers than previous devices, any unevenness of a layer at or near the bottom of an IC device will be magnified in the additional layers that are added to the device. Defects caused by problems in the photolithography process or unevenness in the layers can lead to short circuits, reduced performance and at worst, failure of the IC device. By using CMP, IC device manufacturers can eliminate or minimize these problems.

By enabling IC device manufacturers to make smaller IC devices, CMP allows them to increase the number of IC devices that fit on a wafer. This increase in the number of IC devices that fit on a wafer in turn increases the throughput, or the number of IC devices that can be manufactured in a given time period, and reduces the cost per chip. CMP also helps reduce the number of defective or substandard IC devices produced, which increases the device yield. Improvements in throughput and yield reduce an IC device manufacturer's unit production costs. Manufacturers have the opportunity to achieve further improvements in throughput and yield as new improvements to the CMP process help to reduce defect rates and decrease the amount of time required for the polishing process.

CMP Slurries

The characteristics that are important for an effective CMP process include:

- high polishing rates, which increase productivity and throughput;
- high selectivity, which is the ability to enhance the polishing of specific materials while at the same time inhibiting the polishing of other materials;
- uniform planarity, which minimizes unevenness as different layers are built on the wafer;
- uniformity of polishing, which means that different surface materials can be polished to the same degree at the same time across the wafer, leading to uniformity of all dies on the wafer;
- low defectivity, which means that the devices have fewer imperfections and therefore produce higher yield; and
- cost, which is important for users to minimize their cost of manufacturing.

These attributes may be achieved through technical optimization of both the slurry and the pad in conjunction with an appropriately designed CMP process. These qualities affect and enhance the performance of IC devices, and most also have the ability to reduce the cost of ownership of the CMP process for IC device manufacturers. Cost of ownership is the result of a calculation by which IC device manufacturers evaluate the benefits and costs of each production step by analyzing the impact of that step on throughput and yield, compared with the costs of the production inputs of that step.

Prior to introducing new or different CMP slurries into its manufacturing process, an IC device manufacturer generally requires the product to be qualified in its plant through a series of tests and evaluations. These qualifications are intended to ensure that the product will function properly in the manufacturing process, as well as to optimize its application. These tests may require changes to the CMP process or the CMP slurry.

While this qualification process varies depending on numerous factors, it is not unusual for it to be very costly and to take six or more months to complete. IC device manufacturers usually take the cost, time delay and impact on production into account when they consider implementing or switching to a new CMP slurry.

Industry Trends

The semiconductor industry has experienced rapid growth over the past three decades, but it has also been highly cyclical and prone to downturns on a relatively regular two to three year basis. Over the past one to two years, the industry was in an expansion phase, as it had been recovering from one of the most severe downturns in its history, following the end of the technology boom of the late 1990's. While 2004 has been a strong growth year for the industry, there are indications that 2005 will be a year of moderating revenue growth for the broad semiconductor industry, and possibly even a contraction.

Over the next several years, we believe that growth in emerging consumer connectivity and wireless technologies such as digital mobile phones, digital still and video cameras, digital television and portable media will represent the next wave in the semiconductor industry. We believe that the increased emphasis on memory technology and the incorporation of advanced memory products into digital consumer devices will drive additional growth in the industry over the long term, in parallel with the industry's traditional emphasis on microprocessors for personal computers.

We anticipate the worldwide market for CMP consumables used by IC device manufacturers will grow in the future as a result of expected increases in the number of IC devices produced, the percentage of IC devices produced that require CMP and the number of CMP polishing steps used to produce these devices. In addition, we believe that technology advances will require the use of new materials in IC device manufacture that will require new CMP solutions. We expect this anticipated growth will be somewhat mitigated by efficiencies in CMP slurry usage, driven by pressure on IC manufacturers to reduce their CMP costs. Some examples of these potential efficiencies include the transition by IC manufacturers from 200 mm to 300 mm wafers, as well as the development of technologies intended to reduce slurry usage. In addition, we have recently observed that the time between adoption of one technology node to the adoption of the next technology node appears to be increasing.

As CMP technology has become more advanced, we believe that CMP technical solutions have become more complex, and leading edge technologies now often require some customization by customer, tool set and process integration approach. Further, as CMP technology has matured, we believe that semiconductor manufacturers' processes have become highly sensitive to CMP slurries, and customers now demand a very high level of consistency and quality in CMP slurry products.

Another trend that we have observed is the continued transition of IC manufacturing to the Asia Pacific region.

Strategy

In an effort to maintain our leadership in IC CMP slurries as well as grow our business profitably, we intend to continue to pursue the following strategies:

Advance our Technology Leadership

We believe that technology is vital to success in the CMP slurry business and we plan to continue to devote significant resources to research and development. We need to keep pace with the rapid technological advances in the semiconductor industry so we can continue to deliver products that meet or exceed our customers' evolving needs. Our technology efforts are focused on three main areas: development of new products for specific applications; process development to support rapid and effective commercialization of new products; and, development of fundamental enabling technology to provide new platforms for future generation products. Additionally, we plan to expand our technology infrastructure by constructing an Asia Pacific technology center in Geino, Japan which will add polishing, metrology and product development capability to support our customers in the Asia Pacific region.

Achieve Operations Excellence

Our customers demand increasing performance of our products in terms of product quality and consistency and expect a reliable supply source. We believe the capacity and the location of our production facilities in the United States, Europe and Asia allow us to provide a reliable supply chain to meet our customers' CMP slurry requirements in a consistent and timely manner. We intend to advance our strict quality controls in order to improve the uniformity and consistency of performance of our CMP products. To support our operations excellence initiative, we have broadly introduced the concepts of Six Sigma, which is a systematic, data-driven approach and methodology for improving quality by reducing variability in processes, across our company. We believe there may be significant opportunities to improve product quality and to capture productivity and efficiency gains through this process.

Become Closer to our Customers

We believe that building close relationships with our customers is another cornerstone for long-term success in our business. We work closely with our customers to identify and develop new and better CMP consumables, to integrate our products into their manufacturing processes and to assist them with supply, warehousing, packaging and inventory management. We have devoted significant resources to enhancing our close customer relationships and we are committed to continuing this effort. As more of our business shifts to the Asia Pacific region, we are reinforcing our customer commitment by constructing an Asia Pacific technology center in Geino, Japan, which we believe will enhance our ability to provide optimized CMP solutions to our customers in this region.

Expand Into New Applications and Products

We intend to leverage our CMP experience and technology to explore new applications and products to diversify and grow our business, such as we have accomplished with our slurries for data storage polishing applications. We believe that we have unique capabilities to modify surfaces of materials using chemistry in conjunction with mechanical abrasion, at an atomic level, which may provide enhanced or previously unseen performance that can be applied to a range of fine finish polishing applications.

Expand Global Presence

We believe that having production facilities, personnel and technical resources in strategic locations around the world is important to the success of our business, particularly in light of increased IC device manufacturing in Asia. Accordingly, we have established operations in North America, Asia Pacific and Europe, including production facilities in the United States, Barry, Wales and Geino, Japan. We also have assembled a team of business professionals, account managers and technical support personnel strategically located in the United States, Europe, Taiwan, Singapore, Japan, China and South Korea. Further, we are expanding our technology infrastructure through our planned Asia Pacific technology center which we believe will enhance our ability to provide optimized CMP solutions to our customers in the Asia Pacific region. We intend to continue to expand our production capacity and technical and sales support in locations around the world where our customers are concentrated.

Attract and Retain World-Class Personnel

We have assembled a highly skilled and dedicated workforce that includes a wide range of scientists, applications specialists and business professionals, many of whom have significant experience in the semiconductor industry. We plan to continue to attract, motivate, develop and retain experienced personnel who are committed to providing high-performance products and strong customer and applications support.

Products

CMP Slurries for IC Devices

We produce CMP slurries of various formulations for polishing a wide variety of materials. In addition to improving our existing tungsten and oxide slurries, we focus on developing new slurries to keep pace with our

customers' evolving needs. Our new generations of tungsten and oxide slurries, which are currently the most common use of CMP in IC device manufacturing, are designed to improve flatness, reduce defects in IC devices and reduce the required polishing time.

We also manufacture slurry products for polishing copper used in the wiring layers of the most advanced IC devices and are working on next generation slurries for these applications. These products include different slurries for polishing the primary copper film, as well as the thin barrier metal layer used in copper wiring. We have also developed a slurry for an application known as direct STI which helps eliminate a number of manufacturing steps for our customers. We continue to work closely with our customers to develop advanced slurries to meet their evolving technological needs.

CMP Slurries for the Data Storage Industry

We produce CMP slurries for polishing the magnetic heads and the coating on disks in hard disk drives by leveraging our core slurry technology and manufacturing capacity, as well as by employing personnel who understand the needs of the data storage industry. We believe CMP significantly improves the surface finish of these coatings, resulting in greater storage capacity of the substrates, and also improves the production efficiency of manufacturers of hard disk drives by helping them increase their throughput and yield. We have also established a dedicated research and development team and an applications support team similar to that used for our other slurry products.

CMP Polishing Pads

CMP polishing pads are consumable materials used in the CMP process that work in conjunction with CMP slurries to facilitate the polishing process. We believe the CMP polishing pad market is currently led by one principal supplier, Rohm and Haas. Through discussions with our customers, as well as our own examination of the CMP polishing pad market, we have determined that demand exists for higher quality, more reliable and consistent polishing pads. We previously had participated in the polishing pad business as a value added reseller of pads supplied to us by a third party. However, due to what we believe was a less than acceptable level of profitability under this value-added reseller model, the distribution agreement was terminated by mutual agreement in June 2004. We continue to believe that there is value in co-developing slurries and pads to achieve technically optimized CMP solutions. We continue our development of pads utilizing our own and licensed technology.

Customers, Sales and Marketing

Our sales process begins with development teams who work closely with our customers, using our research and development facilities to design CMP products tailored to their precise needs. Next, our applications teams work with customers to integrate our products into their manufacturing processes. Finally, our logistics and sales personnel work to provide reliable supply, warehousing, packaging and inventory management to our customers. Through our interactive approach, we are able to build close relationships with our customers in a variety of areas.

We also market our products through independent distributors primarily in Taiwan and China. Over the last few years we have reduced the number of resellers that distribute our products, employing more of a direct sales model.

In response to significant growth in the IC device manufacturing industry in Asia, we have increased our focus in Asia over the last several years by increasing the number of sales and marketing, technical and customer support personnel present in this region. In addition, during the fourth fiscal quarter of 2004 we commenced design work on an Asia Pacific technology center. The technology center, which will be located adjacent to our existing manufacturing facility in Geino, Japan, is expected to become operational during the second half of 2005, and will include polishing, metrology and product development capability to support our customers in this region.

In fiscal 2004, our five largest customers, of which one is a distributor, accounted for approximately 55% of our revenue, with Marketech (our distributor in Taiwan and China), and Intel accounting for approximately

32% and 9% of our revenue, respectively. In fiscal year 2003, our five largest customers, of which two were distributors, accounted for approximately 61% of our revenue, with Marketech and Intel accounting for approximately 28% and 15% of our revenue, respectively. In June 2003, we completed our transition to selling directly to customers in Europe, Singapore and Malaysia who previously had been serviced through one of these distributors.

Cabot Corporation as our Major Supplier of Raw Materials

The base ingredients for most of our CMP slurries are ultra-fine, high purity fumed metal oxides — fumed silica and fumed alumina — that are both produced by a flame process. From the time of our initial public offering in April 2000 to January 2004, we purchased fumed silica and fumed alumina under a fumed metal oxide agreement with Cabot Corporation that was due to expire in June 2005. In January 2004 we entered into a fumed silica supply agreement with Cabot Corporation, which replaced the original fumed metal oxide agreement with respect to fumed silica, and accordingly amended our fumed metal oxide agreement with respect to its fumed silica terms such that the agreement now only applies to fumed alumina and runs through June 2005. This fumed silica supply agreement provides for improved supply assurance, reduces our risk to rising raw material costs and implements improved quality performance measures and requirements that support our initiative to increase product quality and consistency. The contract provides for the cost of fumed silica to increase approximately 4% over the initial six-year term of the fumed silica supply agreement, and in some circumstances is subject to certain inflation adjustments and certain shared cost savings adjustments resulting from our joint efforts. Under the fumed silica supply agreement, Cabot Corporation continues to be our primary supplier, subject to certain terms and conditions, of fumed silica for our slurry products produced as of the effective date of the fumed silica supply agreement. Subject to those terms and for products introduced since that time, we have the flexibility to purchase from other parties. The agreement prohibits Cabot Corporation from selling fumed silica to third parties for, or engaging itself in its use in, CMP applications. This agreement expires in December 2009 and will automatically renew unless either party gives certain notice of non-renewal.

In addition, since December 2001, we have operated under a fumed alumina supply agreement with Cabot Corporation under which Cabot Corporation expanded its capacity for the manufacture of fumed alumina, and we have the first right to all of this expanded capacity. The agreement provides that the price we pay to Cabot Corporation for fumed alumina is based on all of its fixed and variable costs for producing the fumed alumina, plus its capital costs for expanding its capacity, plus an agreed upon rate of return on investment, plus incentive payments if they produce more than a certain amount of fumed alumina per year that meets our specifications. Under this agreement, Cabot Corporation is the exclusive supplier of certain quantities of fumed alumina for products we produced as of the effective date of the agreement, subject to certain terms and conditions. For amounts over these quantities, and for products we introduce after the effective date, we have the flexibility to purchase from other parties. The agreement prohibits Cabot Corporation from selling fumed alumina to third parties for, or engaging itself in its use in, CMP applications. The agreement has an initial five-year term and we may renew the agreement for an additional five-years to 2011.

If Cabot Corporation fails to supply us with our requirements for any reason, including if we require product specification changes that Cabot Corporation cannot meet, we have the right to purchase products meeting those specifications from other suppliers.

Research and Development

We believe our leadership position depends in part on our ability to develop CMP applications tailored to our customers' needs. In our product development and dispersion technology laboratories, our skilled technical personnel study different aspects of the CMP process and CMP products, such as various studies of chemical reactions on the surfaces of wafers. Results from these studies allow us to adjust the composition of our slurries to achieve uniform polishing performance. Understanding the chemical processes on the surface of the polished wafer allows us to compose slurries with specifically tailored selectivity that interact with one material and then slow or essentially stop planarization as soon as this particular material has been polished. We have also assembled dedicated development teams that work closely with customers to identify their specific technology

and manufacturing challenges and to translate these challenges into viable CMP process solutions. We have dedicated substantial resources in research & development in each of the copper, tungsten and oxide application areas to support our customers' requirements.

We expanded our existing research and development capabilities in fiscal 2002 with the opening of a new research and development facility in Aurora, Illinois. This facility is staffed by a team that includes experts from the semiconductor industry and scientists from key disciplines required for the development of high-performance CMP products and features a state-of-the-art Class 1 clean room and advanced equipment for product development. We have also invested in 300 mm polishing and metrology capabilities to remain aligned with our technology leading customers and provide us with the ability to replicate their CMP activities in our clean room. In addition, in the fourth fiscal quarter of 2004 we commenced design work on a new Asia Pacific technology center that will be constructed adjacent to our existing manufacturing facility in Geino, Japan. The new 18,000 square foot facility will provide polishing, metrology and product development capabilities. The technology center will include a clean room, development and applications laboratories, a pilot plant and office space. We expect the facility to become operational during the second half of 2005. We believe the technology center will enhance our ability to provide optimized CMP solutions to our customers in the Asia Pacific region. We believe competitive advantage lies in technology and that our existing and planned investments in research and development provide us with leading edge polishing and metrology capabilities to support the most advanced and challenging customer technology requirements on a global basis.

We expensed approximately $44.0 million, $41.5 million and $33.7 million for research and development in fiscal years 2004, 2003 and 2002, respectively. Investments in research and development property, plant and equipment are capitalized and depreciated over their useful life.

Competition

We are aware of several other manufacturers of CMP consumables with significant commercial sales of CMP slurries for IC devices and, due to our success to date and the attractive outlook for the CMP industry, we expect competition will continue to increase as other companies attempt to enter this market. Competitive activity has also increased due to customer desires to gain purchasing leverage and lower their cost of ownership. We believe that customers make supplier decisions based on three factors, in this order of priority: first, product performance; second, supply assurance, which entails not only redundancy in manufacturing but the ability of the supplier to reliably deliver consistent product and provide technical and manufacturing support for the product globally; and third, product price. We believe we are the only CMP slurry supplier today that offers and supports a full line of CMP slurry products for all major applications, serves a broad range of customers and has a proven track record of supplying these products globally in high volumes. In the data storage area we believe there are only two other manufacturers with significant commercial sales of CMP slurries for polishing the nickel coating on hard disk drives, and two other manufacturers with significant commercial sales of CMP slurries for polishing magnetic heads.

We may also face competition in the future from other companies that develop CMP products, customers that currently have, or that may develop, in-house capability to produce their own CMP products, and from significant changes in technology, such as the development of polishing pads containing abrasives and emerging technologies such as electrochemical mechanical planarization ("eCMP").

Intellectual Property

Our intellectual property is important to our success and ability to compete. We currently have 65 active U.S. patents and 93 pending U.S. patent applications. In most cases we file counterpart foreign patent applications. Many of these patents are important to our continued development of new and innovative products for CMP and related processes. Our patents have a range of duration and we do not expect to lose any material patent through the expiration of such patent in the next seven years. We attempt to protect our intellectual property rights through a combination of patent, trademark, copyright and trade secret laws, as well as employee and third party nondisclosure and assignment agreements.

Environmental Matters

Our facilities are subject to various environmental laws and regulations, including those relating to air emissions, wastewater discharges, the handling and disposal of solid and hazardous wastes, and occupational safety and health. We believe that our facilities are in substantial compliance with applicable environmental laws and regulations. We have incurred, and will continue to incur, capital and operating expenditures and other costs in complying with these laws and regulations in both the United States and abroad. However, we currently do not anticipate that the future costs of environmental compliance will have a material adverse effect on our business, financial condition or results of operations.

Employees

As of September 30, 2004, we employed 585 individuals, including 279 in operations, 180 in research and development, 65 in sales and marketing and 61 in administration. None of our employees are covered by collective bargaining agreements. We have not experienced any work stoppages and in general consider our relations with our employees to be good.

Financial Information about Geographic Areas

Our revenue from customers in the United States totaled $78.1 million, $79.9 million and $81.0 million, and total revenue in other geographic locations totaled $231.3 million, $171.8 million and $154.2 million for fiscal years 2004, 2003 and 2002, respectively. Revenue from Taiwan and Japan each accounted for more than ten percent of our total revenue. Our revenue from customers in Taiwan totaled $86.3 million, $63.8 million and $54.9 million for fiscal years 2004, 2003 and 2002, respectively. Our revenue from customers in Japan totaled $44.9, $40.3 million and $34.2 million for fiscal years 2004, 2003 and 2002, respectively. Revenue attributable to foreign regions are based upon the customer location and not the geographic location from which our products were shipped.

Net property, plant and equipment in the United States totaled $94.8 million, $102.8 million and $100.9 million and net property, plant and equipment in other geographic locations totaled $33.0 million, $30.9 million and $31.4 million at September 30, 2004, 2003 and 2002, respectively. More than ten percent of our net property, plant and equipment is located in Japan, having a net book value of $30.2 million, $28.1 million and $27.1 million at September 30, 2004, 2003 and 2002, respectively.

For more financial information about geographic areas, see Note 19 of Notes to the Consolidated Financial Statements included in "Item 8 — Financial Statements and Supplementary Data."

Available Information

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, definitive proxy statements on Form 14a, current reports on Form 8-K, and any amendments to those reports, are made available free of charge on our company website at www.cabotcmp.com as soon as reasonably practicable after such reports are filed with the Securities and Exchange Commission (SEC). Statements of changes in beneficial ownership of our securities on Form 4 by our executive officers and directors are made available on our company website by the end of the business day following the submission to the SEC of such filings. In addition, the SEC's website, www.sec.gov, contains reports, proxy statements, and other information regarding reports that we file electronically with the SEC.

Item 2. ***Properties***

Our principal U.S. facilities that we own consist of:

- a global headquarters and research and development facility in Aurora, Illinois, comprising approximately 200,000 square feet;
- a commercial dispersion plant and distribution center in Aurora, Illinois, comprising approximately 175,000 square feet;

- a commercial dispersion plant in Aurora, Illinois, comprising approximately 48,000 square feet; and
- an additional 13.2 acres of vacant land in Aurora, Illinois to accommodate the possibility of future growth.

Our principal foreign facilities that we own consist of:

- a commercial dispersion plant in Geino, Japan, consisting of approximately 113,000 square feet.
- an additional 6.2 acres of vacant land adjacent to our Geino, Japan facility to accommodate the construction of our Asia Pacific technology center and possible future expansion.

We lease land and a building from Cabot Corporation at a commercial dispersion plant in Barry, Wales consisting of approximately 22,000 square feet. We also lease office and laboratory space in Hsin-Chu, Taiwan consisting of approximately 8,000 square feet and office space in Tokyo, Japan of approximately 3,000 square feet.

In the fourth fiscal quarter of 2004 we commenced design work on a new 18,000 square foot Asia Pacific technology center that will be constructed adjacent to our existing manufacturing facility in Geino, Japan. We expect the facility to become operational during the second half of 2005.

We believe that our current facilities are suitable and adequate for their intended purpose and provide us with sufficient capacity and capacity expansion opportunities and technological capability to meet our current and expected demand in the foreseeable future.

Item 3. ***Legal Proceedings***

We are not currently involved in any material legal proceedings.

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

None.

Executive Officers of the Registrant

Set forth below is information concerning our executive officers and their ages as of December 1, 2004.

Name	Age	Position
William P. Noglows	46	Chairman of the Board, President and Chief Executive Officer
H. Carol Bernstein	44	Vice President, Secretary and General Counsel
Victoria J. Brush	52	Vice President of Human Resources
Jean Pol Delrue	57	Vice President of European Business Region
William S. Johnson	47	Vice President, Chief Financial Officer and Treasurer
Hiroyuki Nishiya	46	Vice President of Northeast Asia
Daniel J. Pike	41	Vice President of Corporate Development
Stephen R. Smith	45	Vice President of Marketing and Sales
Clifford L. Spiro	50	Vice President, Research and Development
Adam F. Weisman	42	Vice President of Operations
Daniel S. Wobby	41	Vice President of Greater China and Southeast Asia
Thomas S. Roman	43	Principal Accounting Officer and Corporate Controller

William P. Noglows has served as our Chairman, President and Chief Executive Officer since November 2003. Mr. Noglows had previously served as a director of our company from January 2000 until April 2002. Prior to joining us, Mr. Noglows served as an Executive Vice President of Cabot Corporation from 1998 to June 2003. Prior to that, Mr. Noglows held various management positions at Cabot Corporation including General Manager of Cabot Corporation's Cab-O-Sil Division, where he was one of the primary founders of Cabot Microelectronics and was responsible for identifying and encouraging the development of the CMP application. Mr. Noglows received his B.S. in Chemical Engineering from the Georgia Institute of Technology.

H. Carol Bernstein has served as our Vice President, Secretary and General Counsel since August 2000. From January 1998 until joining us, Ms. Bernstein served as the General Counsel and Director of Industrial Technology Development of Argonne National Laboratory, which is operated by the University of Chicago for the United States Department of Energy. From May 1985 until December 1997, she served in various positions with the IBM Corporation, culminating in serving as an Associate General Counsel, and was the Vice President, Secretary and General Counsel of Advantis Corporation, a joint venture between IBM and Sears Roebuck and Co. Ms. Bernstein received her B.A. from Colgate University and her J.D. from Northwestern University; she is a member of the Bar of the States of Illinois and New York.

Victoria J. Brush has served as our Vice President of Human Resources since August 2004. Prior to joining us, Ms. Brush served as the Vice President of Human Resources for DuPont Photomasks, Inc. from 2001 through August 2004, and as Vice President of Human Resources, Organizational Development and Marketing Communications at W.R. Grace from 1999 to 2001. Prior to that, she served in human resources leadership positions at AT&T Corporation and Lucent Technologies, Inc. Ms. Brush holds an M.S. and B.S. in Human Resource Management from Upsala College.

Jean Pol Delrue has served as our Vice President of European Business Region since July 2004 and previously served as our European Business Manager from June 2001 to July 2004. Prior to joining us, Dr. Delrue worked for Ebara Precision Machinery Europe from January 1995 to June 2001, culminating in serving as the Vice President of CMP Europe. Prior to that, he served as the Business and Technical Development Director and Member of the Management Board at Riber SA. Dr. Delrue holds an Executive

MBA from the Centre de Perfectionnement des Affaires in Paris, France; a Ph.D. in Physical Chemistry from Belgium's University of Mons and has performed post doctorate work in chemical engineering at Stanford University.

William S. Johnson has served as our Vice President, Chief Financial Officer and Treasurer since April 2003. Prior to joining us, Mr. Johnson served as Executive Vice President and Chief Financial Officer for Budget Group, Inc. from August 2000 to March 2003. Before that, Mr. Johnson spent 16 years at BP Amoco in various senior finance and management positions. Mr. Johnson received his B.S. in Mechanical Engineering from the University of Oklahoma and his M.B.A. from the Harvard Business School.

Hiroyuki Nishiya has served as our Vice President of Northeast Asia since January 2004 and previously was our Vice President, Asia Pacific Business Region from January 2001 to such time. Mr. Nishiya also served as Japan Business Manager upon joining our company in April 1997. Prior to joining us, Mr. Nishiya held various positions at OKIDATA and Materials Research Corporation. Mr. Nishiya received a B.B.A. from George Washington University.

Daniel J. Pike has served as our Vice President of Corporate Development since January 2004 and previously was our Vice President of Operations from December 1999. Mr. Pike served as our Director of Global Operations from 1996 to 1999. Prior to joining us, Mr. Pike worked for FMC Corporation as a Marketing Manager. Mr. Pike received his B.S. in Chemical Engineering from the University of Buffalo and his M.B.A. from the Wharton School of Business of the University of Pennsylvania.

Stephen R. Smith has served as our Vice President of Marketing and Sales since October 2001. Prior to joining us, Mr. Smith served as Vice President, Sales & Business Development for Buildpoint Corporation from 2000 to October 2001. Prior to that, Mr. Smith spent 17 years at Tyco Electronics Group, formerly known as AMP Incorporated, in various management positions. Mr. Smith earned a B.S. in Industrial Engineering from Grove City College and a M.B.A. from Wake Forest University.

Clifford L. Spiro has served as Vice President, Research and Development since December 2003. Prior to joining us, Dr. Spiro served as Vice President of Research and Development at Ondeo-Nalco from 2001 through November 2003. Prior to that, Dr. Spiro held research and development management and senior technology positions at the General Electric Company from 1980 through 2001, the most recent of which was Global Manager — Technology for Business Development. Dr. Spiro received his B.S. in Chemistry from Stanford University and holds a Ph.D in Chemistry from the California Institute of Technology.

Adam F. Weisman has served as our Vice President of Operations since May 2004. Prior to joining us, Mr. Weisman held various engineering and senior operations management positions with the General Electric Company from 1988 through 2004, including having served as the General Manager of Manufacturing for GE Plastics - Superabrasives, and culminating in serving as the Executive Vice President of Operations for GE Railcar Services. Prior to joining GE, he worked as an engineering team leader and pilot plant manager for E.I. Du Pont de Nemours & Company. Mr. Weisman holds a B.S. degree in ceramic engineering from Alfred University.

Daniel S. Wobby has served as our Vice President of Greater China and Southeast Asia since February 2004. Mr. Wobby previously served as Corporate Controller and Principal Accounting Officer from 2000 to 2004. Prior to that, Mr. Wobby had served as our Director of Finance, and had held various accounting and operations positions with Cabot Corporation since 1989. Before that, Mr. Wobby worked for Arthur Andersen LLP. Mr. Wobby earned a B.S. in Accounting from St. Michael's College and a M.B.A. from the University of Chicago's Graduate School of Business.

Thomas S. Roman has served as our Corporate Controller and Principal Accounting Officer since February 2004 and previously served as our North American Controller. Prior to joining us in April 2000, Mr. Roman was employed by FMC Corporation in various financial reporting, tax and audit positions. Before that, Mr. Roman worked for Gould Electronics and Arthur Andersen LLP. Mr. Roman is a C.P.A. and earned a B.S. in Accounting from the University of Illinois and a M.B.A. from DePaul University's Kellstadt Graduate School of Business.

PART II

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

Our common stock has traded publicly on the NASDAQ National Market under the symbol "CCMP" since our initial public offering in April 2000. The following table sets forth the range of quarterly high and low closing sales prices for our common stock on the NASDAQ National Market.

	High	Low
Fiscal 2003		
First Quarter	61.02	33.25
Second Quarter	55.38	38.34
Third Quarter	52.60	41.55
Fourth Quarter	67.00	51.86
Fiscal 2004		
First Quarter	61.61	48.00
Second Quarter	57.54	40.50
Third Quarter	44.19	26.88
Fourth Quarter	38.29	26.86
Fiscal 2005 First Quarter (through November 30, 2004)	40.80	30.58

As of November 30, 2004, there were approximately 1,173 holders of record of our common stock. No dividends were declared or paid in either fiscal 2004 or fiscal 2003 and we have no current plans to pay cash dividends in the future.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet be Purchased Under the Plans or Programs (in thousands)
July 1 through July 31, 2004	52,000	$33.66	52,000	$23,250
Aug. 1 through Aug. 31, 2004	189,865	$32.92	189,865	$17,000
Sept. 1 through Sept. 30, 2004	—	—	—	$17,000
Total	241,865	$33.08	241,865	$17,000

In July 2004 we announced that our Board of Directors had authorized a share repurchase program for up to $25.0 million of our outstanding common stock. Shares are repurchased from time to time, depending on market conditions, in open market transactions, at management's discretion. We fund share repurchases from our existing cash balance. The program is primarily intended to diminish earnings dilution from the issuance of stock from the exercise of stock options under our equity incentive plan and purchases under our employee stock purchase plan. The program, which was effective on the announcement date, may be suspended or terminated at any time, at the Company's discretion.

Item 6. *Selected Financial Data*

The following selected financial data for each of the five-years ended September 30, 2004 has been derived from the audited consolidated financial statements.

The information set forth below is not necessarily indicative of results of future operations and should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and notes to those statements included in Items 7 and 8 of Part II of this Form 10-K.

CABOT MICROELECTRONICS CORPORATION

SELECTED FINANCIAL DATA — FIVE YEAR SUMMARY

	Year Ended September 30,				
	2004	2003	2002	2001	2000
	(Amounts in thousands, except per share amounts)				
Consolidated Statement of Income Data:					
Revenue	$309,433	$251,665	$235,165	$227,192	$181,156
Cost of goods sold	156,805	124,269	113,067	108,419	86,290
Gross profit	152,628	127,396	122,098	118,773	94,866
Operating expenses:					
Research and development	44,003	41,516	33,668	25,805	19,762
Selling and marketing	16,225	11,221	9,667	8,757	7,594
General and administrative	22,351	18,225	17,458	21,054	19,974
Litigation settlement	—	—	1,000	—	—
Amortization of intangibles	340	340	345	718	718
Total operating expenses	82,919	71,302	62,138	56,334	48,048
Operating income	69,709	56,094	59,960	62,439	46,818
Other income (expense), net	139	(27)	763	1,049	130
Income before income taxes	69,848	56,067	60,723	63,488	46,948
Provision for income taxes	23,120	18,334	20,038	21,586	16,446
Net income	$ 46,728	$ 37,733	$ 40,685	$ 41,902	$ 30,502
Basic earnings per share	$ 1.89	$ 1.55	$ 1.68	$ 1.76	$ 1.44
Weighted average basic shares outstanding	24,750	24,401	24,160	23,824	21,214
Diluted earnings per share	$ 1.88	$ 1.53	$ 1.66	$ 1.72	$ 1.39
Weighted average diluted shares outstanding	24,882	24,665	24,565	24,327	21,888
Cash dividends per share	$ —	$ —	$ —	$ —	$ 3.71

	As of September 30,				
	2004	2003	2002	2001	2000
Consolidated Balance Sheet Data:					
Current assets	$229,681	$179,112	$123,283	$ 96,454	$ 59,053
Property, plant and equipment, net	127,794	133,695	132,264	97,426	71,873
Other assets	5,816	2,810	2,838	2,801	5,180
Total assets	$363,291	$315,617	$258,385	$196,681	$136,106
Current liabilities	$ 32,375	$ 28,916	$ 30,571	$ 26,366	$ 24,200
Long-term debt	—	—	3,500	3,500	3,500
Other long-term liabilities	15,294	14,928	10,808	528	844
Total liabilities	47,669	43,844	44,879	30,394	28,544
Stockholders' equity	315,622	271,773	213,506	166,287	107,562
Total liabilities and stockholders' equity	$363,291	$315,617	$258,385	$196,681	$136,106

Certain amounts in the prior fiscal years have been reclassified to conform with the current year presentation.

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

The following "Management's Discussion and Analysis of Financial Condition and Results of Operations", as well as disclosures included elsewhere in this Form 10-K, include "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. This Act provides a "safe harbor" for forward-looking statements to encourage companies to provide prospective information about themselves so long as they identify these statements as forward-looking and provide meaningful cautionary statements identifying important factors that could cause actual results to differ from the projected results. All statements other than statements of historical fact we make in this Form 10-K are forward-looking. In particular, the statements herein regarding future sales and operating results, company and industry growth and trends, growth of the markets in which the company participates, international events, product performance, new product introductions, development of new products and technologies, the construction of new facilities by the company and statements preceded by, followed by or that include the words "intends," "estimates," "plans," "believes," "expects," "anticipates," "should," "could," or similar expressions, are forward-looking statements. Forward-looking statements reflect our current expectations and are inherently uncertain. Our actual results may differ significantly from our expectations. We assume no obligation to update this forward-looking information. The section entitled "Factors Affecting Future Operating Results" describes some, but not all, of the factors that could cause these differences.

The following discussion and analysis should be read in conjunction with our historical financial statements and the notes to those financial statements which are included in Item 8 of Part II of this Form 10-K.

Overview

Cabot Microelectronics Corporation ("Cabot Microelectronics," "the Company," "us," "we," or "our") is the leading supplier of high-performance polishing slurries used in the manufacture of the most advanced integrated circuit ("IC") devices within the semiconductor industry, in a process called chemical mechanical planarization ("CMP"). CMP is a polishing process used by IC device manufacturers to planarize or flatten many of the multiple layers of material that are built upon silicon wafers in the production of advanced ICs. Planarization is a polishing process that uses CMP slurries and pads to level, smooth and remove excess material from the surfaces of these layers, while leaving minimal residue or defects on the surface. CMP slurries are liquid solutions generally composed of high-purity deionized water, proprietary chemical additives and engineered abrasives that chemically and mechanically interact with the surface material of the IC device at an atomic level.

CMP enables IC device manufacturers to produce smaller, faster and more complex IC devices with fewer defects. We believe CMP will become increasingly important in the future as manufacturers continue to shrink the size of these devices and to improve their performance. Our CMP products are used for a number of applications, such as polishing insulating oxide layers, the tungsten plugs that connect the multiple wiring layers of IC devices through these insulating layers, and copper wiring. We also develop slurries for direct shallow trench isolation, used to electrically isolate adjoining transistors. In addition, we have developed and sell CMP slurries for polishing certain components in hard disk drives, specifically rigid disk substrates and magnetic heads, and we believe we are one of the leading suppliers in this area. We are continuing to develop new and improved products for these applications as well as improving existing products on an ongoing basis. In addition, we are developing polishing pads for use in the CMP process.

Prior to our initial public offering in April 2000, we operated as a division of Cabot Corporation ("Cabot Corporation"). In September 2000 we became a wholly independent entity upon Cabot Corporation's spin-off of its ownership in us that remained after the initial public offering.

We have continued to focus on three key strategies; remaining the technology leader in CMP slurries, achieving operations excellence through improved product quality and consistency, and building and maintaining close customer relationships. We believe that this, coupled with an expansionary period for the semiconductor industry, resulted in profitable growth for our company in fiscal 2004. Revenue for fiscal 2004 was $309.4 million, up 23.0% from the $251.7 million reported for fiscal 2003, and net income increased by 23.8% from the prior year. In addition, diluted earnings per share in fiscal 2004 were $1.88, which represents an

increase of 22.9% from the $1.53 reported in fiscal 2003. The following represents what we believe were important events for our business in fiscal 2004:

- We realigned and refreshed our executive leadership team in order to drive broad organizational development and increase overall leadership capability. In addition, we transitioned to a Global Business Team structure to provide a single point of accountability for each major application area.
- We entered into a strategic alliance with NanoProducts Corporation under which we acquired a minority equity ownership interest in the company in exchange for a $3.8 million investment. Under this alliance we are collaborating to develop nanoscale particles for use in next generation CMP slurries, as well as other fine finish polishing applications.
- We executed a silica supply agreement with Cabot Corporation, which provides better supply assurance, reduced cost risk and additional benefits related to quality that support our operations excellence initiative.
- We established a multi-year supply arrangement with a top 5 semiconductor manufacturer to supply the majority of its CMP needs for polishing copper interconnects at 130 nanometer technology.
- We renewed our revolving credit facility in the amount of $50.0 million, with an option to increase the facility by up to $30.0 million.
- We initiated a share repurchase program for up to $25.0 million of our common stock, primarily intended to diminish earnings dilution from the issuance of stock from the exercise of stock options under our equity incentive plan and purchases under our employee stock purchase plan.
- We commenced design work on a new Asia Pacific technology center that will be constructed adjacent to our existing manufacturing facility in Geino, Japan, which will provide polishing, metrology and product development capabilities.
- We terminated our distribution agreement with a polishing pad manufacturer due to what we believe was a less than acceptable level of profitability.
- We experienced increased competition and pricing pressure, and one large customer notified us of its decision to transition to another supplier of CMP slurry for polishing 130 nanometer copper interconnects.
- We launched a company-wide Six-Sigma initiative to reduce product variation, increase efficiency and productivity and reduce costs.

We believe that the Asia Pacific region continues to be the fastest growing region in the world for the semiconductor industry, and we believe that demand for our products will continue to shift to this region. We have increased our focus in Asia over the last few years by increasing the number of sales and marketing, technical and customer support personnel present in this region. In the fourth fiscal quarter of 2004 we commenced design work on a new Asia Pacific technology center that will be constructed adjacent to our existing manufacturing facility in Geino, Japan. This facility represents our first research and development facility to be located outside of the United States. This investment reflects the importance of the Asia Pacific market to our business and underscores our commitment both to continuing to invest in our technology infrastructure to maintain our technology leadership, and to becoming even more responsive to the needs of our customers.

We believe there are three CMP industry trends that are currently impacting our business. First, we believe that rapid incorporation of CMP technology and growth of the CMP industry, combined with our customers' desires to gain purchasing leverage and lower their cost of ownership, have led to much greater competitive activity. Second, as CMP technology has become more advanced, we believe that CMP technical solutions have become more complex, and leading edge technologies often require customization by customer, tool set and process integration approach. Third, as CMP technology has matured, we believe that semiconductor manufacturers' processes have become highly sensitive to CMP slurries, and customers now demand a very high level of consistency and quality in CMP slurry products, which increases our costs. As a result of these

trends, we expect our gross margin as a percentage of revenue to be 48%, plus or minus 2%, for fiscal 2005. There are indications that 2005 will be a year of moderating revenue growth for the broad semiconductor industry, and possibly even a contraction. The continued uncertainty makes it difficult for us to predict future revenue trends for the industry or our business.

Over the next several years, we believe that growth in emerging consumer connectivity and wireless technologies such as digital mobile phones, digital still and video cameras, digital television and portable media will represent the next wave in the semiconductor industry. We believe that the increased emphasis on memory technology and the incorporation of advanced memory products into digital consumer devices will drive additional growth in the industry over the long term, in parallel with the industry's traditional emphasis on microprocessors for personal computers.

Critical Accounting Policies and Estimates

The following "Management's Discussion and Analysis of Financial Condition and Results of Operations", as well as disclosures included elsewhere in this Form 10-K, are based upon our audited consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingencies. On an ongoing basis, we evaluate the estimates used, including those related to product returns, bad debt expense, inventory valuation, warranty obligations, other accruals, contingencies and litigation. We base our estimates on historical experience, current conditions and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources, as well as identifying and assessing our accounting treatment with respect to commitments and contingencies. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies involve significant judgments and estimates used in the preparation of the consolidated financial statements.

We maintain an allowance for doubtful accounts for estimated losses resulting from the potential inability of our customers to make required payments. Our allowance for doubtful accounts includes both a general reserve based on historical experience and an additional reserve for individual accounts when we become aware of a customer's inability to meet its financial obligations, such as in the case of bankruptcy filings or deterioration in the customer's operating results or financial condition. While historical experience may provide a reasonable estimate of uncollectible accounts, actual results may differ from what was recorded. As of September 30, 2004 our allowance for doubtful accounts represented 1.4% of gross accounts receivable. If we had increased our estimate of bad debts by 1.0%, to 2.4% of gross accounts receivable, our general and administrative expense would have increased by $0.4 million.

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and related costs. The warranty reserve is based upon a historical product return rate applied against sales made in the current quarterly period, plus an additional amount related to any specific known conditions or circumstances. Should actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability may be required. As of September 30, 2004 our warranty reserve represented 1.2% of the current quarter revenue. If we had increased our estimate of general warranty reserve by 1.0%, to 2.2% of the current quarter revenue, our cost of goods sold would have increased by $0.8 million.

We value inventory at the lower of cost or market and write down the value of inventory for estimated obsolescence or if inventory is deemed unmarketable. An inventory reserve is maintained based upon a historical percentage of actual inventory written off applied against inventory at the end of the period, plus an additional amount for known conditions and circumstances. We exercise judgment in estimating the amount of inventory that is obsolete. Should actual product marketability and raw material fitness for use be affected by conditions that are different from those projected by management, revisions to the estimated inventory reserve may be required. Also, the purchase cost of one of our key raw materials from one supplier changes significantly based upon the total quantity of in-specification product that we purchase in a given fiscal year. During interim

periods we determine inventory valuation and the amount charged to cost of goods sold for this raw material from this supplier based on the expected average cost over the entire fiscal year using our current full year forecast of purchases of this raw material from this supplier.

We have entered into unconditional purchase obligations, which include noncancelable purchase commitments and take-or-pay arrangements with suppliers. We review our agreements and make an assessment of the likelihood of a shortfall in purchases and determine if it is necessary to record a liability.

In accordance with the provisions of Statement of Financial Accounting Standards No. 148, "Accounting for Stock-Based Compensation — Transition and Disclosure" ("SFAS 148") and No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), we have elected to account for stock-based compensation plans in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25"), and related interpretations. We disclose the summary of pro forma effects to reported net income as if we had elected to recognize compensation cost based on the fair value of stock-based awards to employees of Cabot Microelectronics as prescribed by SFAS 123.

We have entered into a strategic alliance with NanoProducts Corporation and acquired a minority interest in the company of 13.1% in exchange for an investment of $3.8 million. Although we do not own 20% or more of NanoProducts, we have concluded that we have the ability to significantly influence NanoProducts' operating and financial policies. Therefore, in accordance with Accounting Principles Board Option No. 18 "The Equity Method of Accounting for Investments in Common Stock", we account for our investment using the equity method of accounting, which requires us to record earnings and losses of NanoProducts in proportion to our share of ownership.

We maintain an intercompany loan agreement with our wholly-owned subsidiary, Nihon Cabot Microelectronics K.K. ("the K.K."), under which we provided funds to the K.K. to finance the purchase of certain assets from our former Japanese branch at the time of the establishment of this subsidiary, as well as for the purchase of land adjacent to our Geino, Japan facility, which is part of the K.K. Since settlement of the note is expected in the foreseeable future, and our subsidiary has been consistently making timely payments on the loan, the loan is considered a foreign-currency transaction under FASB Statement No. 52, "Foreign Currency Translation". Therefore the associated foreign exchange gains and losses are recognized in earnings rather than being deferred in the cumulative translation account in other comprehensive income.

Results of Operations

The following table sets forth, for the periods indicated, the percentage of revenue of certain line items included in our historical statements of income:

	Year Ended September 30,		
	2004	2003	2002
Revenue	100.0%	100.0%	100.0%
Cost of goods sold	50.7	49.4	48.1
Gross profit	49.3	50.6	51.9
Research and development	14.2	16.5	14.3
Selling and marketing	5.2	4.5	4.1
General and administrative	7.2	7.2	7.4
Litigation settlement	—	—	0.4
Amortization of intangibles	0.1	0.1	0.1
Operating income	22.6	22.3	25.5
Other income, net	—	—	0.3
Income before income taxes	22.6	22.3	25.8
Provision for income taxes	7.5	7.3	8.5
Net income	15.1%	15.0%	17.3%

Year Ended September 30, 2004 Versus Year Ended September 30, 2003

Revenue

Revenue was $309.4 million in 2004, which represented a 23.0%, or $57.8 million, increase from 2003. Of this increase, $56.7 million was due to an increase in sales volume and $1.1 million was due to an increase in weighted average selling price resulting from both a higher valued product mix and favorable foreign exchange rate changes, which more than offset selective price reductions that were granted to certain customers. Revenue for fiscal year 2004 would have been $4.7 million lower had the average exchange rates for the Japanese Yen and Euro during the period held constant with the prior year's average rates. Also, in June 2003, we began selling directly to customers in Europe, Singapore and Malaysia. These customers previously had been serviced through Metron, a third party distributor. During this transition period we discontinued sales to Metron while they drew down their inventory of our products, which we believe resulted in an adverse revenue impact of $3.7 million during our third quarter of fiscal 2003.

While 2004 has been a growth year for the semiconductor industry, there are indications that 2005 will be a year of moderating revenue growth and possibly even a contraction, which we would expect to have an impact on our business. We expect continued competition as other companies attempt to enter the CMP business. We also expect pricing pressure to continue due to customer desires to gain purchasing leverage and lower their cost of ownership. The cyclical nature of and continued uncertainty in the semiconductor industry makes it difficult for us to predict future revenue trends.

Cost of Goods Sold

Total cost of goods sold was $156.8 million in 2004, which represented an increase of 26.2%, or $32.5 million, from 2003. Of this increase, $27.3 million was due to higher sales volume and $8.1 million was due to higher average costs per gallon resulting from increased fixed manufacturing costs and higher costs from lower yields associated with meeting our customers' more stringent product quality requirements, as well as from transition costs associated with the termination of a polishing pad distribution agreement. These increases were partially offset by the absence of $2.9 million of expense incurred in fiscal 2003 related to a raw material supply agreement for a polishing pad technology that was previously under development but is no longer being pursued.

Fumed metal oxides, both fumed silica and fumed alumina, are significant raw materials we use in many of our CMP slurries. From the time of our initial public offering in April 2000 to January 2004, we purchased fumed silica and fumed alumina under a fumed metal oxide agreement with Cabot Corporation that was due to expire in June 2005. In January 2004 we entered into a fumed silica supply agreement with Cabot Corporation, which replaces the original fumed metal oxide agreement with respect to fumed silica, and accordingly amended our fumed metal oxide agreement with respect to its fumed silica terms such that the agreement now only applies to fumed alumina and runs through its original term of June 2005. This fumed silica supply agreement provides for improved supply assurance, reduces our risk to rising raw material costs and incorporates increased quality performance measures and requirements that support our initiative to increase product quality and consistency. This agreement has an initial six-year term, which expires in December 2009 and will automatically renew unless either party gives certain notice of non-renewal. The contract provides for the cost of fumed silica to increase approximately 4% over the initial six-year term of the fumed silica supply agreement, and in some circumstances is subject to certain inflation adjustments and certain shared cost savings adjustments resulting from our joint efforts.

In addition, since December 2001, we have operated under a fumed alumina supply agreement with Cabot Corporation under which Cabot Corporation expanded its capacity for the manufacture of fumed alumina and we have the first right to all of this expanded capacity. The agreement provides that the price Cabot Corporation charges us for fumed alumina is based on all of its fixed and variable costs for producing the fumed alumina, its capital costs for expanding its capacity, an agreed upon rate of return on investment and incentive payments if they produce more than a certain amount of fumed alumina per year that meets our specifications.

Our need for additional quantities or different kinds of key raw materials in the future has required, and will continue to require, that we enter into new supply arrangements with third parties. Future arrangements

may result in costs which are different from those in the existing agreements. We also expect to continue to invest in our operations excellence initiative to improve our manufacturing capabilities to meet our customers' increasing product performance requirements.

Gross Profit

Our gross profit as a percentage of revenue was 49.3% in 2004 as compared to 50.6% in 2003. The 1.3% decrease in gross profit expressed as a percentage of revenue resulted primarily from increased costs from lower yields associated with meeting customer requirements for higher product quality. We continue to experience increasing competition and pricing pressure, along with increasing costs to support the higher product quality and advanced technology requirements of our customers. For these reasons, we expect our gross profit as a percentage of revenue for fiscal 2005 to be in the range of 48%, plus or minus 2%.

Research and Development

Total research and development expenses were $44.0 million in 2004, which represented an increase of 6.0% or $2.5 million, from 2003. Research and development expense increased primarily due to $2.4 million in higher staffing costs, $1.2 million due to higher depreciation related to the purchase of equipment for our CMP polishing and metrology clean room in Aurora, Illinois, and $0.5 million due to higher technical service fees. These increases were partially offset by a decrease in laboratory supplies of $2.1 million. Research and development efforts were mainly related to formulation and evaluation of new and enhanced CMP slurry products for copper and other applications, commercialization and transfer of new products to our customers and research related to fundamental technology such as advanced chemistry and particle technology.

Selling and Marketing

Selling and marketing expenses were $16.2 million in 2004, which represented an increase of 44.6%, or $5.0 million, over 2003. The increase resulted primarily from higher staffing costs of $2.7 million, increased office expenses of $0.6 million, higher travel costs of $0.6 million, increased consulting fees of $0.5 million and $0.3 million in separation costs for certain employees. The higher selling and marketing expenses resulted from our increased customer support initiatives including our transition to selling direct to customers in Europe, Singapore and Malaysia, rather than through a distributor; although we still use a distributor for a relatively small amount of business in Japan, we have greatly reduced our percentage of business through this distributor and sell more of our product direct to customers. Increases in selling and marketing expenses also resulted from the transition to a Global Business Team structure to provide a single point of accountability for each major application.

General and Administrative

General and administrative expenses were $22.4 million in 2004, which represented an increase of 22.6%, or $4.1 million, from 2003. The increase resulted primarily from $2.5 million in higher staffing costs, $0.5 million of increased professional fees, $0.3 million due to higher insurance premiums and $0.2 million in separation costs for an employee.

Amortization of Intangibles

Amortization of intangibles was $0.3 million in 2004 and 2003.

Other Income, Net

Other income was $0.1 million in 2004, compared to being negligible in 2003. The increase in other income is primarily due to higher interest income and lower interest expense, offset by increased foreign exchange losses.

Provision for Income Taxes

Our effective income tax rate was 33.1% in 2004 and 32.7% in 2003. The increase in the effective tax rate was primarily due to the decreased effect of tax credits from research and experimentation activities. We expect our income tax rate for fiscal year 2005 to be 32.8%.

Net Income

Net income was $46.7 million in 2004, which represented an increase of 23.8%, or $9.0 million, from 2003 as a result of the factors discussed above.

Year Ended September 30, 2003 Versus Year Ended September 30, 2002

Revenue

Revenue was $251.7 million in 2003, which represented a 7.0%, or $16.5 million, increase from 2002. Of this increase, $9.7 million was due to a 4.1% increase in sales volume and $6.8 million was due to increased weighted average selling prices driven by improved sales mix. Fiscal 2003 revenue would have been $1.7 million lower had the Japanese Yen average exchange rate for the year held constant with the prior year average. Also, in June 2003, we began selling directly to customers in Europe, Singapore and Malaysia. These customers previously had been serviced through Metron, a third party distributor. During this transition period we discontinued sales to Metron while they drew down their inventory of our products, which we believe resulted in an adverse revenue impact of $3.7 million during our third quarter of fiscal 2003.

Cost of Goods Sold

Total cost of goods sold was $124.3 million in 2003, which represented an increase of 9.9% or $11.2 million from 2002. Of this increase, $4.6 million was due to higher sales volume, $4.6 million was due to higher average costs per gallon associated with meeting our customers' more stringent product quality requirements and $2.0 million was due to a charge related to the remaining minimum purchase obligation under a raw material supply agreement for a polishing pad technology that was previously under development but is no longer being pursued. Our total cost of this supply agreement was $2.9 million in fiscal 2003, compared to $0.8 million in the prior fiscal year.

The increase in cost of goods sold was partially offset by the absence of royalty payments that ended in August 2002, following the expiration of a contingent payment arrangement with Rippey Corporation resulting from our 1995 acquisition of selected assets used or created in connection with the development and sale of polishing slurries. We had made payments under this agreement of 2.5% of applicable slurry revenue from July 1995 through our last payment in August 2002.

Gross Profit

Our gross profit as a percentage of revenue was 50.6% in 2003 as compared to 51.9% in 2002. The decrease in gross profit resulted primarily from an increase in manufacturing costs to support our customers' increasing quality requirements, pricing pressure from certain key customers and our recognition of the minimum purchase obligation referred to above.

Research and Development

Total research and development expenses were $41.5 million in 2003, which represented an increase of 23.3% or $7.8 million, from 2002. Research and development expense increased $1.6 million due to increased staffing, $1.7 million due to higher wafer purchases and $2.7 million due to depreciation and operating costs of our Aurora, Illinois research and development facility and other new equipment. Since our new research and development facility was opened during fiscal 2002, 2002 does not represent a full year of depreciation and operating costs related to the facility. An additional $1.0 million increase resulted from allocating certain common facility operating costs to research and development. These costs had previously been treated as general and administrative expense prior to construction of the facility. Additional costs were incurred in

technical service support and other areas to support the overall increase in research and development activities. Research and development efforts were mainly related to new and enhanced CMP products, including slurry products for copper applications, new CMP polishing pad technology and advanced chemistry and particle technology.

Selling and Marketing

Selling and marketing expenses were $11.2 million in 2003, which represented an increase of 16.1%, or $1.6 million, over 2002. The increase resulted primarily from higher staffing costs associated with our increased customer support initiatives including our transition to selling direct to customers in Europe, Singapore and Malaysia, rather than through a distributor.

General and Administrative

General and administrative expenses were $18.2 million in 2003, which represented an increase of 4.4%, or $0.8 million, from 2002. Increases include depreciation of our business information systems, higher directors' and officers' liability insurance premiums of $1.2 million and increased staffing costs of $0.6 million. These increases were partially offset by a $0.8 million reduction in legal and professional expenses, primarily due to the absence of legal fees associated with the Rodel litigation, discussed further below, a decrease in facilities charges due to the change in allocation of certain common facility operating costs described under Research and Development and the absence of a $0.2 million non-cash charge related to the modification of a former director's stock option agreement in fiscal 2002.

Litigation Settlement

During the second fiscal quarter of 2002, we settled all pending patent infringement litigation with Rodel, which resulted in a one-time payment of $1.0 million. Under the settlement agreement, we received a fully paid-up, worldwide royalty-free license to all technology that was the subject of the litigation and their foreign equivalents, and there is no further financial obligation with respect to this matter.

Amortization of Intangibles

Amortization of intangibles was $0.3 million in 2003 and 2002.

Other Income, Net

Other expense was negligible in 2003 compared to $0.8 million of other income in 2002. The decrease in other income in 2003 is due to the absence of foreign exchange gains recorded in the prior year resulting from the strengthening of the Japanese Yen, which were partially offset by a payment made to Cabot Corporation in 2002 as reimbursement for certain capital improvements made to equipment used to supply us with raw materials, that is no longer in service.

Provision for Income Taxes

The effective income tax rate was 32.7% in 2003 and 33.0% in 2002. The decrease in the effective tax rate was due to an increase in tax credits from expanded research and experimentation activities.

Net Income

Net income was $37.7 million in 2003, which represented a decrease of 7.3%, or $3.0 million, from 2002 as a result of the factors discussed above.

Inflation

We believe that inflation has not had a material effect on our revenues and net income for the last three fiscal years.

Liquidity and Capital Resources

We had cash flows from operating activities of $64.2 million in 2004, $47.6 million in 2003 and $53.5 million in 2002. Our cash provided by operating activities in 2004 originated from net income from operations of $46.7 million and non-cash items of $20.4 million, which were partially offset by a net increase in working capital of $2.9 million.

In 2004 cash flows used in investing activities were $12.8 million, of which $11.0 million was used for purchases of land in Geino, Japan, production-related equipment and research and development equipment. In addition, we acquired a minority equity ownership interest in NanoProducts Corporation in exchange for a $3.8 million investment of which we have paid approximately $1.8 million to NanoProducts Corporation and intend to pay an additional $1.9 million. In 2003 cash flows used in investing activities were $14.5 million, primarily due to $16.4 million in purchases of additional production-related equipment, a 300 mm polishing tool and metrology tools to support increased polishing capacity in our Class 1 clean room. These capital expenditures were partially offset by $1.9 million in cash received from the sale of assets, of which $1.8 million related to the January 2003 sale of our distribution center and land in Ansung, South Korea. In 2002, cash flows used in investing activities were $35.3 million, primarily due to completion of the construction of our new research and development facility in Aurora, Illinois, and equipping the facility with additional research and development equipment. We also purchased additional production-related equipment to be used in Aurora, Illinois and invested in the development and implementation of our business information system.

In 2004 cash flows used in financing activities of $5.4 million resulted primarily from the repurchase of $8.0 million of common stock and principal payments of $0.8 million made under capital lease obligations. These outflows were partially offset by the issuance of common stock of $3.4 million from the exercise of stock options under our equity incentive plan and purchases under our employee stock purchase plan. We had cash flows from financing activities of $8.5 million in 2003 that resulted from the issuance of common stock of $12.8 million for the exercise of stock options under our equity incentive plan and to a much lesser extent, purchases under our employee stock purchase plan, offset by a $3.5 million loan repayment, which is described below, and principal payments of $0.7 million made under capital lease obligations. We had cash flows from financing activities of $3.6 million in 2002 which resulted from the issuance of common stock of $4.5 million for both the exercise of stock options under our equity incentive plan and purchases under our employee stock purchase plan, offset partially by principal payments of $0.9 million made under capital lease obligations.

In July 2004 we announced that our Board of Directors had authorized a share repurchase program for up to $25.0 million of our outstanding common stock. Shares are repurchased from time to time, depending on market conditions, in open market transactions, at management's discretion. We fund share repurchases from our existing cash balance. The plan is primarily intended to diminish earnings dilution from the issuance of stock from the exercise of stock options under our equity incentive plan and purchases under our employee stock purchase plan. The program, which became effective on the announcement date, may be suspended or terminated at any time, at the Company's discretion.

In February 2003, we prepaid the entire $3.5 million unsecured term loan that had been funded on the basis of the Illinois State Treasurer's Economic Program which had been due in April 2005 and had incurred interest at an annual rate of 4.68%. No gain or loss was recognized with respect to the prepayment. As a result of this prepayment, we have no outstanding long term debt.

In July 2001 we entered into a $75.0 million unsecured revolving credit and term loan facility with a group of commercial banks, and in February 2002 and August 2003, this agreement was amended with no material changes in terms. On November 24, 2003, the then existing agreement was terminated and replaced with an amended and restated unsecured revolving credit facility of $50.0 million with an option to increase the facility by up to $30.0 million. Under this agreement, which terminates in November 2006, but can be renewed for two one-year terms, interest accrues on any outstanding balance at either the institution's base rate or the eurodollar rate plus an applicable margin. A non-use fee also accrues. Loans under this facility are anticipated to be used primarily for general corporate purposes, including working capital and capital expenditures. The credit agreement also contains various covenants. No amounts are currently outstanding under this credit facility and we believe we are currently in compliance with the covenants.

We estimate that our total capital expenditures in fiscal year 2005 will be approximately $33.0 million, approximately $0.4 million of which we have already spent as of October 31, 2004. We expect our major capital expenditures in 2005 to include the construction of our Asia Pacific technology center in Geino, Japan and equipment for new product introductions and product capacity expansions.

We believe that cash generated by our operations and available borrowings under our revolving credit facility will be sufficient to fund our operations, expected capital expenditures and share repurchases for the foreseeable future. However, we plan to expand our business and continue to improve our technology and, to do so, we may be required to raise additional funds in the future through public or private equity or debt financing, strategic relationships or other arrangements.

Off-Balance Sheet Arrangements

At September 30, 2004 and 2003, we did not have any unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which might have been established for the purpose of facilitating off-balance sheet arrangements.

Tabular Disclosure of Contractual Obligations

The following summarizes our contractual obligations at September 30, 2004 and the effect such obligations are expected to have on our liquidity and cash flow in future periods.

Contractual Obligations

	Total	Less Than 1 Year	1-3 Years	4-5 Years	After 5 Years
			(In millions)		
Capital lease obligations	$ 7.7	$ 1.3	$ 3.0	$2.4	$1.0
Operating leases	1.0	0.5	0.4	0.1	0.0
Purchase obligations	46.5	29.3	11.8	3.3	2.1
Other long-term liabilities	1.5	0.0	0.0	0.0	1.5
Total contractual obligations	$56.7	$31.1	$15.2	$5.8	$4.6

Capital Lease Obligations

Since December 2001 we have operated under a fumed alumina supply agreement with Cabot Corporation, under which Cabot Corporation expanded its capacity in Tuscola, Illinois for the manufacture of fumed alumina. Payments made by us with respect to capital costs for the facility have been treated as a capital lease for accounting purposes and the present value of the minimum quarterly payments of approximately $0.3 million resulted in a $9.8 million lease obligation and $9.8 million related leased asset. The agreement has an initial five-year term, which expires in 2006, but we can choose to renew the agreement for another five-year term, which would expire in 2011. We also can choose to not renew the agreement subject to certain terms and conditions and the payment of certain costs, after the initial five-year term.

In January 2002 we entered into a CMP tool and polishing consumables transfer agreement with a third party under which we agreed to transfer polishing consumables to this entity in return for a CMP polishing tool. The polishing tool has been treated as a capital lease and the aggregate fair market value of the polishing consumables resulted in a $2.0 million lease obligation. The term of the agreement is approximately three years.

Operating Leases

We lease certain vehicles, warehouse facilities, office space, machinery and equipment under cancelable and noncancelable operating leases, most of which expire within ten years and may be renewed by us.

Purchase Obligations

Purchase obligations include our take-or-pay arrangements with suppliers, and purchase orders and other obligations entered into in the normal course of business regarding the purchase of goods and services. In the fourth quarter of fiscal 2003, we recorded a $2.0 million liability for a raw material supply agreement for a polishing pad technology that was previously under development, but is no longer being pursued. Our remaining obligation with respect to this agreement is $1.2 million which is recorded in current liabilities and shown in the preceding table under purchase obligations.

In January 2004 we entered into a fumed silica supply agreement with Cabot Corporation, which replaces our original fumed metal oxide agreement with respect to fumed silica, and accordingly amended our fumed metal oxide agreement with Cabot Corporation with respect to its fumed silica terms such that the agreement now only applies to fumed alumina through its original term of June 2005. Under the fumed silica supply agreement, we continue to be obligated to purchase at least 90% of our six-month volume forecast and to pay for the shortfall if we purchase less than that amount. This agreement has an initial six-year term, which expires in December 2009 and will automatically renew unless either party gives certain notice of non-renewal. We currently anticipate meeting minimum forecasted purchase volume requirements. Also, under our fumed alumina supply agreement with Cabot Corporation we are obligated to pay certain fixed, capital and variable costs through December 2006. This agreement has an initial five-year term, but we can choose to renew the agreement for another five-year term, which would expire in December 2011. If we do not renew the agreement, we will become subject to certain terms and conditions and the payment of certain costs. Purchase obligations include $24.3 million of contractual commitments for fumed silica and fumed alumina under these contracts based upon our anticipated renewal of the fumed alumina agreement through December 2011.

We have an agreement with a toll manufacturer pursuant to which the manufacturer performs certain agreed-upon dispersion services. We have agreed to purchase minimum amounts of services per year and to invest approximately $0.2 million per year in capital improvements or other expenditures to maintain capacity at the manufacturer's dispersion facility. The initial term of the agreement expired in October 2004. In November 2004 the agreement was renewed for another year under similar terms and conditions. The contract continues to have automatic one-year renewals and contains a 90-day cancellation clause executable by either party. Purchase obligations related to this agreement are $8.8 million, which include a termination payment if the agreement is not renewed.

In June 2003 we entered into a technology licensing and co-marketing agreement with a semiconductor equipment manufacturer under which we may develop, manufacture and sell polishing pads utilizing endpoint detection window technology licensed from the manufacturer for use on the manufacturer's equipment. Under this agreement, we are obligated to supply this manufacturer with certain free commercially available polishing pads, up to an agreed upon dollar amount, for particular uses over a seven-year period. The table above includes estimated total costs associated with these products of $1.2 million over the remaining period. We are also obligated to supply the equipment manufacturer with certain commercially available polishing pads, up to an agreed upon dollar amount over the seven-year period, which the manufacturer will purchase from us at our cost. We will also pay a royalty to the equipment manufacturer and, in certain circumstances, to another party to whom we are a sub-licensee under our agreement, based upon net revenue earned with respect to commercial sales of polishing pads covered under the agreement. The term of the agreement lasts as long as the patents on the technology subject to the license agreement remain valid and enforceable.

We had been operating under a distribution agreement with an existing supplier of polishing pads to the semiconductor industry pursuant to which the supplier sold pads to us for our resale to end users. However, due to what we believe was a less than acceptable level of profitability under this value-added reseller model, the distribution agreement was terminated by mutual agreement in June 2004. Pursuant to our June 2004 termination agreement, we were obligated to pay a non-material transition fee which is included in the table above and was paid in December 2004.

In July 2004 we formed a strategic alliance with NanoProducts Corporation under which we acquired a minority equity ownership interest in the company in exchange for a $3.8 million investment. Under this arrangement, we are collaborating with NanoProducts to develop nanoscale particles for use in future

generation CMP slurries, and other fine finish polishing applications. As of September 30, 2004 we have paid $1.8 million to NanoProducts and intend to pay an additional $1.9 million.

Other Long-Term Liabilities

Other long-term liabilities include $0.8 million for pension liabilities and $0.7 for deferred compensation obligations.

Effects of Recent Accounting Pronouncements

In March 2004, the Emerging Issues Task Force (EITF) reached a consensus on Issue No. 03-06, "Participating Securities and the Two-Class Method under FASB Statement No. 128, Earning per Share" ("EITF Issue No. 03-06"), which provides guidance on the calculation and disclosure of earnings per share (EPS), including the use of the two-class method for determining EPS when a company has participating securities. We have adopted EITF Issue No. 03-06 effective September 2004, which had no impact on our fiscal 2004 EPS.

FACTORS AFFECTING FUTURE OPERATING RESULTS

Risks Relating to Our Business

We have a narrow product range and our products may become obsolete, or technological changes may reduce or limit increases in CMP consumption

Our business is substantially dependent on a single class of products, CMP slurries, which historically has accounted for almost all of our revenue. Our business would suffer if these products became obsolete or if consumption of these products decreased. Our success depends on our ability to keep pace with technological changes and advances in the semiconductor industry and to adapt, improve and customize our products for the most advanced IC applications in response to evolving customer needs and industry trends. Since its inception, the semiconductor industry has experienced rapid technological changes and advances in the design, manufacture, performance and application of IC devices, and our customers continually pursue lower cost of ownership of materials consumed in their manufacturing processes, including CMP slurries. We expect these technological changes and advances, and this drive toward lower costs, to continue in the future. Emerging technologies in the semiconductor industry, such as polishing pads containing abrasives and electrochemical mechanical planarization ("eCMP"), as well as our customers' efforts to reduce consumption of CMP slurries, could render our products less important to the IC device manufacturing process.

A significant amount of our business comes from a limited number of large customers and our revenue and profits could decrease significantly if we lost one or more of them as customers

Our customer base is concentrated among a limited number of large customers. One or more of these principal customers may stop buying CMP slurries from us or may substantially reduce the quantity of CMP slurries they purchase from us, as we saw in the third fiscal quarter of 2004 with respect to one large customer that notified us of its decision to transition to another supplier of CMP slurries for polishing 130 nanometer copper interconnects. Our principal customers also hold considerable purchasing power, which can impact the pricing, and terms of sale of our products. Any cancellation, deferral or significant reduction in CMP slurries sold to these principal customers, or a significant number of smaller customers, could seriously harm our business, financial condition and results of operations. In fiscal 2004, our five largest customers, of which one is a distributor, accounted for approximately 55% of our revenue, with Marketech (our distributor in Taiwan and China), and Intel accounting for approximately 32% and 9% of our revenue, respectively. In fiscal year 2003, our five largest customers, of which two were distributors, accounted for approximately 61% of our revenue, with Marketech and Intel accounting for approximately 28% and 15% of our revenue, respectively. In June 2003, we completed our transition to selling directly to customers in Europe, Singapore and Malaysia who previously had been serviced through Metron, one of these distributors.

Any problem or interruption in supply of our most important raw materials, including fumed metal oxides, could delay our slurry production and adversely affect our sales

Fumed metal oxides, such as fumed silica and fumed alumina, are significant raw materials we use in many of our CMP slurries. Our business would suffer from any problem or interruption in our supply of fumed metal oxides or other key raw materials. We operate under three raw material supply agreements with Cabot Corporation, one of which is for the supply of fumed silica and two of which are for the supply of fumed alumina. Under these agreements, Cabot Corporation continues to be our primary supplier of particular amounts and types of fumed alumina and fumed silica. We believe it would be difficult to secure alternative sources of fumed metal oxides in the event Cabot Corporation or another supplier becomes unable to supply us with sufficient quantities of fumed metal oxides that meet the quality and technical specifications required by our customers. In addition, contractual amendments to the existing agreements with, or non-performance by, Cabot Corporation or another supplier, could adversely affect us as well.

Also, if we change the supplier or type of key raw materials such as fumed metal oxides we use to make our existing CMP slurries or are required to purchase them from a different manufacturer or manufacturing facility, whether Cabot Corporation or another party, or otherwise modify our products, in certain circumstances our customers might have to requalify our CMP slurries for their manufacturing processes and products. The requalification process could take a significant amount of time to complete, possibly interrupting or reducing our sales of CMP slurries to these customers.

Our business could be seriously harmed if our existing or future competitors develop superior slurry products, offer better pricing terms or service, obtain certain intellectual property rights or if any of our major customers develop or increase in-house slurry manufacturing capability

Competition from current CMP slurry manufacturers, new entrants to the CMP slurry market or a decision by any of our major customers to produce, or increase the production of slurry products in-house could seriously harm our business and results of operations. Competition has increased from other existing providers of CMP slurries and opportunities exist for other companies with sufficient financial or technological resources to emerge as potential competitors by developing their own CMP slurry products. Increased competition and additional in-house production has and may continue to impact the prices we are able to charge for our slurry products as well as our overall business. In addition, our competitors could have or obtain intellectual property rights which could restrict our ability to market our existing products and/or to innovate and develop new products.

Because we have limited experience in business areas outside of CMP slurries, expansion of our business into new products and applications may not be successful

An element of our strategy has been to leverage our current customer relationships and technological expertise to expand our business into new product areas and applications, including CMP polishing pads. Expanding our business into new product areas involves technologies and production processes, in which we have limited experience, and we may not be able to develop and produce products that satisfy our customers' needs or we may be unable to keep pace with technological or other developments. Also, our competitors may have or obtain intellectual property rights which could restrict our ability to market our existing products and/or to innovate and develop new products.

We are subject to some risks associated with our foreign operations

We currently have operations and a large customer base outside of the United States. For fiscal 2004, approximately 75% of our revenue was generated by sales to customers outside of the United States. For fiscal 2003, approximately 68% of our revenue was generated by sales to customers outside of the United States. We encounter risks in doing business in certain foreign countries, including but not limited to, adverse changes in economic and political conditions, as well as difficulty in enforcing business and customer contracts and agreements, including protection of intellectual property rights. In June 2003 we completed our transition to selling directly to customers in Europe, Singapore and Malaysia who previously had been serviced through a third party distributor. Selling directly may increase our risk of conducting business in foreign countries.

Because we rely heavily on our intellectual property, our failure to adequately obtain or protect it could seriously harm our business

Protection of intellectual property is particularly important in our industry because CMP slurry and pad manufacturers develop complex technical formulas for CMP products which are proprietary in nature and differentiate their products from those of competitors. Our intellectual property is important to our success and ability to compete. We attempt to protect our intellectual property rights through a combination of patent, trademark, copyright and trade secret laws, as well as employee and third-party nondisclosure and assignment agreements. Our failure to obtain or maintain adequate protection of our intellectual property rights for any reason could seriously harm our business.

Demand for our products and our business may be adversely affected by worldwide economic and industry conditions

Our business is affected by current economic and industry conditions and it is extremely difficult to predict sales of our products given uncertainties in these factors. For example, our quarterly revenue in fiscal years 2001 through 2003 were affected by the global economic slowdown and weakening in demand for electronic systems, coupled with higher than normal chip inventories. While the semiconductor industry recovered from this prolonged downturn in fiscal 2004, we believe the outlook for 2005 is for moderating revenue growth for the broad semiconductor industry and possibly even a contraction. Further, the semiconductor industry has been cyclical, and the advent of the next downturn could adversely affect our business.

Our inability to attract and retain key personnel could cause our business to suffer

If we fail to attract and retain the necessary managerial, technical and customer support personnel, our business and our ability to maintain existing and obtain new customers, develop new products and provide acceptable levels of customer service could suffer. Competition for qualified personnel, particularly those with significant experience in the CMP and IC device industries, is intense. The loss of services of key employees could harm our business and results of operations.

Risks Relating to the Market for Our Common Stock

The Market Price May Fluctuate Significantly and Rapidly

The market price of our common stock has and could continue to fluctuate significantly as a result of factors such as: economic and stock market conditions generally and specifically as they may impact participants in the semiconductor industries; changes in financial estimates and recommendations by securities analysts who follow our stock; earnings and other announcements by, and changes in market evaluations of, us or participants in the semiconductor and related industries; changes in business or regulatory conditions affecting us or participants in the semiconductor and related industries; announcements or implementation by us, our competitors, or our customers of technological innovations, new products or different business strategies; and trading volume of our common stock.

Anti-Takeover Provisions Under Our Certificate of Incorporation and Bylaws and Our Rights Plan May Discourage Third Parties from Making an Unsolicited Bid for Our Company

Our certificate of incorporation, our bylaws, our rights plan and various provisions of the Delaware General Corporation Law may make it more difficult to effect a change in control of our company. For example, our amended certificate of incorporation authorizes our board of directors to issue up to 20 million shares of blank check preferred stock and to attach special rights and preferences to this preferred stock. Also our amended certificate of incorporation provides for the division of our board of directors into three classes as nearly equal in size as possible with staggered three-year terms. In addition, the rights issued to our stockholders under our rights plan may make it more difficult or expensive for another person or entity to acquire control of us without the consent of our board of directors.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

Effect of Currency Exchange Rates and Exchange Rate Risk Management

We conduct business operations outside of the United States through our foreign operations. Our foreign operations maintain their accounting records in their local currencies. Consequently, period to period comparability of results of operations is affected by fluctuations in exchange rates. The primary currencies to which we have exposure are the Japanese Yen and, to a lesser extent, the British Pound and the Euro. From time to time we enter into forward contracts in an effort to manage foreign currency exchange exposure. However, we may be unable to hedge these exposures completely. Approximately 16% of our revenue is transacted in currencies other than the U.S. dollar. We do not currently enter into forward exchange contracts or other derivative instruments for speculative or trading purposes.

Market Risk and Sensitivity Analysis Foreign Exchange Rate Risk

We have performed a sensitivity analysis assuming a hypothetical 10% adverse movement in foreign exchange rates. As of September 30, 2004, the analysis demonstrated that such market movements would not have a material adverse effect on our consolidated financial position, results of operations or cash flows over a one-year period. Actual gains and losses in the future may differ materially from this analysis based on changes in the timing and amount of foreign currency rate movements and our actual exposures.

Item 8. ***Consolidated Financial Statements and Supplementary Data***

Cabot Microelectronics Corporation
Index to Consolidated Financial Statements and Financial Statement Schedule

All other schedules are omitted, because they are not required, are not applicable, or the information is included in the financial statements and notes thereto.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Cabot Microelectronics Corporation

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Cabot Microelectronics Corporation and its subsidiaries at September 30, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 2004 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PRICEWATERHOUSECOOPERS LLP

Chicago, Illinois
December 8, 2004

CABOT MICROELECTRONICS CORPORATION

CONSOLIDATED STATEMENTS OF INCOME

	Year Ended September 30,		
	2004	2003	2002
	(In thousands, except per share amounts)		
Revenue	$309,433	$251,665	$235,165
Cost of goods sold	156,805	124,269	113,067
Gross profit	152,628	127,396	122,098
Operating expenses:			
Research and development	44,003	41,516	33,668
Selling and marketing	16,225	11,221	9,667
General and administrative	22,351	18,225	17,458
Litigation settlement	—	—	1,000
Amortization of intangibles	340	340	345
Total operating expenses	82,919	71,302	62,138
Operating income	69,709	56,094	59,960
Other income (expense), net	139	(27)	763
Income before income taxes	69,848	56,067	60,723
Provision for income taxes	23,120	18,334	20,038
Net income	$ 46,728	$ 37,733	$ 40,685
Basic earnings per share	$ 1.89	$ 1.55	$ 1.68
Weighted average basic shares outstanding	24,750	24,401	24,160
Diluted earnings per share	$ 1.88	$ 1.53	$ 1.66
Weighted average diluted shares outstanding	24,882	24,665	24,565

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

CABOT MICROELECTRONICS CORPORATION

CONSOLIDATED BALANCE SHEETS

	September 30, 2004	September 30, 2003
	(In thousands, except share amounts)	
ASSETS		
Current assets:		
Cash and cash equivalents	$157,318	$111,318
Accounts receivable, less allowance for doubtful accounts of $598 at September 30, 2004 and $585 at September 30, 2003	41,347	37,564
Inventories	24,474	23,814
Prepaid expenses and other current assets	3,264	4,010
Deferred income taxes	3,278	2,406
Total current assets	229,681	179,112
Property, plant and equipment, net	127,794	133,695
Goodwill	1,373	1,373
Other intangible assets, net	350	595
Other long-term assets	4,093	842
Total assets	$363,291	$315,617
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 13,080	$ 12,521
Capital lease obligations	1,272	1,716
Accrued expenses, income taxes payable and other current liabilities	18,023	14,679
Total current liabilities	32,375	28,916
Capital lease obligations	6,385	7,452
Deferred income taxes	7,374	5,384
Deferred compensation and other long-term liabilities	1,535	2,092
Total liabilities	47,669	43,844
Commitments and contingencies (Note 17)		
Stockholders' equity:		
Common stock:		
Authorized: 200,000,000 shares, $0.001 par value		
Issued: 24,855,495 shares at September 30, 2004 and 24,712,740 shares at September 30, 2003	25	25
Capital in excess of par value of common stock	136,259	131,913
Retained earnings	185,586	138,858
Accumulated other comprehensive income	1,905	1,187
Unearned compensation	(153)	(210)
Treasury stock at cost, 241,865 shares at September 30, 2004 and no shares at September 30, 2003	(8,000)	—
Total stockholders' equity	315,622	271,773
Total liabilities and stockholders' equity	$363,291	$315,617

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

CABOT MICROELECTRONICS CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended September 30,		
	2004	2003	2002
		(In thousands)	
Cash flows from operating activities:			
Net income	$ 46,728	$ 37,733	$40,685
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	17,611	15,732	12,009
Equity in loss of equity method investee	73	—	—
Noncash compensation expense and non-employee stock options	67	(13)	475
Provision for inventory writedown	930	1,352	517
Provision for doubtful accounts	44	121	(154)
Stock option income tax benefits	967	4,822	2,059
Deferred income taxes	1,119	4,447	1,756
Unrealized foreign exchange gain	(3)	(1,535)	(1,504)
Raw material supply obligation	—	1,959	—
Loss on disposal of property, plant and equipment	58	50	98
Other noncash items, net	(471)	198	(109)
Changes in operating assets and liabilities:			
Accounts receivable	(3,210)	(10,855)	713
Inventories	(1,256)	(2,045)	(4,429)
Prepaid expenses and other assets	(308)	(378)	(1,255)
Accounts payable, accrued liabilities and other current liabilities	567	(324)	158
Income taxes payable, deferred compensation and other noncurrent liabilities	1,294	(3,680)	2,481
Net cash provided by operating activities	64,210	47,584	53,500
Cash flows from investing activities:			
Additions to property, plant and equipment	(10,968)	(16,396)	(35,259)
Purchases of investments	(1,820)	—	—
Proceeds from the sale of property, plant and equipment	15	1,861	—
Net cash used in investing activities	(12,773)	(14,535)	(35,259)
Cash flows from financing activities:			
Prepayments of long-term debt	—	(3,500)	—
Repurchase of common stock	(8,000)	—	—
Net proceeds from issuance of stock	3,385	12,761	4,500
Principal payments under capital lease obligations	(815)	(742)	(857)
Net cash provided (used) by financing activities	(5,430)	8,519	3,643
Effect of exchange rate changes on cash	(7)	145	44
Increase in cash	46,000	41,713	21,928
Cash and cash equivalents at beginning of year	111,318	69,605	47,677
Cash and cash equivalents at end of year	$157,318	$111,318	$69,605
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	$ 19,554	$ 14,420	$14,028
Cash paid for interest	$ 688	$ 882	$ 869
Supplemental disclosure of noncash investing and financing activities:			
Issuance of restricted stock	$ 25	$ 275	$ 10
Assets acquired under capital leases (Note 9)	$ —	$ 114	$11,770

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

CABOT MICROELECTRONICS CORPORATION

CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY

	Common Stock, $0.001 Par Value	Capital In Excess Of Par	Retained Earnings	Accumulated Other Comprehensive Income	Comprehensive Income	Unearned Compensation	Treasury Stock	Total
				(In thousands)				
Balance at September 30, 2001	$24	$107,335	$ 60,440	$(1,191)		$(321)	$ —	$166,287
Exercise of stock options		3,169						3,169
Tax benefit on stock options exercised		2,059						2,059
Amortization of unearned compensation on restricted stock						260		260
Issuance of Cabot Microelectronics restricted stock under deposit share plan		30				(10)		20
Issuance of stock options to non-Cabot Microelectronics employees		37						37
Issuance of Cabot Microelectronics stock under Employee Stock Purchase Plan		1,308						1,308
Modification of stock award grants		178						178
Net income			40,685		$40,685			
Net unrealized gain on derivative instruments				32	32			
Foreign currency translation adjustment				(529)	(529)			
Total comprehensive income					$40,188			40,188
Balance at September 30, 2002	24	114,116	101,125	(1,688)		(71)	—	213,506
Exercise of stock options	1	11,556						11,557
Tax benefit on stock options exercised		4,822						4,822
Amortization of unearned compensation on restricted stock						18		18
Issuance of Cabot Microelectronics restricted stock under employee compensation plans		265				(199)		66
Issuance of Cabot Microelectronics restricted stock under deposit share plan		30				(10)		20
Forfeiture of Cabot Microelectronics restricted stock		(89)				89		—
Reverse amortization related to restricted stock forfeited						(37)		(37)
Issuance of stock options to non-Cabot Microelectronics employees		6						6
Issuance of Cabot Microelectronics stock under Employee Stock Purchase Plan		1,207						1,207
Net income			37,733		$37,733			
Net unrealized gain on derivative instruments				34	34			
Foreign currency translation adjustment				2,841	2,841			
Total comprehensive income					$40,608			40,608
Balance at September 30, 2003	25	131,913	138,858	1,187		(210)	—	271,773
Exercise of stock options		2,232						2,232
Tax benefit on stock options exercised		967						967
Amortization of unearned compensation on restricted stock						76		76
Issuance of Cabot Microelectronics restricted stock under deposit share plan		75				(25)		50
Forfeiture of Cabot Microelectronics restricted stock		(15)				15		—
Reverse amortization related to restricted stock forfeited						(9)		(9)
Issuance of Cabot Microelectronics stock under Employee Stock Purchase Plan		1,087						1,087
Purchase of treasury stock, at cost							(8,000)	(8,000)
Net income			46,728		$46,728			
Net unrealized loss on derivative instruments				(10)	(10)			
Foreign currency translation adjustment				728	728			
Total comprehensive income					$47,446			47,446
Balance at September 30, 2004	$25	$136,259	$185,586	$ 1,905		$(153)	$(8,000)	$315,622

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

1. Background and Basis of Presentation

We believe we are the leading supplier of high performance polishing slurries used in the manufacture of the most advanced integrated circuit ("IC") devices, within a process called chemical mechanical planarization ("CMP"). CMP is a polishing process used by IC device manufacturers to planarize many of the multiple layers of material that are built upon silicon wafers to produce advanced devices.

The consolidated financial statements have been prepared by Cabot Microelectronics Corporation ("Cabot Microelectronics", "the Company", "us", "we", or "our"), pursuant to the rules of the Securities and Exchange Commission ("SEC") and accounting principles generally accepted in the United States of America. We operate predominantly in one industry segment — the development, manufacture, and sale of CMP polishing slurries.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of Cabot Microelectronics and its subsidiaries. All significant intercompany transactions and balances are eliminated in consolidation.

Use of Estimates

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumption and estimates that affect the amounts reported in the consolidated financial statements and accompanying notes. The accounting estimates that require management's most difficult and subjective judgments include, but are not limited to, the assessment of the adequacy of our allowance for doubtful accounts and our product warranty reserves; the valuation of inventory; and the recognition of certain accruals, contingencies and litigation. We base our estimates on historical experience, current conditions and on various other assumptions that are believed to be reasonable under the circumstances. However, future events are subject to change and the best estimates and judgments routinely require adjustment. Actual results may differ from these estimates under different assumptions or conditions.

Cash and Cash Equivalents

We consider investments in all highly liquid debt instruments with original maturities of three months or less to be cash equivalents.

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. We maintain an allowance for doubtful accounts for estimated losses resulting from the potential inability of our customers to make required payments. Our allowance for doubtful accounts includes both a general reserve based on historical experience and an additional reserve for individual accounts when we become aware of a customer's inability to meet its financial obligations, such as in the case of bankruptcy filings or deterioration in the customer's operating results or financial condition. Account balances are charged off against the allowance when we believe that it is probable that the receivable will not be recovered.

Inventories

Inventories are stated at the lower of cost, determined on the first-in, first-out (FIFO) basis, or market. Finished goods and work in process inventories include material, labor and manufacturing overhead costs. We regularly review and write-down the value of inventory for estimated obsolescence or unmarketable inventory.

An inventory reserve is maintained based upon a historical percentage of actual inventory written off applied against inventory at the end of the period, plus an additional amount for known conditions and circumstances.

Also, the purchase cost of one of our key raw materials from one supplier changes significantly based upon the total quantity of in-specification product that we purchase in a given fiscal year. During interim periods we determine inventory valuation and the amount charged to cost of goods sold for this raw material from this supplier based on the expected average cost over the entire fiscal year using our current full year forecast of purchases of this raw material from this supplier.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation is based on the following estimated useful lives of the assets using the straight-line method:

Buildings	15-25 years
Machinery and equipment	3-10 years
Furniture and fixtures	5-10 years
Information systems	3-5 years
Assets under capital leases	Term of lease or estimated useful life

Expenditures for repairs and maintenance are charged to expense as incurred. Expenditures for major renewals and betterments are capitalized and depreciated over the remaining useful lives. As assets are retired or sold, the related cost and accumulated depreciation are removed from the accounts and any resulting gain or loss is included in the results of operations. Costs related to internal use software are capitalized in accordance with AICPA Statement of Position No. 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use".

Goodwill and Other Intangible Assets

Effective October 1, 2001 we adopted FASB Statement No. 141, "Business Combinations" and FASB Statement No. 142, "Goodwill and Other Intangible Assets", and goodwill and other intangible assets with indefinite useful lives are no longer amortized. Purchased intangible assets with finite lives continue to be amortized over their estimated useful lives. Goodwill and other intangible assets are tested on an annual basis and between annual tests if indicators of potential impairment exist, using a fair-value-based approach. We determined that goodwill and other intangible assets were not impaired as of September 30, 2004.

Impairment of Long-Lived Assets

Reviews are regularly performed to determine whether facts and circumstances exist which indicate that the carrying amount of assets may not be recoverable or that the useful life is shorter than originally estimated. Asset recoverability is assessed by comparing the projected undiscounted cash flows associated with the related asset or group of assets over their remaining lives against their respective carrying amounts. Impairment, if any, is based on the excess of the carrying amount over the fair value of those assets. If assets are determined to be recoverable, but their useful lives are shorter than originally estimated, the net book value of the asset is depreciated over the newly determined remaining useful life. We believe that no material impairment exists at September 30, 2004.

Equity Investment in Nanoproducts Corporation

In July 2004 we entered into a strategic alliance with NanoProducts Corporation and acquired a minority interest in the company of 13.1% in exchange for an investment of $3,750. Although we do not own 20% or more of NanoProducts, we have concluded that we have the ability to significantly influence NanoProducts' operating and financial policies. Therefore, in accordance with Accounting Principles Board Option No. 18 "The Equity Method of Accounting for Investments in Common Stock", we account for our investment using

the equity method of accounting, which requires us to record earnings and losses of NanoProducts in proportion to our share of ownership.

Warranty Reserve

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and related costs. The warranty reserve is based upon a historical product return rate applied against sales made in the current quarterly period, plus an additional amount related to any specific known conditions or circumstances. Adjustments to the warranty reserve are recorded in cost of goods sold.

Foreign Currency Translation

Our operations in Europe and Asia operate primarily in local currency. Accordingly, all assets and liabilities of these operations are translated using exchange rates in effect at the end of the year, and revenue and costs are translated using weighted average exchange rates for the year. The related translation adjustments are reported in comprehensive income in stockholders' equity. Gains and losses resulting from foreign currency transactions are recorded in the statements of income for all periods presented. Foreign exchange gains and losses were a loss of $377 and gains of $146 and $1,356 for fiscal years 2004, 2003 and 2002, respectively.

Foreign Exchange Management

We transact business in various foreign currencies, primarily the Japanese Yen, British Pound and the Euro. Our exposure to foreign currency exchange risks has not been significant because most of our sales are denominated in U.S. dollars. Periodically we enter into forward foreign exchange contracts in an effort to mitigate the risks associated with currency fluctuations on certain foreign currency balance sheet exposures. These foreign exchange contracts do not qualify for hedge accounting under FASB Statement No. 133, "Accounting for Derivatives Instruments and Hedging Activities", as amended by FASB Statement No. 149, "Amendment of Statement 133 on Instruments and Hedging Activities". Gains and losses resulting from the impact of currency exchange rate movements on forward foreign exchange contracts designated to offset certain foreign currency balance sheet exposures are recognized as other income or expense in the accompanying consolidated income statements in the period in which the exchange rates change. These gains and losses are intended to partially offset the foreign currency exchange gains and losses on the underlying exposures being hedged. We do not currently use derivative financial instruments for trading or speculative purposes.

Fair Values of Financial Instruments

The recorded amounts of cash, accounts receivable and accounts payable approximate their fair values.

Intercompany Loan Accounting

We maintain an intercompany loan agreement with our wholly-owned subsidiary, Nihon Cabot Microelectronics K.K. ("the K.K."), under which we provided funds to the K.K. to finance the purchase of certain assets from our former Japanese branch at the time of the establishment of this subsidiary, as well as for the purchase of land adjacent to our Geino, Japan facility, which is part of the K.K. Since settlement of the note is expected in the foreseeable future, and our subsidiary has been consistently making timely payments on the loan, the loan is considered a foreign-currency transaction under FASB Statement No. 52, "Foreign Currency Translation". Therefore the associated foreign exchange gains and losses are recognized in earnings rather than being deferred in the cumulative translation account in other comprehensive income. For additional information regarding our accounting for derivatives, see Note 10 to consolidated financial statements.

Concentration of Credit Risk

Financial instruments that subject us to concentrations of credit risk consist principally of accounts receivable. We perform ongoing credit evaluations of our customers' financial condition and generally do not require collateral to secure accounts receivable. Our exposure to credit risk associated with nonpayment is affected principally by conditions or occurrences within the semiconductor industry and global economy. We historically have not experienced material losses relating to accounts receivables from individual customers or groups of customers and maintain an allowance for doubtful accounts based on an assessment of the collectibility of such accounts.

The portion of revenue from customers who represented more than 10% of revenue were as follows:

	Year Ended September 30,		
	2004	2003	2002
Marketech	32%	28%	24%
Intel	9%	15%	16%

Marketech is our distributor in Taiwan and China.

The two customers above accounted for 30.6% and 30.3% of net accounts receivable at September 30, 2004 and 2003, respectively.

Purchase Commitments

We have entered into unconditional purchase obligations, which include noncancelable purchase commitments and take-or-pay arrangements with suppliers. We review our agreements and make an assessment of the likelihood of a shortfall in purchases and determine if it is necessary to record a liability.

Revenue Recognition

Revenue is recognized upon completion of delivery obligations, provided acceptance and collectibility are reasonably assured. A provision for the estimated warranty cost is recorded at the time revenue is recognized based on our historical experience.

Shipping and Handling

Costs related to shipping and handling are included in cost of goods sold.

Research and Development

Research and development costs are expensed as incurred and consist primarily of staffing costs, materials and supplies, depreciation, utilities and other facilities costs.

Income Taxes

Deferred income taxes are determined based on the estimated future tax effects of differences between financial statement carrying amounts and the tax bases of existing assets and liabilities. Provisions are made for the U.S. and any non-U.S. deferred income tax liability or benefit.

Stock-Based Compensation

We apply the intrinsic value method prescribed by Accounting Principles Board Opinion Number 25, "Accounting for Stock Issued to Employees" ("APB 25"), and related interpretations, with regard to the measurement of compensation cost for options granted under the Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan and shares issued under our Employee Stock Purchase Plan. All options granted had an exercise price equal to the market value of the underlying common

stock on the date of grant and no employee compensation expense has been recorded. Had expense been recognized using the fair value method described in FASB Statement No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), using the Black-Scholes option-pricing model, we would have reported the following results of operations:

	Year Ended September 30,		
	2004	2003	2002
Net income, as reported	$ 46,728	$ 37,733	$ 40,685
Deduct: total stock-based compensation expense determined under the fair value method, net of tax	(21,899)	(18,177)	(12,494)
Pro forma net income	$ 24,829	$ 19,556	$ 28,191
Earnings per share:			
Basic — as reported	$ 1.89	$ 1.55	$ 1.68
Basic — pro forma	$ 1.00	$ 0.80	$ 1.17
Diluted — as reported	$ 1.88	$ 1.53	$ 1.66
Diluted — pro forma	$ 1.00	$ 0.79	$ 1.15

In the figures presented above, we have revised certain assumptions used in the current year's Black-Scholes option-pricing model and adjusted previously reported 2003 data to conform to the current year presentation. The previously reported data for 2003 were as follows: total stock-based compensation expense determined under the fair value method, net of tax was $16,531, pro forma net income was $21,202, pro forma basic net income per share was $0.87, and pro forma diluted net income per share was $0.86. Adjustment of periods prior to 2003 was not meaningful.

For additional information regarding our stock-based compensation plans, see Note 14 to the consolidated financial statements.

Earnings Per Share

Basic earnings per share is calculated based on the weighted average shares of common stock outstanding during the period, and diluted earnings per share is calculated based on the weighted average of common stock outstanding, plus the dilutive effect of stock options, calculated using the treasury stock method.

Comprehensive Income

Comprehensive income differs from net income due to foreign currency translation adjustments and net unrealized gains and losses on derivative instruments.

Effects of Recent Accounting Pronouncements

In March 2004, the Emerging Issues task Force (EITF) reached a consensus on Issue No. 03-06, "Participating Securities and the Two — Class Method under FASB Statement No. 128, Earning per Share" ("EITF Issue No. 03-06") which provides guidance on the calculation and disclosure of earnings per share (EPS), including the use of the two-class method for determining EPS when a company has participating securities. We have adopted EITF Issue No. 03-06 effective September 2004, which had no impact on our EPS.

3. Inventories

Inventories consisted of the following:

	September 30, 2004	September 30, 2003
Raw materials	$14,639	$13,327
Work in process	1,048	1,110
Finished goods	8,787	9,377
Total	$24,474	$23,814

4. Property, Plant and Equipment

Property, plant and equipment consisted of the following:

	September 30, 2004	September 30, 2003
Land	$ 16,858	$ 13,511
Buildings	56,361	55,571
Machinery and equipment	81,115	72,237
Furniture and fixtures	4,805	4,623
Information systems	10,927	9,926
Capital leases	11,884	11,884
Construction in progress	4,647	8,622
Total property, plant and equipment	186,597	176,374
Less: accumulated depreciation and amortization of assets under capital leases	(58,803)	(42,679)
Net property, plant and equipment	$127,794	$133,695

Depreciation expense, including amortization of assets recorded under capital leases, was $17,271, $15,392 and $11,667 for the years ended September 30, 2004, 2003 and 2002, respectively.

5. Goodwill and Other Intangible Assets

Goodwill of $1,373, as of September 30, 2004, was unchanged from September 30, 2003.

The components of intangible assets are as follows:

	September 30, 2004		September 30, 2003	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Trade secrets and know-how	$2,550	$2,360	$2,550	$2,105
Distribution rights, customer lists and other	1,095	935	1,000	850
Total intangible assets	$3,645	$3,295	$3,550	$2,955

Amortization expense of intangible assets was $340 for both fiscal 2004 and fiscal 2003. Estimated future amortization expense for fiscal 2005 is $255.

6. Other Long-Term Assets

Other long-term assets consisted of the following:

	September 30, 2004	September 30, 2003
Investment in equity method investee	$3,677	$ —
Other long-term assets	416	842
Total	$4,093	$842

On July 1, 2004 we entered into a strategic alliance with NanoProducts Corporation, a privately-held company specializing in the development and manufacture of nanoscale particles and related nanotechnology products. Under this arrangement, we are collaborating with NanoProducts to develop nanoscale particles for use in future generation CMP slurries, and other fine finish polishing applications. As of September 30, 2004 we have paid $1,820 to NanoProducts and we currently intend to pay an additional $1,930, representing a total initial investment of $3,750. We have received 1,630,435 shares of common stock of NanoProducts Corporation, which represents an ownership interest of 13.1%. We have concluded that we have the ability to significantly influence NanoProducts' operating and financial policies and account for our investment using the equity method of accounting, which requires us to record earnings and losses of NanoProducts in proportion to our share of ownership. Our investment in NanoProducts as of September 30, 2004 of $3,677 has been reduced by $73, representing our share of net losses incurred by NanoProducts from July 1, 2004 through September 30, 2004.

7. Accrued Expenses, Income Taxes Payable and Other Current Liabilities

Accrued expenses, income taxes and other current liabilities consisted of the following:

	September 30, 2004	September 30, 2003
Accrued compensation	$10,254	$ 7,743
Raw materials accrual	1,726	2,305
Warranty accrual	952	836
Due to equity method investee	1,930	—
Income taxes payable	522	—
Other	2,639	3,795
Total	$18,023	$14,679

8. Long-Term Debt and Revolving Credit Facility

In February 2003, we prepaid the entire $3,500 unsecured term loan that had been funded on the basis of the Illinois State Treasurer's Economic Program which had been due in April 2005 and had incurred interest at an annual rate of 4.68%. No gain or loss was recognized with respect to the prepayment. As a result of this prepayment, we have no outstanding long-term debt.

In July 2001 we entered into a $75,000 unsecured revolving credit and term loan facility with a group of commercial banks and in February 2002 and August 2003, this agreement was amended with no material changes in terms. On November 24, 2003, the existing agreement was terminated and replaced with an amended and restated unsecured revolving credit facility of $50,000 with an option to increase the facility by up to $30,000. Under this agreement, which terminates in November 2006, but can be renewed for two one-year terms, interest accrues on any outstanding balance at either the institution's base rate or the eurodollar rate plus an applicable margin. A non-use fee also accrues. Loans under this facility are anticipated to be used primarily for general corporate purposes, including working capital and capital expenditures. The credit agreement also

contains various covenants. No amounts are currently outstanding under this credit facility and we believe we are currently in compliance with the covenants.

9. Capital Lease Obligations

In December 2001 we entered into a fumed alumina supply agreement with Cabot Corporation under which we agreed to pay Cabot Corporation for the expansion of a fumed alumina manufacturing facility in Tuscola, Illinois. The payments for the facility have been treated as a capital lease for accounting purposes and the present value of the minimum quarterly payments resulted in a $9,776 lease obligation and related leased asset. The agreement has an initial five-year term, which expires in 2006, but we can choose to renew the agreement for another five-year term, which expires in 2011. We also can choose not to renew the agreement subject to certain terms and conditions and the payment of certain costs, after the initial five-year term.

In January 2002 we entered into a CMP tool and polishing consumables transfer agreement with a third party under which we agreed to transfer polishing consumables to them in return for a CMP polishing tool. The polishing tool has been treated as a capital lease for accounting purposes and is valued based on the aggregate fair market value of the polishing consumables, which resulted in a $1,994 lease obligation. The agreement has approximately a three-year term.

In July 2003 we entered into a leasing arrangement for forklift trucks. The lease has a five-year term with a bargain purchase option at the end of the term. The forklift truck leasing arrangement has been treated as a capital lease for accounting purposes, resulting in a $114 lease obligation and related leased asset.

10. Derivatives

All derivatives, whether designated in hedging relationships or not, are required to be recorded on the balance sheet at fair value. If the derivative is designated as a fair value hedge, the changes in the fair value of the derivative and of the hedged item attributable to the hedged risk are recognized in earnings. If the derivative is designated as a cash flow hedge, the effective portions of changes in the fair value of the derivative are recorded in other comprehensive income and are recognized in the income statement when the hedged item affects earnings. Ineffective portions of changes in the fair value of cash flow hedges are recognized in earnings.

During fiscal 2004 we entered into a cash flow hedge to cover commitments involving the purchase of land in Geino, Japan, which resulted in a reduction to comprehensive income of $45. Since the related asset designated under this cash flow hedge was land, which is not depreciated, we will reclassify losses associated with this cash flow hedge into earnings if and when the land is eventually sold.

At September 30, 2004 we had one forward foreign exchange contract selling Japanese Yen related to an intercompany note with one of our subsidiaries in Japan and for the purpose of hedging the risk associated with a net transactional exposure in Japanese Yen.

11. Deferred Compensation

The Directors' Deferred Compensation Plan became effective in March 2001 and applies only to our non-employee directors. All of our non-employee directors have elected to defer their compensation to future periods. In June 2003, this plan was amended to require that payment of deferred amounts be made only in the form of Cabot Microelectronics common shares. Amounts deferred under the plan were $750 and $481 as of September 30, 2004 and 2003, respectively. We do not currently maintain a deferred compensation plan for employees other than our standard Cabot Microelectronics Corporation 401(k) Plan, which is a qualified plan, and our Supplemental Employee Retirement Plan discussed in Footnote 12 to the consolidated financial statements.

12. Savings Plans

Effective in May 2000, we adopted the Cabot Microelectronics Corporation 401(k) Plan (the "401(k) Plan") covering substantially all eligible employees meeting certain minimum age and eligibility requirements, as defined by the 401(k) Plan. Participants may make elective contributions up to 60% of their eligible compensation. All amounts contributed by participants and earnings on these contributions are fully vested at all times. The 401(k) Plan provides for matching and fixed nonelective contributions by the Company. Under the 401(k) Plan, the Company will match 100% of the first four percent of the participant's eligible compensation and 50% of the next two percent of the participant's eligible compensation that is contributed, subject to limitations required by government laws or regulations. Under the 401(k) Plan, all employees, even non-participants, will receive a contribution by the Company in an amount equal to 4% of eligible compensation. Participants and employees are 100% vested in all Company contributions. The Company's expense for the defined contribution plan totaled $2,696, $2,924 and $2,043 for the periods ending September 30, 2004, 2003 and 2002, respectively.

Effective in May 2000, we adopted the Cabot Microelectronics Corporation Supplemental Employee Retirement Plan ("SERP") covering all eligible employees as defined by the SERP. Under the SERP, the Company contributes up to 4% of these individuals' eligible compensation. The purpose of the SERP is to provide for the deferral of the Company contribution to certain highly compensated employees as defined under the provision of the Employee Retirement Income Security Act ("ERISA") of 1974. All amounts contributed by the Company and earnings on these contributions are fully vested at all times. The Company's expense for the SERP was de minimis for periods ending September 30, 2004, 2003 and 2002, respectively.

13. Employee Stock Purchase Plan

In March 2000, Cabot Microelectronics adopted an Employee Stock Purchase Plan ("ESPP") and authorized up to 475,000 shares of common stock to be purchased under the plan. The ESPP allows all full and certain part-time employees of Cabot Microelectronics and its subsidiaries to purchase shares of our common stock through payroll deductions. Employees can elect to have up to 10% of their annual earnings, up to a maximum of $12,500 per each six-month offering period, withheld to purchase our stock, subject to certain other criteria. The shares are purchased at a price equal to the lower of 85% of the closing price at the beginning or end of each semi-annual stock purchase period. A total of 32,740, 32,132 and 30,248 shares were issued under the ESPP during fiscal 2004, 2003 and 2002, respectively.

14. Equity Incentive Plan

In March 2004, our stockholders approved our Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan (individually, or together, the "Plan"), which amended our Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan, for the primary purpose of increasing the number of our common shares reserved for issuance under the Plan from 6,500,000 shares to 9,500,000 shares. The approved increase is intended to provide enough shares to give the company ongoing flexibility to attract, retain and reward our employees, directors, consultants and advisors. The amended Plan includes certain other material changes, such as the allowance of restricted stock unit awards under the Plan and an increase in the number of shares of restricted stock available for issuance from 875,000 shares to 1,900,000 shares of restricted stock or restricted stock units in aggregate. The Plan allows for the granting of four types of equity incentive awards: restricted stock, restricted stock units, stock options, and substitute awards. According to the Plan, all employees, directors, consultants and advisors of the Company and its subsidiaries are eligible for awards under the Plan, which awards will be awarded subject to applicable Award Agreements. The Plan is administered by the Compensation Committee of the Board of Directors.

Restricted Stock

Under the Plan, employees and non-employees may be granted shares of restricted stock or restricted stock units at the discretion of the Compensation Committee. In general, shares of restricted stock and restricted

stock units may not be sold, assigned, transferred, pledged, disposed of or otherwise encumbered. Generally, under our Award Agreements to date for restricted stock, of which there have been few, restrictions have lapsed over a two-year period with one-third becoming unrestricted immediately at the date of grant and the remaining restrictions lapsing over a two-year period. Holders of restricted stock have all the rights of stockholders, including voting and dividend rights, subject to the above restrictions. In no event shall the Company issue more than 1,900,000 shares of restricted stock or restricted stock units, in aggregate, under the Plan. Restricted shares under the Plan may also be purchased and placed "on deposit" by executive level employees pursuant to the 2001 Deposit Share Plan. Shares purchased under this Deposit Share Plan receive a 50% match in restricted shares, which vest at the end of a three-year period, and are subject to forfeiture upon early withdrawal of the deposit shares. Compensation expense related to our restricted stock grants and deposit share purchases was $76, $18, and $260 for fiscal years 2004, 2003 and 2002, respectively.

Stock Options

Under the Plan, employees and non-employees may be granted incentive stock options ("ISO") to purchase common stock at not less than the fair value on the date of grant, and non-qualified stock options ("NQSO"), as determined by the Compensation Committee and set forth in an applicable Award Agreement. The Plan provides that the term of the option may be as long as ten years. Options granted during fiscal years 2004, 2003 and 2002 generally provided for a ten-year term, with options generally vesting equally over a four-year period, with first vesting on the anniversary date of the grant. No more than 1,750,000 ISO shares may be issued under the Plan, and none have been granted to date.

In fiscal 2004 and 2003, no compensation expense was recorded with respect to stock options. In fiscal 2002 we recorded compensation expense of $178 associated with revised stock option agreements involving a former director.

The following tables relate to stock options outstanding as of September 30, 2004:

	Stock Options	Weighted Average Exercise Price
Outstanding at September 30, 2001	2,026,988	$45.97
Granted	1,018,425	50.33
Exercised	(144,203)	21.98
Canceled	(82,446)	50.40
Outstanding at September 30, 2002	2,818,764	48.64
Granted	918,500	50.38
Exercised	(426,488)	27.09
Canceled	(168,570)	59.28
Outstanding at September 30, 2003	3,142,206	51.50
Granted	1,165,200	48.75
Exercised	(104,307)	21.40
Canceled	(583,704)	56.67
Outstanding at September 30, 2004	3,619,395	$50.66

Range of Exercise Price	Options Outstanding			Options Exercisable	
	Number of Shares	Weighted Average Contractual Life (in Years)	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
$20.00	287,685	0.5	$20.00	287,685	$20.00
$27.95-$39.19	167,500	9.2	34.61	26,250	37.81
$40.90-$49.80	1,455,115	8.2	48.75	378,530	48.91
$51.37-$58.94	945,895	8.4	52.59	163,611	51.40
$62.00-$69.69	763,200	3.7	66.97	571,056	66.98
	3,619,395		$50.66	1,427,132	$50.39

On September 27, 2004, as allowed under the Plan, the Compensation Committee accelerated to September 1, 2005, the vesting of those stock options granted to employees, officers and directors under the Plan, prior to September 27, 2004 that had an option price equal to or greater than the fair market value of the shares of the Company on September 27, 2004 ($34.65), through amendment made and effective as of September 27, 2004 to the grant agreements for such stock options. Approximately 1.3 million options, with varying remaining vesting schedules of fewer than three years as of September 1, 2005, had option prices of greater than $34.65, and therefore are subject to the acceleration provision, and as a result will become exercisable as of September 1, 2005.

We have adopted the disclosure requirements of FASB Statement No. 148, "Accounting for Stock-Based Compensation — Transition and Disclosure" ("SFAS 148") effective December 2002. SFAS 148 amends SFAS 123, to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based compensation and also amends the disclosure requirements of SFAS 123 to require prominent disclosures in both annual and interim financial statements about the methods of accounting for stock-based employee compensation and the effect of the method used on reported results. As permitted by SFAS 148 and SFAS 123, we continue to apply the accounting provisions of APB 25, with regard to the measurement of compensation cost for options granted under the Plan and shares issued under our Employee Stock Purchase Plan. All options granted had an exercise price equal to the market value of the underlying common stock on the date of grant and no employee compensation expense has been recorded. Had expense been recognized using the fair value method described in SFAS 123, using the Black-Scholes option-pricing model, we would have reported the following results of operations:

	Year Ended September 30,		
	2004	2003	2002
Pro forma net income	$24,829	$19,556	$28,191
Pro forma basic net income per share	$ 1.00	$ 0.80	$ 1.17
Pro forma diluted net income per share	$ 1.00	$ 0.79	$ 1.15

These costs may not be representative of the total effects on pro forma reported income for future years. Factors that may also impact disclosures in future years include the attribution of the awards to the service period, the vesting period of stock options, timing of additional grants of stock option awards and number of shares granted for future awards. We have revised certain assumptions used in the current year's Black-Scholes option-pricing model and adjusted previously reported 2003 data to conform to the current year presentation. The previously reported data for 2003 were as follows: pro forma net income was $21,202, pro forma basic net income per share was $0.87, and pro forma diluted net income per share was $0.86. Adjustment of periods prior to 2003 was not meaningful.

The fair value of our stock-based awards to employees under SFAS 123 was estimated assuming no expected dividends and the following weighted-average assumptions:

	Options			ESPP		
	2004	2003	2002	2004	2003	2002
Expected term (in years)	5	5	5	.5	.5	.5
Expected volatility	71%	76%	85%	58%	45%	57%
Risk-free rate of return	3.3%	3.0%	2.8%	2.0%	1.0%	1.6%

15. Stockholders' Equity

Common Stock

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of Cabot Microelectronics' stockholders. Common stockholders are entitled to receive ratably the dividends, if any, as may be declared by the Board of Directors. Upon liquidation, dissolution or winding up of Cabot Microelectronics, the common stockholders will be entitled to share, pro ratably, in the distribution of assets available after satisfaction of all liabilities and liquidation preferences of preferred stockholders, if any. The number of authorized shares of common stock is 200,000,000 shares.

Stockholder Rights Plan

In March 2000 the Board of Directors of Cabot Microelectronics approved a stock rights agreement and declared a dividend distribution of one right to purchase one one-thousandth of a share of Series A Junior Participating Preferred Stock for each outstanding share of common stock to stockholders of record on April 7, 2000. The rights become exercisable based upon certain limited conditions related to acquisitions of stock, tender offers and certain business combination transactions.

Stock Repurchases

In July 2004 we announced that our Board of Directors had authorized a share repurchase program for up to $25,000 of our outstanding common stock which is primarily intended to diminish earnings dilution from the issuance of stock from the exercise of stock options under our equity incentive plan and purchases under our employee stock purchase plan. Under this program, shares are repurchased from time to time, depending on market conditions, in open market transactions, at management's discretion. This program may be suspended or terminated at any time, at the Company's discretion. During the fourth fiscal quarter of 2004, the Company repurchased 241,865 shares of common stock at a cost of $8,000. For additional information on share repurchases, see "Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities".

16. Income Taxes

Income before income taxes was as follows:

	Year Ended September 30,		
	2004	2003	2002
Domestic	$63,707	$50,969	$51,772
Foreign	6,141	5,098	8,951
Total	$69,848	$56,067	$60,723

Taxes on income consisted of the following:

	Year Ended September 30,		
	2004	2003	2002
U.S. federal and state:			
Current	$19,564	$12,106	$13,946
Deferred	649	3,810	2,460
Total	$20,213	$15,916	$16,406
Foreign:			
Current	$ 2,790	$ 2,821	$ 4,198
Deferred	117	(403)	(566)
Total	2,907	2,418	3,632
Total U.S. and foreign	$23,120	$18,334	$20,038

The provision for income taxes at our effective tax rate differed from the provision for income taxes at the statutory rate as follows:

	Year Ended September 30,		
	2004	2003	2002
Federal statutory rate	35.0%	35.0%	35.0%
U.S. benefits from research and experimentation activities	(1.2)	(2.9)	(2.0)
State taxes, net of federal effect	1.1	1.1	1.2
U.S. benefits from foreign sales	(1.4)	(0.7)	(0.7)
Other, net	(0.4)	0.2	(0.5)
Provision for income taxes	33.1%	32.7%	33.0%

Significant components of deferred income taxes were as follows:

	September 30,	
	2004	2003
Deferred tax assets:		
Employee benefits	$1,678	$1,565
Inventory	1,717	1,026
Depreciation and amortization	248	374
Product warranty	377	337
Bad debt reserve	209	205
State and local taxes	130	112
Other, net	128	128
Total deferred tax assets	$4,487	$3,747
Deferred tax liabilities:		
Depreciation and amortization	$6,913	$6,001
Translation adjustment	1,065	323
State and local taxes	235	199
Other, net	370	202
Total deferred tax liabilities	$8,583	$6,725

17. Commitments and Contingencies

Legal Proceedings

We periodically become subject to legal proceedings in the ordinary course of business. We are not currently involved in any legal proceedings that we believe will have a material impact on our consolidated financial position, results of operations, or cash flows.

Product Warranties

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and related costs. The warranty reserve is based upon a historical product return rate applied against sales made in the current quarterly period, plus an additional amount related to any specific known conditions or circumstances. Adjustments to the warranty reserve are recorded in cost of goods sold. Our warranty reserve requirements increased during fiscal 2004 as follows:

Balance as of September 30, 2003	$836
Net change	116
Balance as of September 30, 2004	$952

Indemnification Disclosure

In the normal course of business, we are a party to a variety of agreements pursuant to which we may be obligated to indemnify the other party with respect to certain matters. Generally, these obligations arise in the context of agreements entered into by us, under which we customarily agree to hold the other party harmless against losses arising from items such as a breach of certain representations and covenants including title to assets sold, certain intellectual property rights and certain environmental matters. These terms are common in the industry in which we conduct business. In each of these circumstances, payment by us is subject to certain monetary and other limitations and is conditioned on the other party making an adverse claim pursuant to the procedures specified in the particular agreement, which typically allow us to challenge the other party's claims.

We evaluate estimated losses for such indemnifications under SFAS No. 5, "Accounting for Contingencies" as interpreted by FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" ("FIN 45"). We consider such factors as the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. To date, we have not experienced material costs as a result of such obligations and as of September 30, 2004, have not recorded any liabilities related to such indemnifications in our financial statements as we do not believe the likelihood of a material obligation is probable.

Lease Commitments

We lease certain vehicles, warehouse facilities, office space, machinery and equipment under cancelable and noncancelable leases, most of which expire within ten years and may be renewed by us. Rent expense under such arrangements during fiscal 2004, 2003 and 2002 totaled $624, $579 and $482, respectively.

Future minimum rental commitments under noncancelable leases as of September 30, 2004 are as follows:

Fiscal Year	Operating	Capital
2005	$ 509	$ 1,886
2006	270	1,369
2007	90	1,369
2008	75	1,365
2009	70	1,344
Thereafter	34	2,353
	$1,048	9,686
Amount related to interest		(2,029)
Capital lease obligation		$ 7,657

Purchase Obligations

Purchase obligations include our take-or-pay arrangements with suppliers, and purchase orders and other obligations entered into in the normal course of business regarding the purchase of goods and services. In the fourth quarter of fiscal 2003, we recorded a $2.0 million liability for a raw material supply agreement for a polishing pad technology that was previously under development, but is no longer being pursued. Our remaining obligation with respect to this agreement is $1.2 million which is recorded in current liabilities.

In January 2004 we entered into a fumed silica supply agreement with Cabot Corporation, which replaces the original fumed metal oxide agreement with respect to fumed silica, and accordingly amended our fumed metal oxide agreement with Cabot Corporation with respect to its fumed silica terms such that the agreement now only applies to fumed alumina through its original term of June 2005. Under the fumed silica supply agreement, we continue to be obligated to purchase at least 90% of our six-month volume forecast and to pay for the shortfall if we purchase less than that amount. This agreement has an initial six-year term, which expires in December 2009 and will automatically renew unless either party gives certain notice of non-renewal. We currently anticipate meeting minimum forecasted purchase volume requirements. Also, under our fumed alumina supply agreement with Cabot Corporation we are obligated to pay certain fixed, capital and variable costs through December 2006. This agreement has an initial five-year term, but we can choose to renew the agreement for another five-year term, which would expire in December 2011. If we do not renew the agreement, we will become subject to certain terms and conditions and the payment of certain costs.

We have an agreement with a toll manufacturer pursuant to which the manufacturer performs certain agreed-upon dispersion services. We have agreed to purchase minimum amounts of services per year and to invest approximately $150 per year in capital improvements or other expenditures to maintain capacity at the manufacturer's dispersion facility. The initial term of the agreement expired in October 2004, and was renewed for another year. The contract continues to have automatic one-year renewals, and contains a 90-day cancellation clause executable by either party.

In June 2003 we entered into a technology licensing and co-marketing agreement with a semiconductor equipment manufacturer under which we may develop, manufacture and sell polishing pads utilizing endpoint detection window technology licensed from the manufacturer for use on the manufacturer's equipment. Under this agreement, we are obligated to supply this manufacturer with certain free commercially available polishing pads, up to an agreed upon dollar amount, for particular uses over a seven-year period. We are also obligated to supply the equipment manufacturer with certain commercially available polishing pads, up to an agreed upon dollar amount over the seven-year period, which the manufacturer will purchase from us at our cost. We will also pay a royalty to the equipment manufacturer and, in certain circumstances, to another party to whom we are a sub-licensee under our agreement, based upon net revenue earned with respect to commercial sales of

polishing pads covered under the agreement. The term of the agreement lasts as long as the patents on the technology subject to the license agreement remain valid and enforceable.

We had been operating under a distribution agreement with an existing supplier of polishing pads to the semiconductor industry pursuant to which the supplier sold pads to us for our resale to end users. However, due to what we believe was a less than acceptable level of profitability under this value-added reseller model, the distribution agreement was terminated by mutual agreement in June 2004. Pursuant to our June 2004 termination agreement, we are obligated to pay a non-material transition fee which is recorded in current liabilities and was paid in December 2004.

In July 2004 we formed a strategic alliance with NanoProducts Corporation. Under this arrangement, we are collaborating with NanoProducts to develop nanoscale particles for use in future generation CMP slurries, and other fine finish polishing applications. In addition, we obtained a minority equity ownership interest in NanoProducts Corporation. As of September 30, 2004 we have invested $1,820 in NanoProducts and intend to pay an additional $1,930.

18. Earnings Per Share

Statement of Financial Accounting Standards No. 128 "Earnings per Shares", requires companies to provide a reconciliation of the numerator and denominator of the basic and diluted earnings per share computations. Basic and diluted earnings per share were calculated as follows:

	Year Ended September 30,		
	2004	2003	2002
	(In thousands, except for share and per share amounts)		
Numerator:			
Income available to common shares	$ 46,728	$ 37,733	$ 40,685
Denominator:			
Weighted average common shares (Denominator for basic calculation)	24,749,531	24,400,533	24,160,361
Weighted average effect of dilutive securities:			
Stock-based compensation	132,909	264,071	404,713
Diluted weighted average common shares (Denominator for diluted calculation)	24,882,440	24,664,604	24,565,074
Earnings per share:			
Basic	$ 1.89	$ 1.55	$ 1.68
Diluted	$ 1.88	$ 1.53	$ 1.66

19. Financial Information by Industry Segment and Geographic Area

We operate predominantly in one industry segment — the development, manufacture, and sale of CMP slurries.

Revenues are attributed to the United States and foreign regions based upon the customer location and not the geographic location from which our products were shipped. Financial information by geographic area was as follows:

	September 30,		
	2004	2003	2002
Revenue:			
United States	$ 78,093	$ 79,845	$ 81,015
Europe	30,984	24,592	29,734
Asia	200,356	147,228	124,416
Total	$309,433	$251,665	$235,165
Property, plant and equipment, net:			
United States	$ 94,802	$102,771	$100,900
Europe	2,308	2,248	2,032
Asia	30,684	28,676	29,332
Total	$127,794	$133,695	$132,264

Revenue from Taiwan and Japan each accounted for more than ten percent of our total revenue. Our revenue from customers in Taiwan totaled $86,283, $63,812 and $54,942 for fiscal years 2004, 2003 and 2002, respectively. Our revenue from customers in Japan totaled $44,872, $40,295 and $34,175 for fiscal years 2004, 2003 and 2002, respectively.

More than ten percent of our net property, plant and equipment is located in Japan, having a net book value of $30,243, $28,091 and $27,064 at September 30, 2004, 2003 and 2002, respectively.

Selected Quarterly Operating Results

The following table presents our unaudited financial information for the eight quarters ended September 30, 2004. This unaudited financial information has been prepared in accordance with accounting principles generally accepted in the United States of America, applied on a basis consistent with the annual audited financial statements and in the opinion of management, include all necessary adjustments, which consist only of normal recurring adjustments necessary to present fairly the financial results for the periods. The results for any quarter are not necessarily indicative of results for any future period.

CABOT MICROELECTRONICS CORPORATION
SELECTED QUARTERLY OPERATING RESULTS

	Sept. 30, 2004	June 30, 2004	March 31, 2004	Dec. 31, 2003	Sept. 30, 2003	June 30, 2003	March 31, 2003	Dec. 31, 2002
	(Unaudited and in thousands, except per share amounts)							
Revenue	$82,714	$76,925	$73,515	$76,279	$67,903	$64,288	$62,201	$57,273
Cost of goods sold	42,498	37,915	37,366	39,026	33,458	31,360	31,786	27,665
Gross profit	40,216	39,010	36,149	37,253	34,445	32,928	30,415	29,608
Operating expenses:								
Research and development	10,979	11,158	11,143	10,723	12,469	10,803	9,609	8,635
Selling and marketing	3,844	4,235	4,363	3,783	3,338	2,751	2,554	2,578
General and administrative	5,819	5,659	5,749	5,124	4,607	4,655	4,595	4,368
Amortization of intangibles	85	85	85	85	85	85	85	85
Total operating expenses	20,727	21,137	21,340	19,715	20,499	18,294	16,843	15,666
Operating income	19,489	17,873	14,809	17,538	13,946	14,634	13,572	13,942
Other income (expense), net	117	72	(86)	36	(111)	46	43	(5)
Income before income taxes	19,606	17,945	14,723	17,574	13,835	14,680	13,615	13,937
Provision for income taxes	6,439	5,699	5,006	5,976	4,186	4,918	4,561	4,669
Net income	$13,167	$12,246	9,717	$11,598	$ 9,649	$ 9,762	$ 9,054	$ 9,268
Basic earnings per share	$ 0.53	$ 0.49	$ 0.39	$ 0.47	$ 0.39	$ 0.40	$ 0.37	$ 0.38
Weighted average basic shares outstanding	24,689	24,818	24,785	24,733	24,591	24,389	24,346	24,300
Diluted earnings per share	$ 0.53	$ 0.49	$ 0.39	$ 0.46	$ 0.39	$ 0.40	$ 0.37	$ 0.38
Weighted average diluted shares outstanding	24,783	24,912	24,926	24,994	25,049	24,639	24,593	24,579

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

The following table sets forth activities in our allowance for doubtful accounts:

Allowance For Doubtful Accounts	Balance At Beginning Of Year	Additions (Deductions) Charged To Expenses	Deductions	Balance At End Of Year
Year ended:				
September 30, 2004	$ 585	$ 44	$ (31)	$598
September 30, 2003	667	50	(132)	585
September 30, 2002	1,014	(154)	(193)	667

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and related costs. The warranty reserve is based upon a historical product return rate applied against sales made in the current quarterly period, plus an additional amount related to any specific known conditions or circumstances. Adjustments to the warranty reserve are recorded in cost of goods sold. Charges to expenses and deductions, shown below, represent the net change required to maintain an appropriate reserve.

Warranty Reserves	Balance At Beginning Of Year	Additions (Deductions) Charged To Expenses	Deductions	Balance At End Of Year
Year ended:				
September 30, 2004	$ 836	$116	$ —	$952
September 30, 2003	858	—	(22)	836
September 30, 2002	1,255	—	(397)	858

Management Responsibility

The accompanying consolidated financial statements were prepared by Cabot Microelectronics in conformity with accounting principles generally accepted in the United States of America. Cabot Microelectronics' management is responsible for the integrity of these statements and of the data, estimates and judgments that underlie them.

Cabot Microelectronics maintains a system of internal accounting controls designed to provide reasonable assurance that its assets are safeguarded from loss or unauthorized use, that transactions are properly authorized and recorded, and that financial records can be relied upon for the preparation of the consolidated financial statements. The system is monitored and evaluated on an ongoing basis by management in conjunction with its internal audit function, independent accountants, and the Audit Committee of the Board of Directors.

The Audit Committee of the Board of Directors provides general oversight responsibility for the financial statements. Composed entirely of Directors who are independent and not employees of Cabot Microelectronics, the Committee meets periodically with Cabot Microelectronics' management, internal auditors and the independent auditors to review the quality of the financial reporting and internal controls, as well as the results

of the auditing efforts. The internal auditors and independent auditors have full and direct access to the Audit Committee, with and without management present.

/s/ WILLIAM P. NOGLOWS
William P. Noglows
Chief Executive Officer

/s/ WILLIAM S. JOHNSON
William S. Johnson
Chief Financial Officer

/s/ THOMAS S. ROMAN
Thomas S. Roman
Principal Accounting Officer

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

None.

Item 9A. ***Controls and Procedures***

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended) as of September 30, 2004. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of September 30, 2004.

While we believe the present design of our disclosure controls and procedures is effective to make known to our senior management in a timely fashion all material information concerning our business, we intend to continue to improve the design and effectiveness of our disclosure controls and procedures to the extent necessary in the future to provide our senior management with timely access to such material information, and to correct any deficiencies that we may discover in the future.

There were no changes in our internal controls over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Item 9B. ***Other Information***

None.

PART III

Item 10. ***Directors and Executive Officers of the Registrant***

The information required by Item 10 of Form 10-K with respect to identification of directors and identification of an audit committee financial expert is incorporated by reference from the information contained in the sections captioned "Election of Directors" and "Board Structure and Compensation" in Cabot Microelectronics' definitive Proxy Statement for the Annual Meeting of Stockholders to be held March 8, 2005 (the "Proxy Statement"). In addition, for information with respect to the executive officers of Cabot Microelectronics, see "Executive Officers" at the end of Part I of this Form 10-K and the section captioned "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement. Information required by

Item 405 of Regulation S-K is incorporated by reference from the information contained in the section captioned "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement.

We have adopted a code of business conduct for all of our employees and directors, including our principal executive officer, other executive officers, principal financial officer and senior financial personnel. A copy of our code of business conduct is available free of charge on our company website at www.cabotcmp.com. We intend to post on our website any material changes to, or waivers from our code of business conduct, if any, within two days of any such event.

Item 11. ***Executive Compensation***

The information required by Item 11 of Form 10-K is incorporated by reference from the information contained in the section captioned "Executive Compensation" in the Proxy Statement.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management***

Equity Compensation Plan Information

Shown below is information as of September 30, 2004 with respect to the shares of common stock that may be issued under Cabot Microelectronics' existing equity compensation plans.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	3,623,313	$50.66	5,089,855(1)
Equity compensation plans not approved by security holders	—	—	—
Total	3,623,313	$50.66	5,089,855

(1) Includes 304,090 shares available for future issuance under our Employee Stock Purchase Plan.

The other information required by Item 12 of Form 10-K is incorporated by reference from the information contained in the section captioned "Stock Ownership" in the Proxy Statement.

Item 13. ***Certain Relationships and Related Transactions***

The information required by Item 13 of Form 10-K is incorporated by reference from the information contained in the section captioned "Certain Relationships and Related Transactions" in the Proxy Statement.

Item 14. ***Principal Accountant Fees and Services***

The information required by Item 14 of Form 10-K is incorporated by reference from the information contained in the section captioned "Fees of Independent Auditors and Audit Committee Report" in the Proxy Statement.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules***

(a) The following Financial Statements and Financial Statement Schedule are included in Item 8 herein:

1. Financial Statements:

Report of Independent Registered Public Accounting Firm
Consolidated Statements of Income for the years ended September 30, 2004, 2003 and 2002
Consolidated Balance Sheets at September 30, 2004 and 2003
Consolidated Statements of Cash Flows for the years ended September 30, 2004, 2003 and 2002
Consolidated Statements of Changes in Stockholders' Equity for the years ended September 30, 2004, 2003 and 2002
Notes to the Consolidated Financial Statements

2. Financial Statement Schedule: Schedule II — Valuation and Qualifying Accounts

3. Exhibits — The following exhibits are filed as part of, or incorporated by reference into, this Report on Form 10-K:

Exhibit Number	Description
3.2(1)	Amended and Restated By-Laws of Cabot Microelectronics Corporation.
3.3(1)	Form of Amended and Restated Certificate of Incorporation of Cabot Microelectronics Corporation.
3.4(2)	Form of Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock.
4.1(2)	Form of Cabot Microelectronics Corporation Common Stock Certificate.
4.2(3)	Rights Agreement.
4.3(4)	Amendment to Rights Agreement.
10.1(12)	Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan.*
10.2	Form of Cabot Microelectronics Corporation Second Amended and Restated 2000 Equity Incentive Plan Non-Qualified Stock Option Grant Agreement (directors).*
10.3	Form of Cabot Microelectronics Corporation Second Amended and Restated 2000 Equity Incentive Plan Non-Qualified Stock Option Grant Agreement (employees (including executive officers)).*
10.15(7)	Cabot Microelectronics Corporation Employee Stock Purchase Plan, as amended.*
10.22(9)	Cabot Microelectronics Corporation 401(k) Plan, as amended.*
10.23(5)	Form of Change in Control Severance Protection Agreement.**
10.28(10)	Directors' Deferred Compensation Plan, as amended.*
10.29(11)	Amended and Restated Credit Agreement dated November 24, 2003 among Cabot Microelectronics Corporation, Various Financial Institutions and LaSalle Bank National Association, as Administrative Agent, and National City Bank of Michigan/Illinois, as Syndication Agent.
10.30(6)	Deposit Share Agreement.***
10.31(6)	Amendment No. 1 to Fumed Metal Oxide Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.+
10.32(6)	Fumed Alumina Supply Agreement.+
10.33(7)	Adoption Agreement, as amended, of Cabot Microelectronics Corporation Supplemental Employee Retirement Plan.*
10.34(8)	Code of Business Conduct.
10.36(11)	Directors' Cash Compensation Umbrella Program.*
10.37(13)	Employment and Transition Agreement dated November 3, 2003.*
10.38(13)	Employment Offer Letter dated November 2, 2003.*
10.39(13)	Employment Offer Letter dated November 17, 2003.*
10.40(14)	Amendment No. 2 to Fumed Metal Oxide Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.

Exhibit Number	Description
10.41(14)	Amendment No. 3 to Fumed Metal Oxide Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.
10.42(14)	Fumed Silica Supply Agreement.+
10.43(14)	General Release, Waiver and Covenant Not to Sue.*
21.1	Subsidiaries of Cabot Microelectronics Corporation.
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney.
31.1	Certification of Chief Executive Officer as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

(1) Filed as an exhibit to, and incorporated by reference from the Registrant's Registration Statement on Form S-1 (No. 333-95093) filed with the Commission on March 27, 2000.

(2) Filed as an exhibit to, and incorporated by reference from the Registrant's Registration Statement on Form S-1 (No. 333-95093) filed with the Commission on April 3, 2000.

(3) Filed as an exhibit to, and incorporated by reference from the Registrant's Registration Statement on Form S-1 (No. 333-95093) filed with the Commission on April 4, 2000.

(4) Filed as an exhibit to, and incorporated by reference from the Registrant's Current Report on Form 8-K filed with the Commission on October 6, 2000.

(5) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K filed with the Commission on December 28, 2000.

(6) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q filed with the Commission on February 12, 2002.

(7) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q filed with the Commission on May 13, 2002.

(8) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K filed with the Commission on December 10, 2002.

(9) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q filed with the Commission on February 12, 2003.

(10) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q filed with the Commission on August 11, 2003.

(11) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K filed with the Commission on December 10, 2003.

(12) Filed as Appendix B, and incorporated by reference from the Registrant's Definitive Proxy Statement filed with the Commission on January 23, 2004.

(13) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q filed with the Commission on February 12, 2004.

(14) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q filed with the Commission on May 7, 2004.

* Management contract, or compensatory plan or arrangement.

** Substantially similar change in control severance protection agreements have been entered into with William P. Noglows, H. Carol Bernstein, Victoria J. Brush, Jean Pol Delrue, William S. Johnson, Hiroyuki Nishiya, Daniel J. Pike, Thomas S. Roman, Stephen R. Smith, Clifford L. Spiro, Adam F. Weisman and Daniel S. Wobby, with differences only in the amount of payments and benefits to be received by such persons.

*** Substantially similar deposit share agreements have been entered into with H. Carol Bernstein, William S. Johnson, Matthew Neville and Daniel S. Wobby with differences only in the amount of initial deposit made and deposit shares purchased by such persons.

+ This Exhibit has been filed separately with the Commission pursuant to the grant of a confidential treatment request. The confidential portions of this Exhibit have been omitted and are marked by an asterisk.

SIGNATURES

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

CABOT MICROELECTRONICS CORPORATION

Date: December 8, 2004

/s/ WILLIAM P. NOGLOWS
William P. Noglows
Chairman of the Board, President and Chief Executive Officer
[Principal Executive Officer]

Date: December 8, 2004

/s/ WILLIAM S. JOHNSON
William S. Johnson
Vice President, Chief Financial Officer and Treasurer
[Principal Financial Officer]

Date: December 8, 2004

/s/ THOMAS S. ROMAN
Thomas S. Roman
Corporate Controller
[Principal Accounting Officer]

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

Date: December 8, 2004

/s/ WILLIAM P. NOGLOWS
William P. Noglows
Chairman of the Board, President and Chief Executive Officer
[Director]

Date: December 8, 2004

/s/ JUAN ENRIQUEZ-CABOT*
Juan Enriquez-Cabot
[Director]

Date: December 8, 2004

/s/ JOHN P. FRAZEE, JR.*
John P. Frazee, Jr.
[Director]

Date: December 8, 2004

/s/ H. LAURANCE FULLER*
H. Laurance Fuller*
[Director]

Date: December 8, 2004

/s/ J. JOSEPH KING*

J. Joseph King
[Director]

Date: December 8, 2004

/s/ RONALD L. SKATES*

Ronald L. Skates
[Director]

Date: December 8, 2004

/s/ STEVEN V. WILKINSON*

Steven V. Wilkinson
[Director]

* by H. Carol Bernstein as Attorney-in-fact pursuant to the requirements of section 13 or 15(d) of the Securities Exchange Act of 1934.

EXHIBIT 31.1

CERTIFICATION

I, William P. Noglows, Chief Executive Officer of Cabot Microelectronics Corporation, certify that:

1. I have reviewed this annual report on Form 10-K of Cabot Microelectronics Corporation;

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

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

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

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

(b) (paragraph omitted pursuant to SEC Release Nos. 33-8238 and 34-47986);

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

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

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

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

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

/s/ WILLIAM P. NOGLOWS

William P. Noglows
Chief Executive Officer

Date: December 8, 2004

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EXHIBIT 31.2

CERTIFICATION

I, William S. Johnson, Chief Financial Officer of Cabot Microelectronics Corporation, certify that:

1. I have reviewed this annual report on Form 10-K of Cabot Microelectronics Corporation;

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

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

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

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

(b) (paragraph omitted pursuant to SEC Release Nos. 33-8238 and 34-47986);

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

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

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

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

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

/s/ WILLIAM S. JOHNSON

William S. Johnson
Chief Financial Officer

Date: December 8, 2004

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EXHIBIT 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Cabot Microelectronics Corporation (the "Company") on Form 10-K for the fiscal year ended September 30, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

/s/ WILLIAM P. NOGLOWS
William P. Noglows
Chief Executive Officer

Date: December 8, 2004

/s/ WILLIAM S. JOHNSON
William S. Johnson
Chief Financial Officer

Date: December 8, 2004

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LEADERSHIP TEAM

William P. Noglows
Chairman of the Board, President and Chief Executive Officer

William S. Johnson
Vice President, Chief Financial Officer and Treasurer

Clifford R. Spiro
Vice President of Research and Development

[illegible] A. Hensel
Director of Global Quality

Daniel S. Wobby
Vice President of Greater China and Southeast Asia

[illegible] J. Brush
Vice President of Human Resources

Adam F. Weisman
Vice President of Operations

Stephen R. Smith
Vice President of Marketing and Sales

Daniel J. Pike
Vice President of [illegible]

James DeHoniesto
Chief Information Officer

[illegible] Nishiya
Vice President of Northeast Asia

Jean Pol Delrue
Vice President of European Business Region

H. Carol Bernstein
Vice President, Secretary and General Counsel

CORPORATE INFORMATION

Board of Directors

William P. Noglows
Chairman
President and Chief Executive Officer, Cabot Microelectronics Corporation

[illegible] Enriquez-Cabot
Director
[illegible] and Chief Executive Officer, [illegible]

[illegible] Frazee, Jr.
Director
Former Chairman and Chief Executive Officer, [illegible] Corporation

[illegible] Laurance Fuller
Director
Former Co-Chairman, BP Amoco PLC

[illegible] L. Skates
Director
[illegible] President and Chief Executive Officer, [illegible] Corporation

Steven V. Wilkinson
Director
[illegible] Partner, Arthur Andersen LLP

CORPORATE HEADQUARTERS

Cabot Microelectronics Corporation

870 N. Commons Drive
Aurora, IL 60504
(630) 375-6631

Investor Information

Investor inquiries are welcome, and individuals are invited to contact our offices by mail at the address above, by telephone at (630) 499-2600 or through our website at www.cabotcmp.com.

Stock Information

Cabot Microelectronics is traded on NASDAQ® under the symbol CCMP.

Stock Transfer Agent and Registrar

EquiServe Trust Company, N.A.
P.O. Box 43010
Providence, RI 02940-3010
(781) 575-3400
www.equiserve.com

Independent Auditors

PricewaterhouseCoopers LLP
Chicago, IL

Shareholder Meeting

The Annual Meeting of Shareholders will be held at 8 a.m. on March 8, 2005, at Cabot Microelectronics Corporation, 870 N. Commons Drive, Aurora, IL.

Form 10-K

A copy of the Cabot Microelectronics Annual Report on Form 10-K for the fiscal year ended September 30, 2004 filed with the Securities and Exchange Commission is enclosed and also available without charge at our website, www.cabotcmp.com.

Cabot Microelectronics

Cabot
Microelectronics

[redacted]
www.cabotcmp.com