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

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**FORM 10-K**

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

For the fiscal year ended August 28, 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: 000-30789

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**ENTEGRIS, INC.**

(Exact name of registrant as specified in its charter)

**Minnesota**  
(State or other jurisdiction of  
incorporation or organization)

**41-1941551**  
(I.R.S. Employer  
Identification Number)

**3500 Lyman Boulevard  
Chaska, Minnesota 55318**  
(Address of principal executive offices)

Registrant's telephone number, including area code: (952) 556-3131

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

Securities registered pursuant to Section 12(g) of the Act:  
Common Stock, \$0.01 Par Value

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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 10K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes  No

The aggregate market value of voting stock held by non-affiliates of the registrant, based on the last sale price of the Common Stock on October 29, 2004 as reported by the NASDAQ National Market, was approximately \$450 million. Shares held by each officer and director of the registrant and by each person who owns 5 percent or more of the outstanding Common Shares have been excluded from this computation in that such persons may be deemed to be affiliates of the registrant. This determination of affiliate status for this purpose is not necessarily a conclusive determination for other purposes.

The number of outstanding shares of the registrant's Common Stock, \$0.01 Par Value, as of October 29, 2004 was 73,246,675.

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## **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Proxy Statement for the 2005 Annual General Meeting of Shareholders (the "Proxy Statement"), to be filed with the Securities and Exchange Commission pursuant to Regulation 14A within 120 days after the Registrant's fiscal year ended August 28, 2004, are incorporated by reference into Part III of this report. (The Audit Committee Report, the Compensation and Stock Option Committee Report and the stock performance graph of the Registrant's Proxy Statement are expressly not incorporated by reference herein.)

Certain Exhibits filed with the registrant's Registration Statement on Form S-1, No.333-33668 filed with the Commission on July 10, 2000, are incorporated by reference into Part IV of this report.

## **CAUTIONARY INFORMATION REGARDING FORWARD-LOOKING STATEMENTS**

Portions of this Annual Report on Form 10-K (including information incorporated by reference) include "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and are subject to the safe harbor created by that statute. This includes in particular, Part II, Item 7 of this Form 10-K. In some cases, you can identify forward-looking statements by terminology such as "expects," "anticipates," "intends," "may," "should," "plans," "believes," "seeks," "estimates," "could," "would" or the negative of such terms or other comparable terminology. Such forward-looking statements are based upon current expectations and beliefs and involve numerous risks and uncertainties, both known and unknown, that could cause actual events or results to differ materially from these forward-looking statements. For a discussion of factors that could cause actual results to differ materially from those described in this Form 10-K, see the discussion of risk factors set forth below in Item 1 of this report. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable as of the date of this report, it cannot guarantee future results, levels of activity, performance or achievements. The Company undertakes no duty to update any of the forward-looking statements after the date of this report.

## **ENTEGRIS WEBSITE**

The Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available through its website ([www.entegris.com](http://www.entegris.com)) under the "Investor Relations" caption free of charge.

Information relating to corporate governance at Entegris, including the Company's Code of Ethics and Conduct and information concerning our executive officers, directors and Board committees, including the Audit Committee charter and transactions in Entegris securities by directors and officers, is available on or through our website at [www.entegris.com](http://www.entegris.com) under the "Corporate Governance" and "Financial Reports" captions within the "Investor Relations" caption.

Entegris is not including the information on its website as a part of, or incorporating it by reference into, its Form 10-K.

## PART I

### ITEM 1. BUSINESS

#### Our Company

Entegris was incorporated in June 1999 to effect the business combination of Fluoroware, Inc., which began operating in 1966, and EMPAK, Inc., which began operating in 1980. Our executive offices are located at 3500 Lyman Boulevard, Chaska, Minnesota 55318, and our telephone number is (952) 556-3131.

#### Our Business

We are a leading provider of materials integrity management solutions to the microelectronics industry in particular, the semiconductor and data storage markets. More than 95% of our sales in fiscal 2004 were related to the microelectronics industry. In addition, we leverage our core technology capabilities to extend our materials integrity management solutions to the fuel cell and life sciences markets. Our materials integrity management solutions for the semiconductor industry assure the integrity of materials as they are handled, stored, processed and transported throughout the semiconductor manufacturing process, from raw silicon wafer manufacturing to packaging of completed integrated circuits. These solutions enable our customers to protect their investment in work-in-process and finished devices by facilitating the safe handling, purity and precision processing of the critical materials used in their manufacturing processes.

#### Strategy

Our objective is to build upon our leadership in materials integrity management solutions for disks, semiconductor device, equipment and materials suppliers, as well as apply our expertise to the growing materials integrity management needs of other markets. Key elements of our strategy to achieve these objectives are:

- Broaden our product and service offerings;
- Leverage our capabilities to expand into new markets;
- Increase our operational efficiencies;
- Expand our technological leadership; and
- Pursue selective acquisitions.

## BUSINESS

#### Overview

We are a leading provider of materials integrity management solutions to the microelectronics industry in particular, the semiconductor and data storage markets. More than 95% of our sales in fiscal 2004 were related to the microelectronics industry. In addition, we leveraged our core technology capabilities to extend our materials integrity management solutions to the fuel cell and life sciences markets. Our materials integrity management solutions for the semiconductor industry assure the integrity of materials as they are handled, stored, processed and transported throughout the semiconductor manufacturing process, from raw silicon wafer shipping to the manufacturing and packaging of completed integrated circuits. These solutions enable our customers to protect their investment in work-in-process and finished devices by facilitating the safe handling, purity and precision processing of the critical materials used in their manufacturing processes.

With more than 10,000 standard and customized products, we believe we provide the most comprehensive portfolio of materials integrity management products and services to the microelectronics industry. Our materials integrity management products include wafer shippers, wafer transport and process carriers, standard mechanical interface pods and work-in-process boxes. Our fluid handling products, such as valves, fittings, tubing, pipe, fluid measuring and control products, and containers, assure the consistent and safe delivery and storage of sophisticated chemicals between chemical manufacturers and manufacturers' point-of-use.

We provide a full range of materials integrity management services across our range of served markets, including the semiconductor, data storage and other markets. Our comprehensive service offering includes product cleaning, certified reuse, on-site and off-site product maintenance and recycling for our wafer, device and disk-handling products. Our outsourced materials integrity management services provide us with a recurring revenue opportunity, while enabling our customers to better focus on their core competencies.

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We sell our products worldwide to more than 1,000 customers, who represent a broad base of leading suppliers to the microelectronics industry. None of our customers made up 10% or more of our net sales in fiscal 2004. Our customers in the semiconductor industry include wafer manufacturers, chemical suppliers, equipment manufacturers, device manufacturers and assemblers. Our semiconductor customers include Amkor, Applied Materials, Ashland Chemical, Infineon, MEMC, Mykrolis, Shin-Etsu Handotai, Samsung, Texas Instruments and TSMC. Our customers in data storage manufacturing include Komag and Seagate Technology.

International sales represented approximately 53%, 59% and 62% of our sales in fiscal 2002, 2003 and 2004, respectively. We provide our customers with a worldwide network of sales and support personnel, who enable us to offer local service to our global customer base and facilitate the timely and cost-effective delivery of our products.

### **Industry Background**

Semiconductors, or integrated circuits, are the building blocks of today's electronics and the backbone of the information age. The market for semiconductors has grown significantly over the past decade. This trend is expected to continue due to increased Internet usage and the continuing demand for applications in data processing, wireless communications, broadband infrastructure, personal computers, handheld electronic devices and other consumer electronics.

As integrated circuit performance has increased and the size and cost have decreased, the use of semiconductors in these applications has generally grown. Based on data from the Semiconductor Industry Association, or SIA, the worldwide semiconductor revenues grew by 18% to \$166 billion in 2003 after declining from calendar year 2000 to calendar year 2002. Also according to SIA, the worldwide semiconductor revenues are expected to rise 29% to \$214 billion in 2004 and are anticipated to grow at a compound annual growth rate of about 5% over the next three years to \$247 billion in 2007.

The semiconductor materials industry is comprised of a wide variety of materials and consumables that are used throughout the semiconductor production process. The extensive and complex process of turning bare silicon wafers into finished integrated circuits is dependent upon a variety of materials used repeatedly throughout the manufacturing process, such as silicon, chemicals, gases and metals. The handling of these materials during the integrated circuit manufacturing process requires the use of a variety of products, such as wafer shippers, wafer transport and process carriers, fluid and gas handling components and integrated circuit trays. Semiconductor unit volume is the primary driver of the demand for these materials and products because they are used or consumed throughout the production process and many are replenished or replaced on a regular basis. While influenced by capacity expansion, the semiconductor materials and materials management industries are historically less cyclical than the semiconductor capital equipment sector.

### **Semiconductor Manufacturing Process**

Semiconductor manufacturing is highly complex and consists of two principal segments: front-end and back-end processes. The front-end process begins with the delivery of raw wafers from wafer manufacturers to semiconductor manufacturers. After the wafers are shipped to semiconductor manufacturers, they are processed into finished wafers. During the front-end process, raw wafers undergo a series of highly complex and sensitive manufacturing steps, during which a variety of materials, including chemicals and gases, are introduced. Once the front-end manufacturing process is completed, finished wafers are transferred to back-end manufacturers or assemblers. The back-end semiconductor manufacturing process consists of test, assembly and packaging of finished wafers into integrated circuits. Materials integrity management products, such as wafer shippers, wafer and reticle carriers, fluid handling components and integrated circuit trays, facilitate the storage, transport, processing and protection of wafers through these front-end and back-end manufacturing steps. Semiconductor manufacturing has become increasingly complex in recent years as new technologies have been introduced to enhance device performance and as larger wafer sizes have been introduced to increase production efficiencies. Increased processing complexity adds significantly to the cost of constructing, equipping a wafer manufacturing facility, or fab, and safely protecting critical materials within the fab, which can now exceed \$3 billion.

### **Materials Integrity Management Focus**

In an effort to realize continued productivity gains, semiconductor manufacturers have become increasingly focused on materials integrity management solutions that enable them to safely store, handle, process and transport critical materials throughout the manufacturing process to minimize the potential for damage or degradation to their materials and to protect their investment in processed wafers. Wafer processing can involve hundreds of steps and take several weeks. As a result, a batch of

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25 fully processed wafers, the maximum number of wafers that can be transported in one of our products, can be worth several million dollars. Since significant value is added to the wafer during each successive manufacturing step, it is essential that the wafer be handled carefully and precisely to minimize damage.

In addition, materials handling products must meet exact specifications each and every time or valuable wafers can be damaged. For example, in the case of wafer carriers, precise wafer positioning, highly reliable and predictable cassette interface dimensions and advanced materials are crucial. The failure to prevent damage to wafers can severely impact integrated circuit performance, render an integrated circuit inoperable or disrupt manufacturing operations. Thus, semiconductor manufacturers are seeking to: minimize contamination (semiconductor processing is now so sensitive that ionic contamination in certain processing chemicals is measured in parts per trillion); protect semiconductor devices from electrostatic discharge and shock; avoid process interruptions; prevent damage or abrasion to wafers and materials during automated processing caused by contact with other materials or equipment; prevent damage due to abrasion or vibration of work-in-process and finished goods during transportation to and from customer and supplier facilities; and eliminate the dangers associated with handling toxic chemicals.

The importance of efficiently managing materials throughout the manufacturing process and the need to protect wafers is demonstrated by the existence of related standards established by the Semiconductor Equipment and Materials International (SEMI) organization, a leading industry trade organization. SEMI has specifically included the need to eliminate these risks in SEMI's official standards publication.

The need for efficient and reliable materials integrity management is particularly important as new materials are introduced and as 300mm semiconductor wafer manufacturing becomes a more prevalent manufacturing technology. Processing 300mm wafers, currently the largest wafer size in a manufacturing environment, is more costly and more complex because of the larger size of these wafers. In addition, new materials and circuit shrinkage create new contamination and material compatibility risks, rendering 300mm wafers more vulnerable to damage or contamination. These trends will present new and increasingly difficult shipping, transport, process and storage challenges.

A key emerging market is the outsourced fab services market, which consists of logistics management, spares and refurbishment, consumables and information technology. The market for outsource services remains largely untapped, as currently these activities are performed primarily by the owners of fabs. A rapidly growing segment within this market is materials integrity management services, which includes sub-micron cleaning and certified re-use and recycling of materials management products. As the materials integrity management market continues to grow, we believe that there is an increasing need for more effective and efficient application of materials integrity management solutions through dedicated, outsourced service offerings.

The semiconductor materials and the materials integrity management industries are highly fragmented and are served by a variety of providers, consisting of divisions within large corporations and smaller companies that target niche markets or specific geographic regions. Semiconductor manufacturers require materials integrity management providers that demonstrate a deep knowledge of materials integrity management and semiconductor manufacturing, have a track record of reliability, offer a broad product line and have the ability to support and service customer needs worldwide.

### **Products and Capabilities**

We are a leading provider of materials integrity management solutions that assure the integrity of materials as they are handled, stored, processed and transported throughout the semiconductor manufacturing process, from raw silicon wafers to completed integrated circuits. Among other things, our comprehensive portfolio of products enable:

- secure transport of materials, including chemicals and raw silicon wafers, from suppliers to the fab;
- storage, handling and transport of wafers and reticles throughout fab processing;
- storage, mixing, distribution, measuring and controlling of chemicals throughout fab processing;
- delivery of finished wafers to test, assembly and packaging facilities;
- safe handling of integrated circuit packages and bare die at the test, assembly and packaging facilities; and
- optimization of product performance and productivity improvement as a result of customized service offerings for product cleaning, inspection, certification and recycling and logistics management.

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We also apply our materials integrity expertise within other markets, such as the data storage, life sciences and fuel cell markets. Our comprehensive product line, advanced manufacturing capabilities, extensive polymer expertise and worldwide infrastructure provide significant benefits to our customers.

### **Comprehensive Product Line**

With over 10,000 products, we believe that we offer the broadest product offering of materials integrity management solutions for the microelectronics manufacturing industry. In the semiconductor industry, we offer products to ship, process, test and store wafers before, during and after the integrated circuit manufacturing process.

We also offer a complete product line to transport, process, store and ship chemicals used in the semiconductor manufacturing process. Our capabilities include advanced high purity fluid measurement, including pressure measurement, flow measurement and flow control. In the data storage market, we offer a broad range of products to transport and handle magnetic hard disk drives, read/write heads and optical and compact disks. In addition, we offer materials integrity management services, which provide our customers the ability to outsource their wafer, disk and device handling, product cleaning, maintenance, re-use, certification, recycling and product optimization activities.

### **Advanced Manufacturing Capabilities**

We have a wide range of advanced polymer manufacturing capabilities that use a variety of mold designs to produce high precision products, often in cleanroom facilities. Our polymer capabilities include injection molding, rotational molding, compression molding, blow molding, extrusion, machining, welding and flaring, sheet lining, over-molding, insert molding, prototyping and assembly. These capabilities, coupled with our strengths in advanced tool design and mold-making, high-volume manufacturing, quality assurance and polymer reclaiming, enable us to be a leader in our markets.

### **Extensive Polymer Expertise**

We have extensive research experience with the advanced polymer materials used in our products. We have expertise in material evaluation, analytical chemistry, polymer blending and quality assurance techniques. We understand the properties of advanced polymers, how they interact with other materials used in the semiconductor and disk manufacturing process and how they address the varying conditions of the manufacturing process. We have transferred our advanced polymer knowledge into the fuel cell and life sciences markets, where the properties of highly engineered polymers can be used in various products and manufacturing processes.

### **Industry and Applications Knowledge**

Throughout our 38-year history, we have worked closely with semiconductor and data storage manufacturers and materials suppliers to accumulate considerable insight into the increasingly complex manufacturing requirements of the semiconductor and data storage markets. This insight allows us to more effectively target our research and development toward products that satisfy our customers' manufacturing requirements. Our industry knowledge encompasses contamination control, electrostatic discharge protection, automation interface, and cleanroom manufacturing.

This industry knowledge has enabled us to serve as a leader in developing industry standards. Our ability to characterize and test products allows us to understand the interaction of our products with wafers and other critical components in our customers' manufacturing process in order to ensure superior performance while reducing the risk of damage.

### **Worldwide Infrastructure**

Our worldwide infrastructure positions us in every major region of the world where semiconductor or data storage production takes place. Our manufacturing operations and support offices in the United States, Europe and Asia, including Japan, enable us to offer local service, the timely and cost-effective delivery of our products and the capacity to meet standard and unique customer requirements. We offer customer service 24 hours a day, 7 days a week.

## Strategy

Our objective is to build upon our leadership in materials integrity management solutions for semiconductor device, equipment and material suppliers and disk suppliers, as well as apply our expertise to the growing materials integrity management needs in the life sciences, fuel cell and other markets. The key elements of our strategy to achieve this objective are:

### ***Broaden Product and Service Offerings***

Although we offer a comprehensive line of more than 10,000 products, we believe that there is significant potential for sales of new products and solutions in the semiconductor and data storage markets and within the broader microelectronics industry including, among others, new products and solutions for the 300mm wafer market; upgrading 200mm wafer fabrication facilities with new and improved products, new products and solutions to store, mix, handle, transport, measure and control ultra-pure and corrosive chemicals used in the semiconductor manufacturing process; and new products and solutions in the area of testing, storing and shipping finished integrated circuits.

We are committed to developing new products through both internal research and development and strategic acquisitions. In addition, we continue to broaden our materials integrity management services across our served markets. For example, our Silicon Delivery Systems and Services (SDS<sup>2</sup>) and Disk Delivery Systems and Services (DDS<sup>2</sup>) programs offer outsourced programs for wafer, device and disk transportation and protection. These programs were the foundation for expanding our materials integrity management services to include WaferCare<sup>®</sup>, DeviceCare<sup>SM</sup> and DiskCare<sup>®</sup> Services, which provide product cleaning, certified re-use services for shipping products, on-site product maintenance and optimization, and end-of-life recycling for our wafer, device and disk-handling products. Re-use services can be customized depending on the customers needs to provide product cleaning, logistics, recovery, certification and supply solutions for our products.

### ***Leverage Capabilities to Expand into New Markets***

We believe that our materials integrity management expertise can be applied outside the semiconductor and data storage markets to a variety of other markets that use sophisticated manufacturing processes and have critical materials integrity management needs. For example, the life science market provides opportunities for our polymer-based fluid handling products and application knowledge. Our product offering for this market includes a broad array of sanitary tubing, valves, fittings, adapters and containers to provide biopharmaceutical manufacturers a complete, non-metallic fluid process system. In particular, we are seeking to apply our expertise to drug manufacturing and other processes that are metal sensitive. Through our recent acquisition of Electrol Specialties Company in fiscal 2003, we complement our polymer-based products with custom fabricated stainless steel equipment and controls.

We also apply our advanced capabilities in polymer material science and manufacturing to the growing fuel cell market. Since we entered this market in October 2002, we have developed a broad array of products, including bipolar plates and balance of plant components and subassemblies. We leverage our current infrastructure including our research, engineering and worldwide manufacturing facilities to develop and produce our fuel cell products. We intend to continue to leverage our materials integrity management expertise to become a leading provider of advanced fuel cell materials, components, sub-assemblies and value-added services to fuel cell developers.

### ***Increase Operational Efficiencies***

Continuous cost reduction and a disciplined capital expenditure program are key components of our long-term financial strategy. During the past several years, we have taken significant steps to reduce our cost structure and improve the efficiency of our global manufacturing processes. We have created manufacturing "centers of excellence" around the world and consolidated our manufacturing operations. Through our adoption of the Kaizen and lean sigma methodology, we have further reduced our cost structure by identifying and eliminating non-value added steps from our manufacturing process. This approach has enabled us to achieve a reduction in production leadtime and an increase in production throughput. Operational efficiencies will continue to be a focus as we integrate acquisitions and seek to continuously improve our manufacturing processes.

### ***Expand Technological Leadership***

Since our inception, we have been an innovator in materials integrity management solutions for the semiconductor industry. For example, our chemical delivery product line represents a number of industry firsts, including: the first perfluoroalkoxy, or PFA, fusion-bonded piping; the first valves with no metal parts in the fluid stream; the first nonmetallic capacitive sensors to successfully perform in harsh environments at high temperatures; the first pinch valve; the first PFA fluid handling product line for biopharmaceutical applications; and the first PFA non-wetted pressure and flow sensors designed specifically for high purity and corrosive applications.

Additionally, we are a leading designer and manufacturer of 300mm materials integrity management solutions with products such as front opening unified pods (FOUPs). Further, we developed a unique wafer shipper designed to protect and transport extremely delicate thinned wafers, which are used to achieve smaller packages, making smaller size electronic devices possible. We intend to continue to expand the scope of our technology leadership by: identifying and developing viable new

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polymers for materials integrity management applications, developing innovative product designs and advanced processes for molding difficult materials and aiding the industry in establishing standards for materials integrity management products and services.

### *Pursue Selective Acquisitions*

Although we currently have no agreements or commitments to acquire any material business, we intend to pursue selective acquisitions to complement our growth. Our goal is to acquire businesses or product lines that will expand our total addressable markets, strengthen our position in our targeted markets, enhance our technology base, increase our manufacturing capability or our product offerings and expand our geographic presence. We believe expanding our business in key market segments could strengthen our presence with existing customers and provide access to new customers who seek a global service provider for their materials integrity management needs.

In January 2003, we purchased the assets of Electrol Specialties Company (ESC), a market leader in Clean-In-Place (CIP) technology for the life sciences market. The integration of our fluoropolymer materials and fluid handling expertise with ESC's stainless steel system design and fabrication capabilities enabled us to expand the scope of our current products and services. Our goal is to leverage ESC's extensive CIP experience, biopharmaceutical industry customer relationships and innovative technology to further penetrate this market.

In February 2003, we purchased the wafer and reticle carrier product lines of Asyst Technologies, Inc. With this purchase, we enhanced our comprehensive product and service offerings to customers, increased our intellectual property portfolio, and added new talent to the product development group. Our strategy is to accelerate the development of our next-generation products to bring to market products that will improve our customers' efficiencies and capabilities.

In May 2004, the Company completed the acquisition of a precision parts cleaning business located in Montpellier, France. The transaction was made to expand the geographic reach of Entegris' materials integrity management services, with the facility at Montpellier becoming the Entegris European Service Center (EESC). From this facility, Entegris will service European customers with precision clean certified parts as an element of their Off-site Service program. With the acquisition, Entegris also added a staff experienced in precision parts cleaning which will help to ensure the success of the global services program.

### **Markets and Products**

With over 10,000 standard and customized products, we believe that we provide the most comprehensive portfolio of materials integrity management solutions to the microelectronics industry. Our product lines address both the semiconductor and the data storage manufacturing markets. During the front-end semiconductor manufacturing process, we provide materials integrity management products and services that preserve the integrity of wafers as they travel from wafer manufacturers to semiconductor manufacturers. As the wafers are subsequently processed, we provide wafer transport products that reliably interface with automated processing equipment. We also provide products that safely deliver processing chemicals from chemical manufacturers in our containers at the fab and then from the containers through our pipes, valves and fittings to process equipment within the fab.

During the back-end semiconductor manufacturing process, we provide products that transport and handle completed integrated circuits during testing, assembly and packaging. Furthermore, we provide products that prevent degradation and damage to magnetic hard disk drives and read/write heads as they are processed and shipped. Through our unique, industry-leading SDS<sup>2</sup> and DDS<sup>2</sup> offerings, we provide our customers a complete, outsourced solution for wafer, disk and device transportation and protections, which includes programs for sub-micron product cleaning; certified product re-use, including cleaning, recovery and supply logistics; on-site product maintenance and optimization; and end-of-life recycling.

In addition to our product offerings, we offer outsourcing services, which provide an opportunity to optimize the use of our products, increase productivity and reduce total costs. We offer five major services:

- On-site service: our personnel provide sub-micron cleaning, maintenance and optimization services, as well as training on our products, at the customer's site;
- Off-site cleaning: we provide product cleaning and analysis services at our regional service centers, which are located throughout the world;

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- Re-use services: we provide product-customized product re-use solutions for wafer and disk shipping products, including cleaning, certification, collection, logistics and JIT delivery;
- Recycle services: we provide environmentally sound end-of-life disposition of our products; and
- Field services: we provide repair and maintenance capability for our products and cleaning equipment.

A summary of our materials integrity management product offerings follows:

### ***Semiconductor Market: Front-End***

***Wafer Manufacturing Products.*** We believe we are a leading provider of critical shipping products that preserve the integrity of raw silicon wafers as they are transported from wafer manufacturers to semiconductor manufacturers. We lead the market with our extensive, high volume line of UltraPak® and CrystalPak® products which are supplied to wafer manufacturers in a full range of sizes covering 100, 125, 150, 200 and 300mm wafers. We also offer a full-pitch FOSB for the transportation and automated interface of 300mm wafers. We offer a complete shipping system, including both wafer shipping containers as well as secondary packaging that provide another level of protection for wafers.

***Wafer Handling Products.*** We believe that we are a market leader in wafer handling products. We offer a wide variety of products that hold and position wafers as they travel between each piece of equipment used in the automated manufacturing process. These specialized carriers provide precise wafer positioning, wafer protection and highly reliable and predictable cassette interfaces in automated fabs. Semiconductor manufacturers rely on our products to improve yields by protecting wafers from abrasion, degradation and contamination during the manufacturing process. We provide standard and customized products that meet the full spectrum of industry standards and customers' wafer handling needs including FOUPs, wafer transport and process carriers, SMIF pods and work-in-process boxes. To meet our customers' varying wafer processing and transport needs, we offer wafer carriers in a variety of materials and in sizes ranging from 100mm through 300mm.

***Cleaning Systems and Services.*** We believe we are the only global provider currently offering outsourcing programs for wafer and device transportation and protection for both wafer manufacturing and wafer handling products. Our WaferCare®, and DeviceCare<sup>SM</sup> services include product cleaning, certified re-use services for shipping products, on-site and off-site product maintenance and optimization, and end-of-life recycling for our wafer, device and disk-handling products. Re-use services can be customized depending on the customers needs to provide product cleaning, logistics, recovery, certification and supply solutions for our products.

***Chemical Delivery Products.*** Chemicals spend most of their time in contact with fluid storage and management distribution systems, so it is critical for fluid storage and handling components to resist these chemicals and avoid contributing contaminants to the fluid stream. We offer chemical delivery products that allow the consistent and safe delivery of sophisticated chemicals from the chemical manufacturer to the point-of-use in the semiconductor fab. The products we offer include products that measure and control the pressure and flow of these chemicals in the fab and in the equipment used to make semiconductors. Most of these products are made from perfluoroalkoxy or PFA, a fluoropolymer resin widely used in the industry because of its high purity and inertness to chemicals. The innovative design and reliable performance of our products and systems under the most stringent of process conditions has made us a recognized leader in high purity fluid transfer products and systems. Both semiconductor manufacturers and semiconductor OEMs use our chemical delivery products and systems. Our comprehensive product line provides our customers with a single source provider for their chemical storage and management needs throughout the manufacturing process. Our chemical delivery products include:

- ***Valves.*** We offer the Integra®, Dymak® and Accuflo™ valves, each of which were first in their respective applications. Our Integra® valve was the first to feature no external metal parts, which can corrode and pose a safety hazard when managing aggressive chemicals. Our Dymak® valve is the first PFA pinch valve designed for chemical mechanical polishing, or CMP, slurries, bulk chemical distribution and other high flow applications. The all-PFA pinch element allows greater resistance to chemical corrosion and offers lower particle generation than competing valves. Our Accuflo™ metering valve is the first to be molded entirely from PFA, which provides enhanced control for a broad range of applications.
- ***Fittings.*** We provide fittings that have become the industry standard for high purity chemical resistance. We offer three styles of tube fittings: Flaretek®, Quikgrip® and Galtek® fittings. Our Flaretek® fittings feature a flare design that combines leak-free performance with minimum dead volume. All of the wetted surfaces of our fittings products are Teflon® PFA, chosen for its purity and resistance to corrosion in the semiconductor processing environment. Our Quikgrip® fitting has a gripper design that features easy, user-friendly assembly. Additionally, our Galtek® fittings represent the industry's first all PFA fitting featuring an integral ferrule design for strength along with chemical resistance features.

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- **Tubing.** We offer three grades of FluoroLine® PFA tubing, which address our customers' needs ranging from industrial to ultra high purity applications.
- **Pipe.** Our PUREBOND® fusible piping components provide leak-free piping systems by fusion bonding over rigid pipe and components. Our patented method for joining PFA components allows flexibility of design and assembly of fluid delivery systems. We offer many component configuration sizes ranging from 1/4 inch to 2 inch inner diameters, meeting a wide range of customer design requirements.
- **Measurement and Control.** We offer a wide variety of measurement and control products for high purity and corrosive applications. For electronic measurement and control, we provide a complete line of pressure and flow measurement and control products through our subsidiary, NT International. NT International also handles our patented line of all-plastic capacitance sensors for leak detection, valve position, chemical level and other measurements. We also offer a complete line of sight tube-style flowmeters and mechanical gauge pressure measurement products.
- **Chemical Containers.** We offer a broad spectrum of chemical transport and storage containers that help ensure the safe delivery of sophisticated chemicals from chemical manufacturers to the semiconductor manufacturers' point-of-use. Our containers are well suited for the microelectronics industry because they help minimize contamination of chemicals to concentrations of parts per billion and parts per trillion. Our sheet lining process allows us to provide containers for bulk chemical storage and shipment of up to 19,000 liters. We offer a wide variety of container types including drums, pressure vessels, intermediate bulk containers, custom containers and bottles. In addition, we provide our patented quick connect system, which enables safe, risk-free connections for chemical container change-outs.
- **Custom Fabricated Products.** We offer a wide variety of custom-molded, welded or fabricated fluid products, including custom valves, fittings, filter housings, caps, closures, flanges and tanks. We manufacture these custom products to meet stringent standards of consistency and safety by offering a variety of high performance, chemically resistant materials.

Some of our valves fall within the scope of United States export licensing regulations pertaining to products that could be used in connection with chemical weapons processes. These regulations require us to obtain licenses to ship some of our products to customers in certain countries, and we routinely apply for and obtain export licenses. The applicable export licensing regulations frequently change. Moreover, the types and categories of products that are subject to export licensing are often described in the regulations in general terms and could be subject to differing interpretations.

### **Semiconductor Market: Back-End**

**Test, Assembly and Packaging Products** Rapidly changing packaging strategies for semiconductor applications are creating new materials management challenges for back-end manufacturers. We offer chip and matrix trays as well as shippers and carriers for thinned wafers, bare die handling and integrated circuits. Our materials management products are compatible with industry standards and available in a wide range of sizes with various feature sets. Our standard trays offer dimensional stability and permanent electrostatic discharge protection. Our trays also offer a number of features including custom designs to minimize die movement and contact; shelves and pedestals to minimize direct die contact, special pocket features to handle various surface finishes to eliminate die sticking; and other features for automated or manual die placement and removal.

In addition, we support our product line with a full range of accessories to address specific needs such as static control, cleaning, chip washing and other related materials management requirements. To better address this market, we have established ictray.com, a website which allows new and existing customers to select from our full range of standard and custom integrated circuit trays.

We recently introduced to the market our Stream™ product line, a new tape and reel product, which is a packaging system designed to protect and transport microelectronic components, while enabling the high-speed automated placement of the components onto printed circuit boards used for today's electronics.

### **Data Storage Market**

**Disk Manufacturing Products** Like the semiconductor industry, the data storage market continues to face new challenges and deploy new technologies at an accelerating rate. We provide materials management products and solutions to

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manage two critical sectors of this industry: magnetic disks and the read/write heads used to read and write today's higher density disks. Because both of these hard disk drive components are instrumental in the transition to more powerful storage solutions, we offer products that carefully protect and maintain the integrity of these components during their processing, storage and shipment. Our product offerings for magnetic hard disk drives include process carriers, boxes, packages, tools and shippers for aluminum and other disk substrates. Our optical hard disk drive products include stamper cases, process carriers, boxes and glass master carriers. Our read/write head products include transport trays, carriers, handles, boxes, individual disk substrate packages and accessories.

### ***Life Sciences Market***

For the Life Sciences market, particularly the biopharmaceutical area, we protect and transport critical materials by using both fluoropolymer and stainless steel system design and fabrication. Our fluoropolymer process systems include valves, fittings, tubing, sheetlined and rotolined vessels and other process components. These fluoropolymer products perform better than exotic metals in some applications and are priced comparably to stainless steel. With the acquisition of Electrol Specialties Company in January 2003, we now have stainless steel system design and fabrication capabilities, which enable us to expand the scope of our current products and services.

### ***Fuel Cell and Other Markets***

In October 2002, we entered into the fuel cell market. Our core competencies in polymer material science and manufacturing enables us to provide advanced fuel cell materials, components, subassemblies and services to fuel cell developers. We utilize our advanced molding and machining capabilities to manufacture bipolar plates for portable, stationary and transportation fuel stack needs. Our cell stack assemblies feature our sealing technology and contamination control, to facilitate a leak-free and contamination-free cell stack at lower cost. We also provide assemblies and service for Balance of Plant Applications (BOP), including valves, fittings, tubing, manifolds and rotolined tanks. Through our close working relationships with fuel cell developers, we are able to decrease the number of components within a fuel cell system, which minimizes potential leak paths and the potential for contamination, reducing the size, weight and cost of fuel cell systems while improving reliability.

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### Customers

We have over 1,000 customers in North America, Europe and Asia, including every major semiconductor manufacturer in the world. No single end-customer accounts for over 5% of our sales. We provide products and solutions primarily to semiconductor manufacturers and semiconductor equipment manufacturers, chemical materials suppliers and data storage manufacturers. The following table sets forth a representative list of major end-customers in each of the markets in which we operate:

Semiconductor Wafer Manufacturing		Microelectronics and Semiconductor Materials	
Komatsu	Sumco	Cabot Microelectronics	General Chemical
MEMC	Wacker Siltronic	EKC Technology	Pall
Shin-Etsu Handotai (SHE)			Mallinckrodt Baker
Semiconductor Device Manufacturing and Assembly			
Agere	IBM	Philips	Texas Instruments
AMD	Infineon	Samsung	Trecenty
Amkor	Micron Technology	SMIC	TSMC
Fujitsu	Motorola	STMicroelectronics	UMC
Hitachi			U.S. West Coast-based IC manufacturer
Semiconductor Equipment Manufacturing		Data Storage Manufacturing	
Applied Materials	Mykrolis	Fuji Electric	MMC Technology
Dainippon Screen	SCP Global Technologies	Hoya	Seagate Technology
Kinetics		Komag	Showa Denko
Life Sciences			
	Alcon Labs	Guidant	
	Boston Scientific	Hamco Filtertechnic	

### Sales and Marketing

We market and sell our products on a worldwide basis through a network of direct sales personnel, commissioned sales representatives and stocking distributors. Our sales and marketing initiatives in Japan are coordinated through the sales office of our wholly-owned subsidiary, Entegris Japan K.K. We support our worldwide sales activities by stocking select products in regional warehouses, which facilitates rapid response to customers' needs. For example, Entegris Europe GmbH serves as one of several stocking locations for distribution throughout Europe. The worldwide offices of Metron also carry Fluid Handling product inventories to meet regional demand. Direct customer support comes from our regional service and customer support offices located in the United States, Europe and Asia, including Japan. We work with each of our regional service and customer support offices to provide regional marketing support, including public relations, collateral development and publication, corporate positioning, advertising, trade show participation and communications. Our marketing groups based in the United States support our global marketing strategy, e-business and other initiatives.

## Manufacturing

Our customers rely on our products to assure their materials integrity by providing dimensional precision and stability, cleanliness and consistent performance. Our ability to meet our customers' expectations, combined with our substantial investments in worldwide manufacturing capacity, position us to respond to the increasing materials integrity management demands of the microelectronics industry and other industries that require similar levels of materials integrity.

To meet our customer needs worldwide, we have established an extensive global manufacturing network with manufacturing facilities in the United States, Germany, Japan and Malaysia. Because we work in an industry where contamination control is paramount, we maintain Class 100 to Class 10,000 cleanrooms for manufacturing and assembly. We believe that our worldwide manufacturing operations and our advanced manufacturing capabilities are important competitive advantages. Our advanced manufacturing capabilities include:

- **Injection Molding.** Our manufacturing expertise is based on our long experience with injection molding. Using molds produced from computer-aided processes, our manufacturing technicians utilize specialized injection molding equipment and operate within specific protocols and procedures established to consistently produce precision products.
- **Extrusion.** Extrusion is accomplished through the use of heat and force from a screw to melt solid polymer pellets in a cylinder and then forcing the resulting melt through a die to produce tubing and pipe. We have established contamination free on-line laser marking and measurement techniques to properly identify products during the extrusion process and ensure consistency in overall dimension and wall thickness.
- **Blow Molding.** Blow molding consists of the use of heat and force from a screw to melt solid polymer pellets in a cylinder and then forcing the melt through a die to create a hollow tube. The molten tube is clamped in a mold and expanded with pressurized gas until it takes the shape of the mold. We utilize advanced three-layer processing to manufacture 55 gallon drums, leading to cost savings while simultaneously assuring durability, strength and purity.
- **Rotational Molding.** Rotational molding is accomplished by the placing of a solid polymer powder in a mold, placing the mold in an oven and rotating the mold on two axes so that the melting polymer coats the entire surface of the mold. This forms a part in the shape of the mold upon cooling. We use rotational molding in manufacturing containers up to 5,000 liters. Our rotational molding expertise has provided rapid market access for our current fluoropolymer sheet lining manufacturing business.
- **Compression Molding.** In compression molding, thermoset polymers are processed. Today, we use this manufacturing process primarily for manufacturing bipolar plates and end-plates for the fuel cell market. We use the same expertise as in injection molding to assure a consistently produced precision product.
- **Sheet Lining.** Sheet lining consists of welding thin sheets of polymer into a solid lining that conforms to the shape of a large vessel, such as a tanker truck. We sheet line stainless steel tanks up to 19,000 liters in size through a complex adhesive and welding process that provides customers with purity and strength for the high volume storage and transportation of corrosive chemicals.
- **Stainless Steel Sheet Metal Fabrication.** We use modern stainless steel fabrication equipment, a skilled work force and high quality materials and components to generate products that meet the high standards of sanitation and control applicable to the life sciences market. We complement our manufacturing capabilities with American Society of Mechanical Engineers certified welders, material trace ability, in-house inspection and weld maps with supporting documentation contribute to our specialty stainless steel equipment capabilities.
- **Machining.** Machining consists of the use of computer-controlled equipment to create shapes, such as valve bodies, out of solid polymer blocks or rods. Our computerized machining capabilities enable speed and repeatability in volume manufacturing of our machined products, particularly products utilized in chemical delivery applications.

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- **Assembly.** We have established protocols, flow charts, work instructions and quality assurance procedures to assure proper assembly of component parts. The extensive use of robotics throughout our facilities reduces labor costs, diminishes the possibility of contamination and assures process consistency.
- **Tool Making.** We employ about 60 tool development and tool making related staff primarily at locations in the United States. Our toolmakers produce the majority of the tools we use throughout the world.

We have made significant investments in systems and equipment to create innovative products and tool designs. Our computer-aided design (CAD) equipment allows us to develop three-dimensional electronic models of desired customer products to guide design and tool-making activities. Our CAD equipment also aids in the rapid prototyping of products.

We also use computer-automated engineering in the context of mold flow analysis. Beginning with a three-dimensional CAD model, mold flow analysis is used to visualize and simulate how our molds will fill. The mold flow analysis techniques cut the time needed to bring a new product to market because of the reduced need for sampling and development. Also, our CAD equipment can create a virtual part with specific geometries, which drives subsequent tool design, tool manufacturing, mold flow analysis and performance simulation.

In conjunction with our three-dimensional product designs, we use finite element analysis software to simulate the application of a variety of forces or pressures to observe what will happen during product use. This analysis helps us anticipate forces that affect our products under various conditions. The program also assists our product designers by measuring anticipated stresses against known material strengths and establishing proper margins of safety.

### **Engineering, Research and Development**

We devote a significant portion of our financial and human resources to research and development programs. As of August 28, 2004, we employed about 135 people in our worldwide engineering, research and development department. Of these, about 24 work in our materials and product testing research laboratories, where we conduct general materials research to enhance current products and strengthen our advanced materials knowledge. The other engineering, research and development personnel perform product design and development in response to general market needs as well as specific industry and customer requests. Increasingly, customers ask us to conduct research and development to find materials, products and systems that meet their specific materials handling needs.

We utilize sophisticated methodologies to develop and characterize our materials and products. Our materials technology lab is equipped to analyze the physical, rheological, thermal, chemical and compositional nature of the polymers we use. Our materials lab includes standard and advanced polymer analysis equipment such as inductively coupled plasma mass spectrometry (ICP/MS), inductively coupled plasma atomic emission spectrometry (ICP/AES), fourier transform infrared spectroscopy (FTIR) and automated thermal desorption gas chromatography/mass spectrometry (ATD-GC/MS). This advanced analysis equipment allows us to detect contaminants in materials that could harm the semiconductor manufacturing process to levels as low as parts per billion, and in many cases parts per trillion.

Our capabilities to test and characterize our materials and products are focused on continuously reducing risk to our customers. The majority of our research is located at our Chaska, Minnesota facilities. We expect that technology and product research and development will continue to represent an important element in our ability to develop and characterize our materials and products.

### **Patents and Proprietary Rights**

We rely on patent, copyright, trademark and trade secret laws, confidentiality agreements and other contractual arrangements with our employees, strategic partners and others to protect our technology. Our goal is to obtain intellectual property protection to maintain our position as a leader in materials integrity management and to give us a competitive advantage in the industry.

We actively pursue a program of patent applications to seek protection of technologically sensitive features of our materials integrity management products and services. We conduct extensive research on the patentability of our innovations, the potential infringement on existing patents and the business value of retaining the information as proprietary knowledge. With this information, we determine whether to seek a patent, disclose the information through an industry white paper or maintain the information as a trade secret.

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As of October 31, 2004 our patent portfolio consisted of 178 current U.S. patents and 298 patents outside the United States. We regularly seek patent protection outside the United States by filing counterpart applications, principally in Germany, France, United Kingdom, Italy, Taiwan, China, Malaysia, Korea, Singapore and Japan. We also pursue trademark registration of our key trademarks in the principal countries where we do business.

The patent position of any manufacturer, including us, is subject to uncertainties and may involve complex legal and factual issues. Litigation may be necessary in the future to enforce our patents and other intellectual property rights or to defend ourselves against claims of infringement or invalidity. The steps that we have taken in seeking patents and other intellectual property protections may prove inadequate to deter misappropriation of our technology and information. In addition, our competitors may independently develop technologies that are substantially equivalent or superior to our technology.

### **Competition**

We face substantial competition from a number of companies, some of which have greater financial, marketing, manufacturing and technical resources. We are not aware of any single competitor who offers a comparable breadth of materials integrity management products and services in the microelectronics industry. We compete on the basis of our technical expertise, product performance, advanced manufacturing capabilities, global locations, quality, reliability, established reputation, service and customer relationships. We believe that we compete favorably on the basis of these factors in each of our served markets.

Our wafer and reticle handling product lines face competition largely on a product-by-product basis. We have historically faced competition from companies such as Miraial (formerly Kakizaki), Dainichi and Shin-Etsu Polymer. These companies compete with us primarily in 200mm and 300mm applications. Our chemical delivery products also face worldwide competition from companies such as Saint-Gobain, Parker and Gemu. In assembly, packaging and testing of semiconductor and data storage applications, we compete with companies such as Advantek, ITW/Camtex, Peak International and 3M. In the disk shipping and bare and packaged die tray markets, we face competition from regional suppliers.

### **Facilities**

We conduct manufacturing operations in facilities strategically positioned throughout the world. Our manufacturing facilities adequately meet our production capacity and work flow requirements. The table in Item 2 presents certain information relating to these manufacturing facilities.

### **Employees**

As of August 28, 2004, we had 2,248 employees, including 469 temporary employees, throughout the world. Of these, 1,736 in manufacturing, 135 in engineering, research and development, including custom product development, and 374 in selling, marketing and general and administrative activities, including customer service, finance and accounting, information technology, human resources and corporate management. Of our full-time employees, 1,564 are located in the United States, 219 are located in Europe and 465 are located in Asia. None of our employees is covered by a collective bargaining arrangement. We consider our relationship with our employees to be good.

### **Legal Proceedings**

See Item 3.

### **Financial Information about Segments and Geographic Areas**

See Note 19 to the Consolidated Financial Statements contained under Items 8 and Item 15(a)(1).

## **RISK FACTORS**

Our business faces significant risks. These risks are described below. If any of the events or circumstances described in the following risks occurs, our business, operating results or financial condition could be materially adversely affected. These risks should be read in conjunction with the other information set forth in this report.

## Industry Risk

### **The semiconductor industry is highly cyclical, and industry downturns reduce revenue and profits.**

Our business depends on the purchasing patterns of semiconductor manufacturers, which, in turn, depend on the current and anticipated demand for semiconductors and products utilizing semiconductors. The semiconductor industry is highly cyclical and historically has experienced periodic downturns, which often have resulted in decreased expenditures by semiconductor manufacturers. This cyclicity could cause our operating results to decline significantly from one period to the next. For example, during the industry downturn that began in fiscal 2001, our revenues declined significantly for three consecutive quarters from a high of \$105.7 million in the second quarter of 2001 to a low of \$45.9 million in the first quarter of 2002. Furthermore, even in periods of reduced demand, we must continue to maintain a satisfactory level of research and development expenditures and continue to invest in our infrastructure. At the same time, we have to manage our operations to be able to respond to significant increases in demand. In addition, because we typically do not have significant backlog, changes in order patterns have a more immediate impact on our revenues. We expect the semiconductor industry to continue to be cyclical. Any future downturns will reduce revenue and possibly increase pricing pressure, affecting both gross margin and net income. Such fluctuations in our results could cause our share price to decline substantially. We believe that period-to-period comparisons of our results of operations may not be meaningful, and you should not rely upon them as indicators of our future performance.

### **Our industry is subject to rapid technological change, and we may fail to successfully anticipate customer needs and develop new products.**

The microelectronics industry is subject to rapid technological change, changing customer requirements and frequent new product introductions. Because of this, the life cycle of our products is difficult to determine. Our future success will depend, to a significant extent, on our ability to keep pace with changes in the market and on our ability to enhance our current products and introduce new products. For example, we must continue to identify new polymers, improve our product design and qualify our products with our customers. We might not successfully develop and introduce new products and materials in a timely and cost-effective manner. Any product enhancements or new products developed by us might not gain market acceptance. In addition, products or technologies developed by competitors could make our products or technologies obsolete or less competitive. If we do not anticipate or respond adequately to technological developments or customer requirements, we could lose market share or miss market opportunities.

## International Risks

### **Continued terrorist attacks, war or other disturbances could lead to further economic instability and decreases in demand for our products and could have a material adverse effect on our operating results and financial condition.**

The terrorist attacks of September 11, 2001 caused political and global financial market instability. The long-term effects of the September 11 attacks and recent terrorist actions on a global basis on our business are unknown. These attacks and the U.S. actions in the Middle East may lead to additional armed hostilities or to further acts of terrorism and civil disturbance in the United States or elsewhere, which may further contribute to economic instability and could have a material adverse effect on our business, financial condition and results of operations. In addition to the effect of global economic instability on foreign sales, sales to U.S. customers having significant foreign operations could be impacted negatively by these conditions.

### **We are dependent upon sales outside the United States, and the risks associated with international operations could affect our ability to maintain and increase revenues.**

International sales accounted for 53% of our revenues in fiscal 2002, 59% in fiscal 2003 and 62% in fiscal 2004. We anticipate that sales outside the United States will be an increasing percentage of our revenues as we pursue our international growth strategy and our markets are expected to grow faster outside the United States. A significant portion of our revenues will therefore be subject to risks associated with sales in markets outside the United States, including unexpected changes in legal and regulatory requirements and policy; changes affecting the markets for semiconductor technology; difficulties in managing sales representatives or distributors; difficulties in staffing and managing foreign operations; and difficulties in protecting our intellectual property outside the United States.

The value of the U.S. dollar in relation to other currencies may also harm our sales to customers outside the United States. In fiscal 2004, approximately 17% of our sales revenue was not denominated in U.S. dollars, which exposes us to currency fluctuations, primarily in the Japanese Yen. We intend to expand internationally, and to the extent that we do so or change our pricing practices to denominate prices in other currencies, we will be exposed to increased risks of currency fluctuations as well as the increased risks of doing business internationally.

**Adverse developments in relations between China and Taiwan could limit our future growth opportunities in those countries.**

Taiwan accounts for a significant portion of the world's semiconductor manufacturing. In 2002, Taiwan ended its ban on Taiwanese companies building wafer fabrication facilities in China, and as a result China is also an emerging market for our products. We currently operate sales offices in Taiwan and China. Our ability to penetrate the emerging market in China will depend heavily on our ability to develop business relationships there. Any adverse development in relations between China and Taiwan could significantly impact the worldwide production of semiconductors, which would lead to reduced sales of our products.

**An increased concentration of wafer manufacturing in Japan could result in lower sales of our wafer shipper products.**

A significant portion of the world's 300mm wafer manufacturing currently takes place in Japan. Our market share in Japan is currently lower than in other regions we serve. During fiscal 2004, we expanded our manufacturing capabilities in Japan in order to improve our market share. If we are not able to successfully operate our manufacturing capability and increase market share in Japan, we might not be able to maintain our global market share in wafer shipper products, especially if 300mm wafer manufacturing in Japan increases.

**Regulatory compliance impacts delivery times and reduces our ability to be competitive in certain countries.**

We are subject to federal, state, local and foreign regulations. Compliance with future regulations, including environmental regulations in the United States and abroad, could require us to incur substantial costs. If we do not comply with current or future regulations, directives and standards, we could be subject to fines; our production could be suspended or delivery could be delayed; and we could be prohibited from offering particular products in specified markets.

Certain of our fluid handling products fall within the scope of U.S. export licensing regulations pertaining to products that could be used in connection with chemical weapons processes. These regulations require us to obtain licenses to ship some of our products to customers in certain countries, and we routinely apply for and obtain export licenses. The applicable export licensing regulations frequently change. Moreover, the types and categories of products that are subject to export licensing are often described in the regulations in general terms and could be subject to differing interpretations.

**Failure to establish and maintain relationships with joint venture partners could harm our ability to do business internationally.**

We may enter into joint venture agreements intended to complement or expand our manufacturing and distribution operations. The success of our joint ventures depends in part on our ability to strengthen our relationships with our joint venture partners. If we do not develop and maintain good relationships with joint venture partners, we will be less able to successfully penetrate international markets. In addition, any joint venture relationship is likely to require us to make a substantial capital investment in equipment, all or a portion of which could be lost if the venture is unsuccessful.

**Economic difficulties in countries in which we sell our products could lead to a decrease in demand for our products.**

The volatility of general economic conditions as well as fluctuations in currency exchange and interest rates can lead to decreased demand in countries in which we sell products. Moreover, any economic, banking or currency difficulties experienced by countries in which we have sales may lead to economic recession in those countries. This in turn could result in a reduction in sales to customers in these countries.

**Manufacturing Risks**

**Our dependence on single and limited source suppliers could affect our ability to manufacture our products.**

We rely on single or limited source suppliers for some plastic polymers that are critical to the manufacturing of our products. At times, we have experienced a limited supply of certain polymers as well as the need to substitute polymers, resulting in delays, increased costs and the risks associated with qualifying new polymers with our customers. An industry-wide increase in demand for these polymers could affect the ability of our suppliers to provide sufficient quantities to us. If we are unable to obtain an adequate quantity of such supplies, our manufacturing operations may be interrupted.

In addition, suppliers may discontinue production of polymers specified in certain of our products, requiring us in some instances to certify an alternative with our customers. If we are unable to obtain an adequate quantity of such supplies for any of the above reasons, our manufacturing operations may be affected. Obtaining alternative sources would likely result in increased costs and shipping delays, which could decrease profitability and damage our relationships with current and potential customers.

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Prices for polymers can vary widely. However, we have a long-term arrangements with certain key suppliers of polymers that fixes our price for purchases up to specified quantities. If our polymer requirements exceed the quantities specified, we could be exposed to higher material costs. In addition, under certain circumstances, such as when oil prices increase above specified levels, some suppliers may add surcharges to the prices of the polymers we purchase. If the cost of polymers increases and we are unable to correspondingly increase the sales price of our products, our profit margins will decline.

### **Our production processes are becoming increasingly complex, and our production could be disrupted if we are unable to avoid manufacturing difficulties.**

Our manufacturing processes are complex and require the use of expensive and technologically sophisticated equipment and materials. These processes are frequently modified to improve manufacturing yields and product quality. We have on occasion experienced manufacturing difficulties, such as temporary shortages of raw materials and occasional critical equipment breakdowns that have delayed deliveries to customers. A number of our product lines are manufactured at only one or two facilities, and any disruption could impact our sales until another facility could commence or expand production of such products.

Our manufacturing operations are subject to numerous risks, including the introduction of impurities in the manufacturing process that could lower manufacturing yields and make our products unmarketable; the costs and demands of managing and coordinating geographically diverse manufacturing facilities; and the disruption of production in one or more facilities as a result of a slowdown or shutdown in another facility. We could experience these or other manufacturing difficulties, which might result in a loss of customers and exposure to product liability claims.

### **We may lose sales if we are unable to timely procure, repair or replace capital equipment necessary to manufacture many of our products.**

If our existing equipment fails, or we are unable to obtain new equipment quickly enough to satisfy any increased demand for our products, we may lose sales to competitors. In particular, we do not maintain duplicate tools for most of our important products. Fixing or replacing complex tools is time consuming, and we may not be able to replace a damaged tool in time to meet customer requirements.

### **We generally have no written contracts with our customers, which diminishes our ability to plan for future manufacturing needs.**

As is typical in our industry, our sales are primarily made on a purchase order basis, and we have few written purchase contracts with our customers. As a result, we cannot predict the level of future sales or commitments from our current customers, which diminishes our ability to effectively allocate labor, materials and equipment in the manufacturing process.

### **We may not be able to protect our intellectual property, which may limit our ability to compete.**

Our success depends in part on our proprietary technology. We attempt to protect our intellectual property rights primarily through patents, trademarks and non-disclosure agreements. However, we might not be able to protect some of our technology, and competitors might be able to develop similar technology independently. In addition, the laws of certain foreign countries might not afford our intellectual property the same protection as do the laws of the United States. The costs of applying for patents in foreign countries and translating the applications into foreign languages require us to select carefully the inventions for which we apply for patent protection and the countries in which we seek such protection. Generally, we have concentrated our efforts on obtaining international patents in countries with competing manufacturers, as well as current and potential customers. Our inability or failure to obtain adequate patent protection in a particular country could harm our ability to compete effectively in that country. Our patents also might not be sufficiently broad to protect our technology, and any existing or future patents might be challenged, invalidated or circumvented. Additionally, our rights under our patents may not provide competitive advantages.

### **Litigation may be necessary to defend us against claims of intellectual property infringement, which if successful could cause us to pay significant damage awards or prevent us from manufacturing or selling our products.**

Some of our current or future products could infringe patents or proprietary rights of others. Also, litigation may be necessary to enforce patents issued to us, to protect our trade secrets or know-how, to defend ourselves against claimed

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infringement of the rights of others or to determine the scope and validity of the proprietary rights of others. Litigation could result in substantial cost and diversion of our efforts. Moreover, an adverse determination in any litigation could cause us to lose proprietary rights, subject us to significant liabilities to third parties, require us to seek licenses or alternative technologies from third parties, or prevent us from manufacturing or selling our products.

### **Operating Risks**

#### **We spend substantial capital to develop, expand and diversify our product lines and services, which may not be recovered if the new product lines or services are unsuccessful.**

We incur significant research and development expenses in conjunction with the introduction of new product lines and services, such as our recent expansion into the life sciences, and fuel cell markets. If we are unable to penetrate these markets, all or a portion of our investment in these endeavors would be lost.

#### **If we do not attract and retain key personnel, our production would be disrupted and shipments might be delayed.**

Our success depends upon the continued efforts of our senior management team and our technical, manufacturing, marketing and sales personnel. These employees may voluntarily terminate their employment with us at any time. If a significant number of manufacturing personnel were to voluntarily terminate their employment with us, our production would be disrupted and shipments might be delayed.

Competition for such personnel in the technology and semiconductor industries is particularly intense. Recruiting and hiring employees with the combination of skills and attributes required to conduct our business is extremely competitive, time-consuming and expensive. We may not be able to successfully identify, hire and train new manufacturing personnel.

#### **If we fail to identify, complete and successfully integrate future acquisitions, our ability to expand our operations and increase revenues would be harmed.**

One of our strategies is to expand by acquiring other technologies, product lines or businesses, including businesses of significant size requiring substantial integration activity. However, we currently have no commitments or agreements with respect to any material acquisition. We might not be able to successfully identify, negotiate or finance any acquisitions, or integrate such acquisitions with our current business, which could diminish our ability to expand our business and remain competitive. Moreover, expansion could require significant management time and resources. Further, we cannot assure you that acquisitions undertaken by us would positively impact our operating results.

#### **Competition in the semiconductor and data storage materials integrity management fields could intensify, which may limit our ability to maintain and increase our market share and raise prices.**

We face substantial competition from a number of companies, some of which have greater financial, marketing, manufacturing and technical resources. Larger providers of materials integrity management solutions and products could emerge, with potentially broader product lines. Larger competitors could spend more time and resources on research and development, which could give those competitors an advantage in meeting customer demand. We expect that existing and new competitors will improve the design of their existing products and will introduce new products with enhanced performance characteristics. The introduction of new products or more efficient production of existing products by our competitors could diminish our market share and increase pricing pressure on our products. Further, customers continue to demand lower prices, shorter delivery times and enhanced product capability. If we do not respond adequately to such pressures, we could lose customers or orders. If we are unable to compete successfully, we could experience pricing pressures, reduced gross margins and order cancellations.

#### **Lack of market acceptance of our 300mm products could harm our operating results.**

The growing trend toward the use of 300mm wafers has contributed to the increasing complexity of the semiconductor manufacturing process. The greater diameter of these wafers requires higher tooling costs and presents more complex handling, storage and transportation challenges. We have made substantial investments to complete a full line of 300mm wafer manufacturing and handling product lines, but there is no guarantee that our customers will adopt our 300mm wafer manufacturing and handling product lines as they convert existing 200mm wafer fabrication facilities to 300mm wafer fabrication, or build new 300mm wafer fabrication facilities. In addition, if the trend toward 300mm wafer manufacturing does not evolve as we anticipate, sales of our products for these applications would be minimal and we might not recover our development costs.

**Some of our management information and financial reporting systems are not fully integrated and need to be upgraded, which will require additional investments. If these new systems are not successfully implemented, our business may be harmed.**

The management information and financial reporting systems that we use in our day-to-day operations, particularly in our recently acquired businesses, are not fully integrated on a worldwide basis. We will need to continue to invest in these systems in order to maintain our current level of business and accommodate any future growth. Our failure to successfully upgrade and integrate our management information and financial reporting systems may disrupt our business, create inefficiencies due to the lack of centralized data, result in unnecessarily high levels of inventories, and increase expenses associated with additional employees to compensate for the lack of fully integrated systems.

**We may not be able to significantly expand our customer base by soliciting customers of our competitors because customers tend to standardize materials handling procedures and are reluctant to change their standardized manufacturing processes.**

Once an original equipment manufacturer or a microelectronics manufacturer has selected particular materials integrity management products and services, that manufacturer typically must qualify those products before incorporating them into customized manufacturing procedures that assure precise and consistent processing steps. Qualification and incorporation of materials integrity management products and services by manufacturers can be time-consuming and expensive. After these procedures have been established, manufacturers are very reluctant to switch to another provider of materials integrity management products and services. Accordingly, it may be difficult to sell our products to a manufacturer that has already selected a competitor's products.

**We may face liability claims that could harm our operating results.**

Our products are used by our customers to handle sensitive, complex and valuable materials. If our products fail, these materials could be damaged or contaminated, which could expose us to product liability claims. Business interruption and personal injury claims are also possible in the event of a product failure or misapplication of our product by a customer. In addition, the failure of our chemical delivery products could subject us to environmental liability claims and a failure of our custom medical device components could subject us to personal injury claims. We cannot predict whether our existing insurance coverage limits are adequate to protect us from any liabilities that we might incur in connection with the manufacture, sale or use of our products. A successful product liability claim or series of product liability claims brought against us could damage our reputation, diminish customer confidence in our products, expose us to increased competition and increase our insurance costs.

**We may be exposed to various risks related to legal proceedings or claims, which could result in significant legal expenses and settlements.**

From time to time we may be involved in legal proceedings or claims regarding patent infringement, intellectual property rights, contracts and other matters. These legal proceedings and claims, whether with or without merit, could be time-consuming and expensive to prosecute or defend, and could divert management's attention and resources. There can be no assurance regarding the outcome of current or future legal proceedings or claims. If we are not able to resolve a claim, negotiate a settlement, obtain necessary licenses on commercially reasonable terms and/or successfully prosecute or defend our position, our business, financial condition and results of operations could be materially adversely affected.

Specifically, on September 9, 2002, Lucent Technologies, Inc. named the Company as a defendant along with Poly-Flow Engineering Inc., FSI International, Inc. and BOC Capital Group in an action filed in circuit court in Orange County, Florida for damages arising from a chemical spill at its facility in January 2000. To date, Lucent has requested aggregate damages from all defendants in the range of \$52 million, and has specifically requested damages of \$12 million from the Company. While the outcome of this matter cannot be predicted with any certainty, based on the information to date, the Company believes that it has valid defenses to the claims and, furthermore, has adequate insurance to cover any damages assessed against the Company and as such, does not believe that the matter will have a material adverse effect on its financial position, operating results or cash flows.

**Changes to financial accounting standards may adversely affect our reported results of operations.**

We prepare our consolidated financial statements to conform with accounting principles generally accepted in the United States of America ("GAAP"). GAAP is subject to interpretation by the American Institute of Certified Public Accountants, the Securities and Exchange Commission and various bodies formed to interpret and create appropriate accounting policies. A change in those policies can have a significant effect on our reported results and may even affect our reporting of transactions completed before a change is announced.

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Accounting policies affecting many other aspects of our business, including rules relating to purchase accounting for business combinations, revenue recognition, accounting for goodwill and other intangible assets, employee stock purchase plans and stock option grants, have recently been revised or are under review. Changes to those rules or the interpretation of our current accounting practices may have a material adverse effect on our reported financial results or on the way we conduct business. In addition, our preparation of consolidated financial statements in accordance with GAAP requires that we make estimates and assumptions that affect the recorded amounts of assets and liabilities, disclosure of those assets and liabilities at the date of the consolidated financial statements and the recorded amounts of expenses during the reporting period. A change in the facts and circumstances surrounding those estimates could result in a change to our estimates and could impact our future operating results.

### **Ownership Risks**

**Because of the volatility of our stock price, the ability to trade Entegris common shares may be adversely affected and our ability to raise capital through future equity financing may be reduced.**

Our stock price has been volatile in the past and may continue to be so in the future. In the 2003 fiscal year, for example, our stock price ranged from \$4.26 to \$15.59 per share, and in the 2004 fiscal year, our stock price ranged from \$7.72 to \$15.66 per share.

The trading price of our common shares is subject to wide fluctuations in response to various factors, some of which are beyond our control, including factors discussed elsewhere in this prospectus supplement and including the following: the failure to meet the published expectations of securities analysts; changes in financial estimates by securities analysts; press releases or announcements by, or changes in market values of, comparable companies; stock market price and volume fluctuations, which are particularly common among securities of high technology companies; stock market price and volume fluctuations attributable to inconsistent trading volume levels; additions or departures of key personnel; and involvement in or adverse results from litigation.

**Future sales of our common shares may reduce the market price of our common shares.**

If our shareholders sell substantial amounts of our common shares, including shares issued upon the exercise of outstanding options, the market price of our common shares may fall. These sales also make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate.

**Current management, the Entegris, Inc. Employee Ownership Plan (“ the ESOP”) and WCB Holding LLC beneficially own approximately 33.7% of our shares, and their beneficial ownership may limit your ability to influence the outcome of matters requiring shareholder approval.**

Based on common stock beneficial ownership information available as of October 31, 2004, WCB Holding LLC owns 18.9%, the ESOP owns 9.3% (8.4% excluding ESOP shares allocated to all directors and executive officers), and all directors and executive officers as a group owns 6.4% of our shares. Accordingly, WCB Holding LLC, the ESOP and management, if acting together, could significantly influence the outcome of any shareholder vote, including any vote on the election or removal of directors and on any merger, consolidation or sale of all or substantially all of our assets. This concentration of ownership could discourage, delay or prevent a person or entity from acquiring control of us even if a change in control might be considered beneficial by some shareholders.

**Anti-takeover provisions limit the ability of a person or entity to acquire control of us, which may lower the price of our securities and discourage potential acquisition proposals or tender offers which may otherwise be advantageous to our shareholders.**

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We are subject to the anti-takeover provisions of the Minnesota Business Corporation Act. Any of these provisions could delay or prevent a person or entity from acquiring control of us. The effect of these provisions may be to limit the price that investors are willing to pay in the future for our securities. These provisions might also discourage potential acquisition proposals or tender offers, even if the acquisition proposal or tender offer is at a price above the then current market price for our common shares.

**We do not intend to pay dividends in the foreseeable future, and therefore investors must rely solely on the market value of our shares to realize a return on their investment.**

We have never declared or paid any cash dividends on our shares. In addition, our loan agreements restrict our ability to pay dividends without the consent of our lenders. We currently intend to retain any future earnings to fund the development and growth of our business and, therefore, do not anticipate paying any cash dividends in the foreseeable future.

## ITEM 2. PROPERTIES

### Facilities

We conduct manufacturing operations in facilities strategically positioned throughout the world. Our manufacturing facilities adequately meet our production capacity and work flow requirements. The table below presents certain information relating to these manufacturing facilities.

<u>Manufacturing/ Operation Locations</u>	<u>Square Footage</u>	<u>Type of Ownership</u>	<u>Manufacturing Use</u>
United States			
Minnesota	370,000	3 facilities owned, 2 facilities leased	Injection Molding, Extrusion, Blow Molding, Rotational Molding, Compression Molding, Thermo Forming, Tool Making, Micro-molding, Sheet Lining, Assembly, Operations
Colorado	82,000	1 facility owned	Injection Molding, Tool Making
California	60,000	1 facility owned, 1 facility leased	Product Cleaning Services, Equipment Assembly
Illinois	50,000	1 facility leased	Stainless Sheet Metal Fabrication, Assembly
France	53,000	1 facility owned	Cleaning Services
Malaysia	105,000	1 facility owned	Injection Molding
Singapore	24,000	1 facility leased	Cleaning Services
Germany	44,000	1 facility owned,	Injection Molding, Extrusion
Japan	49,000	2 facilities owned	Injection Molding, Extrusion, Tool Making, Micro-molding, Assembly

## ITEM 3. LEGAL PROCEEDINGS

On September 9, 2002, Lucent Technologies, Inc. named the Company as a defendant along with Poly-Flow Engineering Inc., FSI International, Inc. and BOC Capital Group in an action filed in circuit court in Orange County, Florida for damages arising from a chemical spill at its facility in January 2000. To date, Lucent has requested aggregate damages from all defendants in the range of \$52 million, and has specifically requested damages of \$12 million from the Company. While the outcome of this matter cannot be predicted with any certainty, based on the information to date, the Company believes that it has valid defenses to the claims and, furthermore, has adequate insurance to cover any damages assessed against the Company and as such, does not believe that the matter will have a material adverse effect on its financial position, operating results or cash flows.

In addition, from time to time, the Company is a party to various legal proceedings incidental to its normal operating activities. Although it is impossible to predict the outcome of such proceedings, facts currently available indicate that no such claims will result in losses that would have a material adverse effect on the financial condition, results of operations or cash flows of the Company.

**ITEM 4. SUBMISSION OF MATTERS TO VOTE OF SECURITY HOLDERS**

No matters were submitted to a vote of shareholders, through the solicitation of proxies or otherwise, during the fourth quarter of the fiscal year covered by this report.

**PART II**

**ITEM 5. MARKET FOR REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS**

The Company's common shares, \$0.01 par value, are traded on the NASDAQ National Market System (NMS) under the symbol "ENTG". The following table sets forth the highest and lowest sale prices at the close of each day, as reported by the NASDAQ-NMS, for the fiscal periods indicated:

	Fiscal 2003		Fiscal 2004	
	High	Low	High	Low
First quarter	\$ 11.03	\$ 4.26	\$ 15.66	\$ 11.15
Second quarter	\$ 12.90	\$ 8.51	\$ 14.95	\$ 11.30
Third quarter	\$ 12.61	\$ 8.79	\$ 13.59	\$ 9.97
Fourth quarter	\$ 15.59	\$ 12.38	\$ 12.42	\$ 7.72

There were approximately 284 shareholder accounts of record on October 31, 2004, and the number of beneficial shareholders was estimated to be 6,500.

The Company has never declared or paid cash dividends on its common stock. The Company currently intends to retain all earnings for use in its business, and does not anticipate paying dividends in the foreseeable future.

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**ITEM 6. SELECTED FINANCIAL DATA**

The table that follows presents selected financial data for each of the last nine fiscal years from the Company's consolidated financial statements and should be read in conjunction with the Company's Consolidated Financial Statements and the related Notes and with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Form 10-K Report.

(In thousands, except per share amounts)	Fiscal year ended								
	2004	2003	2002	2001	2000	1999	1998	1997	1996
<b>Operating Results</b>									
Net sales	\$ 346,764	\$ 251,104	\$ 222,997	\$ 343,624	\$ 344,569	\$ 243,053	\$ 266,591	\$ 277,290	\$ 271,037
Gross profit	150,827	98,723	88,706	162,670	160,442	92,230	109,734	119,238	122,304
Selling, general and administrative expenses	96,176	80,307	73,569	78,510	73,293	62,340	65,111	62,384	62,390
Engineering, research and development expenses	20,128	17,803	17,408	16,517	15,041	14,565	19,912	17,986	12,447
Operating profit (loss)	34,523	(985)	(3,834)	54,499	72,108	15,325	24,711	38,868	47,467
Income loss before income taxes and other items	35,917	(4,829)	(1,395)	60,110	74,631	11,677	17,989	30,015	44,281
Income tax expense (benefit)	11,134	(6,248)	(3,373)	21,339	26,754	4,524	4,565	11,976	16,226
Equity in net loss (income) of affiliates	13	144	—	(1,488)	(1,694)	1,587	118	(1,750)	(3,252)
Minority interest in subsidiaries' net (loss) income	—	—	(798)	1,643	489	(399)	176	573	2,898
Net income	\$ 24,770	\$ 1,275	\$ 2,776	\$ 38,616	\$ 47,933	\$ 5,965	\$ 13,130	\$ 19,216	\$ 28,409
<b>Earnings Per Share Data</b>									
Earnings per share - diluted	\$ 0.32	\$ 0.02	\$ 0.04	\$ 0.53	\$ 0.73	\$ 0.10	\$ 0.21	\$ 0.31	\$ 0.45
Weighted shares outstanding - diluted	76,689	75,472	74,170	72,995	65,403	62,220	61,492	61,786	63,500
<b>Operating Ratios – % of net sales</b>									
Gross profit	43.5%	39.3%	39.8%	47.3%	46.6%	37.9%	41.2%	43.0%	45.1%
Selling, general and administrative expenses	27.7	32.0	33.0	22.8	21.3	25.6	24.4	22.5	23.0
Engineering, research and development expenses	5.8	7.1	7.8	4.8	4.4	6.0	7.5	6.5	4.6
Operating profit (loss)	10.0	(0.4)	(1.7)	15.9	20.9	6.3	9.3	14.0	17.5
Income (loss) before income taxes and other items	10.4	(1.9)	(0.6)	17.5	21.7	4.8	6.7	10.8	16.3
Effective tax rate	31.0	129.4	241.8	35.5	35.8	38.7	25.4	39.9	36.6
Net income	7.1	0.5	1.3	11.2	13.9	2.5	4.9	6.9	10.5
<b>Cash Flow Statement Data</b>									
Depreciation and amortization	\$ 25,492	\$ 27,180	\$ 28,164	\$ 24,260	\$ 27,246	\$ 28,810	\$ 26,591	\$ 23,395	\$ 18,122
Capital expenditures	21,179	13,445	19,568	24,231	21,376	10,079	33,512	44,928	52,531
Net cash provided by operating activities	48,135	32,136	32,861	79,958	64,129	43,409	45,909	28,491	27,590
Net cash used in investing activities	55,474	37,541	38,333	110,134	15,789	9,256	34,000	46,321	50,721
Net cash provided by (used in) financing activities	1,898	10,987	5,619	2,019	38,295	(27,067)	(14,948)	17,851	23,314
<b>Balance Sheet and Other Data</b>									
Current assets	\$ 264,615	\$ 211,128	\$ 216,735	\$ 220,037	\$ 221,414	\$ 110,279	\$ 101,155	\$ 122,761	\$ 101,271
Current liabilities	64,919	54,289	39,621	61,253	62,544	58,372	56,567	69,006	56,352
Working capital	199,696	156,839	177,114	158,784	158,870	51,907	44,588	53,755	44,919
Current ratio	4.08	3.89	5.47	3.59	3.54	1.89	1.79	1.78	1.80
Long-term debt	18,898	10,070	12,691	13,101	10,822	53,830	73,242	75,971	61,916
Shareholders' equity	372,185	337,665	322,114	312,307	266,844	127,730	121,210	112,146	83,185
Total assets	467,046	414,739	390,260	405,815	353,368	246,978	257,475	213,643	265,343
Long-term debt to equity ratio - %	5.1	3.0	3.9	4.2	4.1	42.1	60.4	67.7	74.4
Return on average shareholders' equity - %	7.0	0.4	0.7	13.3	24.3	4.8	11.3	19.7	38.0
Shares outstanding at year end	73,380	72,512	71,161	69,730	68,317	60,000	60,553	60,774	58,539

\* The above table includes certain items as described below. In addition, per share and shareholders' equity figures have been adjusted to reflect the reclassification of redeemable common stock no longer redeemable upon completion of the Company's initial public offering in July 2000. Net sales and related operating ratios for 1998, 1997 and 1996 do not reflect the application of EITF 00-10, as the data is not readily available. Operating results include the following charges or gains: **fiscal 2004** a gain of \$1.1 million (\$0.7 million after taxes) associated with the sale of an investment in an affiliate's common stock; **fiscal 2003** a charge of \$1.5 million (\$1.0 million after taxes) related to the closure of a facility and the impairment loss of \$4.5 million (\$3.3 million after taxes) of an equity



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investment; **fiscal 2002** a charge of \$4.0 million (\$2.5 million after taxes) related to the closure of two facilities, the reversal of previous nonrecurring charges of \$2.4 million (\$1.5 million after taxes) and a one-time tax benefit of \$1.4 million; **fiscal 2001** charges of \$8.2 million (\$5.1 million after taxes) related to the early termination of a distribution agreement and \$4.9 million (\$1.5 million after taxes) in connection with the closure of two facilities; **fiscal 2000** a gain of \$5.5 million (\$3.5 million after taxes) associated with the sale of an investment in an affiliate's common stock and an extraordinary loss on the extinguishment of debt of \$1.1 million; **fiscal 1999** a charge of \$4.9 million (\$3.1 million after taxes associated with merger-related expenses.)

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Overview

Entegris, Inc. is a leading provider of materials integrity management products and services that protect and transport the critical materials used in key technology-driven industries. Entegris derives most of its revenue from the sale of products and services to the semiconductor and data storage industries. The Company's customers consist primarily of semiconductor manufacturers, semiconductor equipment and materials suppliers, and hard disk manufacturers which are served through direct sales efforts, as well as sales and distribution relationships, in the United States, Asia and Europe.

The Company's fiscal year is a 52- or 53-week period ending on the last Saturday of August. The last three fiscal years ended on the following dates: August 28, 2004, August 30, 2003 and August 31, 2002. Fiscal years 2004 and 2003 included 52 weeks, while fiscal 2002 comprised 53 weeks. Fiscal years are identified in this report according to the calendar year in which they end. For example, the fiscal year ended August 28, 2004 is alternatively referred to as "fiscal 2004" or "2004."

### Forward-Looking Statements

The information in this Management's Discussion and Analysis of Financial Condition and Results of Operations, except for the historical information, contains forward-looking statements. These statements are subject to risks and uncertainties. These forward-looking statements could differ materially from actual results. The Company assumes no obligation to publicly release the results of any revision or updates to these forward-looking statements to reflect future events or unanticipated occurrences. This discussion and analysis should be read in conjunction with the Consolidated Financial Statements and the related Notes, which are included elsewhere in this report.

**Key operating factors** Key factors, which management believes have the largest impact on the overall results of operations of Entegris, Inc. include:

- **The level of sales.** Since a large portion of the Company's product costs (excepting raw materials, purchased components and direct labor) are largely fixed in the short/medium term, an increase or decrease in sales affects gross profits and overall profitability significantly. Also, increases or decreases in sales and operating profitability affects certain costs such as incentive compensation, commissions and donations, all of which are highly variable in nature.
- **The variable margin on sales,** which is determined by selling prices and the cost of manufacturing and raw materials, has a large effect on profit. This factor is affected by a number of factors, which include the Company's sale mix, purchase prices of raw material, especially resin, purchased components, competition, both domestic and international, direct labor costs, and the efficiency of the Company's production operations, among others.
- **The Company's fixed cost structure is significant.** Accordingly, increases or decreases in these costs have a large impact on profitability. There are a number of large fixed or semi-fixed cost components, which include salaries, indirect labor, and benefits, and depreciation and amortization. Thus changes in amounts or usage of these cost components can have a large effect on the Company's results of operations.

**Overall Summary of Fiscal 2004 Financial Results** Net sales in fiscal 2004 increased by 38% over the prior year. This sales improvement was principally driven by the stronger order and sales activity for the Company's semiconductor market product lines. The Company's higher sales were associated with the continuation of improving industry and global economic conditions throughout fiscal 2004. Primarily due to the leverage associated with the higher sales, the Company reported higher gross profits and operating income for the year. Partly offsetting the improvement in gross margin were increased selling, general and administrative expenses and engineering, research and development expenses as described below, although both categories rose at rates lower than the aforementioned sales increases. As a result, the Company reported greater net income for the year when compared to a year ago.

### Critical Accounting Policies

Management's discussion and analysis of financial condition and results of operations are based upon the Company's consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires the Company to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. At each balance sheet date, management evaluates its estimates, including, but not limited to, those related to accounts receivable, warranty and sales return obligations, inventories, long-lived assets, and

income taxes. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. The critical accounting policies affected most significantly by estimates, assumptions and judgments used in the preparation of the Company's consolidated financial statements are discussed below.

**Allowance for Doubtful Accounts and Other Accounts Receivable-Related Valuation Accounts.**

The Company maintains an allowance for doubtful accounts as well as reserves for sales returns and allowances, and warranty claims. Significant management judgments and estimates must be made and used in connection with establishing these valuation accounts. Material differences could result in the amount and timing of the Company's results of operations for any period if we made different judgments or utilized different estimates. In addition, actual results could be different from the Company's current estimates, possibly resulting in increased future charges to earnings.

The Company provides an allowance for doubtful accounts for all individual receivables judged to be unlikely for collection. For all other accounts receivable, the Company records an allowance for doubtful accounts based on a combination of factors. Specifically, management analyzes the age of receivable balances, historical bad debts write-off experience, industry and geographic concentrations of customers, general customer creditworthiness and current economic trends when determining its allowance for doubtful accounts. The Company's allowance for doubtful accounts was \$1.8 million at both August 28, 2004 and August 30, 2003.

A reserve for sales returns and allowances is established based on historical trends and current trends in product returns. At August 28, 2004 and August 30, 2003, the Company's reserve for sales returns and allowances was \$1.2 million and \$1.0 million, respectively.

The Company records a liability for estimated warranty claims. The amount of the accrual is based on historical claims data by product group and other factors. Claims could be materially different from actual results for a variety of reasons, including a change in the Company's warranty policy in response to industry trends, competition or other external forces, manufacturing changes that could impact product quality, or as yet unrecognized defects in products sold. At August 28, 2004 and August 30, 2003, the Company's accrual for estimated future warranty costs was \$2.0 million and \$2.1 million, respectively. Both figures include \$1.2 million in warranty liabilities recorded in connection with a fiscal 2003 acquisition.

**Inventory Valuation** The Company uses certain estimates and judgments to properly value inventory. In general, the Company's inventories are recorded at the lower of manufacturing cost or market value. Each quarter, the Company evaluates its ending inventories for obsolescence and excess quantities. This evaluation includes analyses of inventory levels, historical write-off trends, expected product lives, sales levels by product and projections of future sales demand. Inventories that are considered obsolete are written off or are reserved for fully. In addition, reserves are established for inventory quantities in excess of forecasted demand. Inventory reserves were \$4.2 million at August 28, 2004 compared to \$4.6 million at August 30, 2003.

The Company's inventories comprise materials and products subject to technological obsolescence, which are sold in highly competitive industries. If future demand or market conditions are less favorable than current analyses, additional inventory write-downs or reserves may be required and would be reflected in cost of sales in the period the revision is made.

**Impairment of Long-Lived Assets** The Company routinely considers whether indicators of impairment of its property and equipment assets, particularly its molding equipment, are present. If such indicators are present, it is determined whether the sum of the estimated undiscounted cash flows attributable to the assets in question is less than their carrying value. If less, an impairment loss is recognized based on the excess of the carrying amount of the assets over their respective fair values. Fair value is determined by discounted estimated future cash flows, appraisals or other methods deemed appropriate. If the assets determined to be impaired are to be held and used, the Company recognizes an impairment charge to the extent the present value of anticipated net cash flows attributable to the asset are less than the asset's carrying value. The fair value of the asset then becomes the asset's new carrying value, which we depreciate over the remaining estimated useful life of the asset.

The Company assesses the impairment of intangible assets and related goodwill at least annually, or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors considered important which could trigger an impairment review, and potentially an impairment charge, include the following:

- significant underperformance relative to historical or projected future operating results;
- significant changes in the manner of use of the acquired assets or the Company's overall business strategy;
- significant negative industry or economic trends; and

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- significant decline in the Company's stock price for a sustained period changing the Company's market capitalization relative to its net book value;

The Company's marketable equity securities are periodically reviewed to determine if declines in fair value below cost basis are other-than-temporary, requiring an impairment loss to be recorded and the investment written down to a new cost basis.

**Income Taxes** In the preparation of the Company's consolidated financial statements, management is required to estimate income taxes in each of the jurisdictions in which the Company operates. This process involves estimating actual current tax exposures together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included in the Company's consolidated balance sheet.

The Company intends to continue to reinvest its undistributed international earnings in its international operations; therefore, no U.S. tax expense has been recorded to cover the repatriation of such undistributed earnings.

The Company has significant amounts of deferred tax assets. Management reviews its deferred tax assets for recoverability on a quarterly basis and assesses the need for valuation allowances. These deferred tax assets are evaluated by considering historical levels of income, estimates of future taxable income streams and the impact of tax planning strategies. A valuation allowance is recorded to reduce deferred tax assets when it is determined that it is more likely than not that the Company would not be able to realize all or part of its deferred tax assets. The Company carried no valuation allowance against its net deferred tax assets at either August 28, 2004 or August 30, 2003.

### Results of Operations

The following table sets forth the relationship between various components of operations, stated as a percent of net sales, for fiscal year 2004, 2003 and 2002. The Company's historical financial data were derived from its audited consolidated financial statements and related notes included elsewhere in this annual report.

	2004	2003	2002
<b>Net sales</b>	100.0	100.0	100.0
Cost of sales	56.5	60.7	60.2
<b>Gross profit</b>	43.5	39.3	39.8
Selling, general and administrative expenses	27.7	32.0	33.0
Engineering, research and development expenses	5.8	7.1	7.8
Other charges	—	0.6	0.7
<b>Operating profit (loss)</b>	10.0	(0.4)	(1.7)
Interest income, net	(0.1)	(0.2)	(0.7)
Other (income) expense, net	(0.3)	1.8	(0.4)
<b>Income (loss) before income taxes and other items below</b>	10.4	(1.9)	(0.6)
Income tax expense (benefit)	3.2	(2.5)	(1.5)
Equity in net loss of affiliates	—	0.1	—
Minority interest	—	—	(0.4)
<b>Net income</b>	7.1	0.5	1.3

**Fiscal 2004 Compared to Fiscal 2003**

**Net sales** Net sales increased 38% to \$346.8 million in fiscal 2004 from \$251.1 million in fiscal 2003. The increase reflected continued improvement in the semiconductor industry and general economic conditions. The sales improvement was principally driven by the improved sales of the Company's semiconductor market product lines. In addition, sales associated with the Company's efforts to expand its materials integrity management expertise into new applications and expanded markets resulted in improved sales.

The Company estimates that approximately one-fifth of the sales increase for 2004 was associated with the sales generated by businesses or product lines acquired in the second quarter of fiscal 2003 for which no sales were recorded in the year-ago period prior to the dates of the acquisitions. Net sales for fiscal 2004 also included favorable foreign currency effects, primarily related to the strengthening of the Japanese yen, in the amounts of approximately \$5.0 million.

The following table summarizes total net sales by markets served for 2004 and 2003, along with the year-to-year percentage change:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>Percent change</u>
Net sales:			
Semiconductor	\$274,755	\$191,405	44
Data storage	32,761	31,221	5
Services	23,276	20,354	14
Other	15,972	8,124	97
	<u>\$346,764</u>	<u>\$251,104</u>	<u>38</u>

The semiconductor market generated about 79% of the Company's overall sales for 2004, compared to about 76% in the prior year. Sales of semiconductor products rose by 44% from 2003 to 2004. Unit-driven product lines such as wafer shippers, and test, assembly and packaging products saw sales improvements in the 20% range. Sales of capital-spending driven products, such as wafer and reticle carrier products and fluid handling products, experienced sales gains generally exceeding 50% year-over-year.

The Company's data storage products accounted for about 9% of consolidated net sales in 2004, compared to 12% a year ago. Year-over-year sales increased by 5% as customers experienced a well-publicized overbuild of hard disk drives in the later part of fiscal 2004. The overall market growth outlook for data storage remains positive, particularly as consumer products are increasingly starting to use disk drives to store data.

Services market sales rose 14% from fiscal 2003 and accounted for 7% of Entegris' overall sales, compared to about 8% a year ago. This increase mainly reflects growth in both the Company's sales of its on- and off-site cleaning services. Sales of equipment used to clean wafer, disk carrier and shipping products were essentially flat with those of a year earlier.

About 4% of overall sales for the year were generated in the life science market. Sales increased by 89% from fiscal 2003, about three-quarters of which was due to higher sales recorded by Electrol Specialties, a market leader in clean-in-place technology, which was acquired by the Company in January 2003.

On a geographic basis, Entegris' fiscal 2004 sales in North America were 38% of total sales, in Asia Pacific 30%, in Europe 16% and in Japan 16%. Primarily on the strength of improved semiconductor sales, year-over-year sales comparisons saw sales gains in excess of 25% in all regions, with sales to Asia Pacific up over 60%.

Based on current order rates, industry analyst expectations and other information, the Company expects that sales for the first quarter of fiscal 2005 will be 10% to 15% lower than sales levels experienced in the fourth quarter of fiscal 2004. However, industry volatility and uncertain market conditions make it difficult to forecast for future quarters.

**Gross profit** Gross profit in fiscal 2004 increased 53% to \$150.8 million, compared to \$98.7 million in fiscal 2003. As a percentage of net sales, the fiscal 2004 gross margin was 43.5%, compared to 39.3% in 2003. Gross profit dollar gains were reported by both domestic and international operations. The improvements in fiscal 2004 gross margin percentage figures were primarily the result of the increased leverage associated with the improved sales levels noted above, which resulted in higher production levels.

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Several factors combined to partially offset the benefit of the higher utilization of the Company's production capacity in fiscal 2004. As was the case in the prior year, gross margin levels were adversely affected by the stronger sales of the Company's life sciences market products, where gross margins are below those of the semiconductor and data storage markets. In addition, for much of the year, the Company expanded its manufacturing staffing levels to address the rapidly increasing sales demand. As a consequence of adding and training a large number of personnel, primarily temporary employees, operational efficiencies were not fully optimized. As a result, the Company believes it incurred expenses at a somewhat higher level than normal, offsetting the Company's improved factory utilization.

The fiscal 2004 gross margin comparison to the prior year also benefited from the absence of certain items included in fiscal 2003 results. During the fourth quarter of fiscal 2003, the Company began the process, which it essentially completed early in fiscal 2004, of moving a portion of its manufacturing to a build-to-order model, which enabled the reduction of finished goods inventory. These actions led to significant under-absorption of fixed manufacturing costs during that period, accounting for approximately \$2.2 million in reduced gross profit. Fiscal 2003 also included transition costs of approximately \$1.0 million related to the integration of the wafer and reticle carrier product line acquisition. The Company also incurred costs in connection with the consolidation of several facilities in fiscal 2003.

As discussed above, the Company does not provide guidance about fiscal 2005 sales levels. However, in general, gross profit and gross margin variances mainly track the utilization of the Company's production capacity associated with varying sales levels. In addition, the Company's gross margin will be dependent on its ability to improve manufacturing efficiencies.

**Selling, general and administrative expenses (SG&A)** SG&A expenses increased \$15.9 million, or 20%, to \$96.2 million in fiscal 2004, up from \$80.3 million in fiscal 2003. SG&A costs, as a percent of net sales, decreased to 27.7% from 32.0%. This decline mainly reflects the leverage associated with the Company's increase in net sales.

The year-over-year increase was due primarily to increased incentive compensation, profit-sharing and donation accruals reflecting the Company's improved sales and profitability (\$7.4 million), higher professional and consulting fees (\$3.8 million), increased amortization expense (\$0.9 million) and compensation expense associated with the issuance of shares of restricted stock (\$1.2 million). Related to the last item, the Company changed a component of its long-term equity-based incentive programs by issuing fewer stock options and began issuing restricted stock grants. Under current accounting rules, the Company is required to expense the intrinsic value of restricted stock grants over their four-year graded vesting periods.

**Other charges** The Company incurred no "Other charges" in fiscal 2004. During the first quarter of fiscal 2003, the Company recorded a pre-tax charge of \$1.8 million related to the relocation of its Upland, California operations and certain workforce reductions. The charge included \$0.9 million in termination costs related to a workforce reduction of approximately 75 employees, \$0.4 million for estimated losses for asset impairment and \$0.5 million for future lease commitments on the Upland facility. As of August 28, 2004, future cash outlays of \$0.1 million remained outstanding in connection with the aforementioned charge and are related to lease commitments, which run through July 2005. The Company recorded a pre-tax benefit of \$0.2 million in the fourth quarter of 2003 associated with the favorable settlement of a portion of the future lease commitments included in the aforementioned charge.

**Engineering, research and development expenses (ER&D)** ER&D expenses increased 13% to \$20.1 million in 2004 as compared to \$17.8 million in 2003. Despite the increase in ER&D expenses, such costs as a percent of net sales, decreased to 5.8% from 7.1%, mainly reflecting the Company's higher net sales. About \$0.7 million of the year-over-year increase in ER&D expenses was due to the incremental costs of ER&D activities associated with the Company's January 2003 acquisition of the assets of Electrol Specialties Company and its February 2003 acquisition of Asyst Technologies, Inc.'s wafer and reticle carrier product lines. In addition, \$1.1 million and \$0.3 million of the increase reflected the Company's investment in the development of its fuel cell, and tape and reel technologies, respectively. The Company ER&D efforts continued to focus on the support of current product lines, and the development of new products and manufacturing technologies.

**Interest income, net** The Company reported net interest income of \$0.3 million in 2004 compared to \$0.6 million in 2003. The decline reflects the lower rates of interest available on the Company's investments in short-term debt securities compared to the year-ago period.

**Operating income (loss)** Operating income, stated as a percent of net sales, was 10.0% for fiscal 2004, compared to an operating loss, stated as a percent of net sales, of 0.4% in fiscal 2003. The improvement in 2004 was mainly due to the leverage associated with increased sales levels, the effect of which was slightly offset by higher SG&A and ER&D expenses as described above.

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**Other (income) expense, net** Other income was \$1.1 million in fiscal 2004 compared to other expense of \$4.4 million in fiscal 2003. Other income in fiscal 2004 included gains of \$1.1 million associated with the sale of an aggregate 512,800 shares of Metron Technology N.V. (Metron) common stock made periodically over the course of fiscal 2004.

Other expense in 2003 included an impairment loss of \$4.5 million, or \$3.3 million after tax, related to the write-down of the Company's equity investment in Metron common stock. The Company, a founding shareholder of Metron, owned about 1.6 million shares of Metron common stock throughout 2003. Prior to the impairment charge, the Company's investment in Metron Technology N.V. common stock had a cost basis of \$7.6 million. At November 30, 2003, the fair value of the investment was \$3.1 million, based on a price of \$2.00 per share, the closing price of Metron at that date. The decline in fair value was determined to be other-than-temporary. Accordingly, an impairment loss of \$4.5 million was recorded and the investment in Metron common stock written down to a new cost basis of \$3.1 million.

**Income tax expense (benefit)** The Company recorded income tax expense of \$11.1 million for fiscal 2004 compared to an income tax benefit of \$6.2 million in fiscal 2003. The main factor contributing to this variance is the Company's improvement in earnings from operations. The effective tax rate for fiscal 2004 was 31.0% compared to (129.4)% in fiscal 2003. The Company's effective tax rate in fiscal 2004 is lower than the statutory federal rate of 35% in the United States due to lower taxes on foreign operations, a tax benefit associated with export activities, and a tax credit associated with research and development activities.

The income tax benefit for fiscal 2003 includes one-time benefits of \$0.9 million from the redetermination of prior years' taxes, \$1.4 million from the reversal of a valuation allowance on the net operating loss carryforwards of certain non-U.S. subsidiaries, and \$1.2 million related to the impairment loss recorded on the Company's investment in Metron stock, as well as benefits associated with the factors noted above related to fiscal 2004.

Based on the current analysis of its tax situation, the Company anticipates its effective tax rate for fiscal 2005 to be approximately 32%. However, tax calculations are complex and sensitive to estimates of annual levels of profitability. Therefore, it is possible that there will be volatility in the Company's tax rate.

In addition, the American Jobs Creation Act of 2004 ("the Act") was passed in October 2004 and included numerous law changes that will affect the Company's tax computations. The provisions of the Act include a new deduction for U.S. manufacturers, the repeal of the extraterritorial income exclusion and a provision regarding the repatriation of foreign earnings. The Company is studying the new law to determine what impact, if any, the Act will have on its effective tax rate.

**Net income** The Company recorded net income of \$24.8 million, or \$0.32 per diluted share, in fiscal 2004, compared to net income of \$1.3 million, or \$0.02 per diluted share, in the year-ago period.

### **Fiscal 2003 Compared to Fiscal 2002**

**Net sales** Net sales increased 13% to \$251.1 million in fiscal 2003 from \$223.0 million in fiscal 2002. The increase reflected some improvement in the difficult business conditions that affected the semiconductor industry since the latter half of fiscal 2001. In addition, sales from acquired businesses and improved sales associated with the Company's efforts to expand its materials integrity management expertise into new applications and new markets resulted in improved sales.

The following table summarizes total net sales by markets served for 2003 and 2002, along with the year-to-year percentage change:

<i>(In thousands)</i>	2003	2002	Percent change
Net sales:			
Semiconductor	\$ 191,405	\$ 178,272	7%
Data storage	31,221	25,191	24
Services	20,354	17,534	16
Other	8,124	2,000	306
	<u>\$ 251,104</u>	<u>\$ 222,997</u>	<u>13%</u>

The semiconductor market generated about 76% of the Company's overall sales for 2003, compared to about 80% in the prior year. Sales of semiconductor products rose by 7% from 2002 to 2003. Sales for the Company's microenvironment products doubled over the prior year, which included sales from the wafer and reticle carrier product line acquired in the second quarter. This factor accounted for most of the overall increase in semiconductor market sales. Sales of wafer handling process products fell slightly year-over-year, as did sales of chemical containers.

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The Company's data storage products accounted for about 12% of consolidated net sales in 2003, compared to 11% a year ago. Key customers in the industry implemented form-factor and process changes during the latter part of 2003, the major factor behind the 24% increase in sales.

Service business revenue, which accounted for about 8% of Entegris' overall sales, rose 16% compared to fiscal 2002. This increase reflects growth in both the Company's sales of equipment, used to clean wafer and disk carriers and shipping products, and sales of its on- and off-site cleaning services.

About 3% of overall sales for the year were generated in the life science market. Sales increased by 283% from fiscal 2002, about three-quarters of which was due to sales recorded by Electrol Specialties, a market leader in clean-in-place technology, which was acquired by the Company in January 2003.

On a geographic basis, Entegris' total sales in North America were 41%, in Asia Pacific 26%, in Europe 17% and in Japan 16%. Year-to-year sales comparisons saw solid sales gains in Europe, Japan and Asia Pacific with essentially flat sales reported for North America.

**Gross profit** Gross profit in fiscal 2003 increased 11% to \$98.7 million, compared to \$88.7 million in fiscal 2002. Fiscal 2003 gross margin was 39.3%, compared to 39.8% in 2002.

With the 13% increase in sales from 2002 to 2003, the Company typically would have expected a higher gross margin for the year. However, several factors combined to offset the benefit of the higher utilization of the Company's production capacity, many of them significantly affecting the Company in the fourth quarter. During the fourth quarter, the Company began the process of moving a portion of its manufacturing to a build-to-order model, which enabled the reduction of inventory. However, these actions led to significant under-absorption of fixed manufacturing costs during the quarter, accounting for approximately \$2.2 million in reduced gross profit.

Among other factors was the consolidation of several facilities as the Company moved its polymer material manufacturing operation from Texas to Malaysia, relocated its Upland, California operations to Chaska, Minnesota and consolidated its cleaning equipment operations into the Gilroy, California service center. Fiscal 2003 also included transition costs of approximately \$1.0 million related to the integration of the wafer and reticle carrier product line acquisition. Also negatively influencing margins were stronger sales in services and life sciences, two of the Company's new markets, where gross margins for such products and services are below those of the semiconductor and data storage markets.

Partly offsetting the declines was the benefit of the Company's actions in reducing fixed costs and increasing manufacturing efficiencies associated with the closure of manufacturing plants, investing in automation, continuing process improvements and instituting manufacturing Centers of Excellence.

**Selling, general and administrative expenses (SG&A)** SG&A expenses increased by \$6.7 million, or 9%, to \$80.3 million in fiscal 2003 from \$73.6 million in fiscal 2002. SG&A costs, as a percent of net sales, decreased to 32.0% from 33.0% with the impact of higher SG&A expenses more than offset by the effect of higher net sales. The year-to-year increase in SG&A expenses is due to a number of factors, including higher sales commissions, incentive compensation and amortization expense. In addition, fiscal 2003 included costs associated with the Company's two fiscal 2003 acquisitions, and the transition to a direct sales model in Japan for certain products previously sold under a distribution relationship.

**Other charges** During the first quarter of fiscal 2003, the Company recorded a pre-tax charge of \$1.8 million related to the relocation of its Upland, California operations and certain workforce reductions. The charge included \$0.9 million in termination costs related to a workforce reduction of approximately 75 employees, \$0.4 million for estimated losses for asset impairment and \$0.5 million for future lease commitments on the Upland facility. The Company recorded a pre-tax benefit of \$0.2 million in the fourth quarter of 2003 associated with the favorable settlement of a portion of the future lease commitments included in the aforementioned charge.

In 2002, the Company's results included a charge of \$4.0 million in connection with the closure of its Chanhassen, MN plant. The charge included \$1.5 million in termination costs related to a workforce reduction of 230 employees and \$2.3 million for estimated losses for asset impairment.

The Company recorded pre-tax benefits of \$1.6 million and \$0.8 million in the third and fourth quarters of 2002, respectively, associated with the reversal of previous accruals related to plant closures in 2002 and 2001. Approximately \$1.0 million of the reversals was associated with the favorable settlement of future lease commitments on the Castle Rock facility, for which the Company had recorded accruals in 2001. Lower than expected impairment costs accounted for approximately \$1.2 million of the reversals.

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As of August 30, 2003, \$0.7 million remained outstanding in connection with the aforementioned charges and are primarily related to severance payments of \$0.5 million, which run through May 2004, and lease commitments of \$0.2 million, which run through July 2005.

**Engineering, research and development expenses (ER&D)** ER&D expenses increased 2% to \$17.8 million, or 7.1% of net sales, in 2003 as compared to \$17.4 million, or 7.8% of net sales, in 2002. The Company's ER&D activities continue to focus on the support of current product lines, and the development of new products and manufacturing technologies. The Company's ER&D expenses for the last half of the year included \$0.6 million related to the addition of employees hired in connection with the Company's second-quarter acquisition of Asyst Technologies, Inc.'s wafer and reticle carrier product lines.

**Interest income, net** The Company reported net interest income of \$0.6 million in 2003 compared to \$1.5 million in 2002. The decline reflects the significantly lower rates of interest available on the Company's investments in short-term debt securities compared to the year-ago period as well as slightly lower invested balances.

**Other expense (income), net** Other expense was \$4.4 million in fiscal 2003 compared to other income of \$1.0 million in fiscal 2002.

Other expense in 2003 included an impairment loss of \$4.5 million, or \$3.3 million after tax, related to the write-down of the Company's equity investment in Metron Technology N.V. common stock. The Company, a founding shareholder of Metron, owned about 1.6 million shares of Metron common stock throughout 2003. Prior to the impairment charge, the Company's investment in Metron Technology N.V. common stock had a cost basis of \$7.6 million. At November 30, 2002, the fair value of the investment was \$3.1 million, based on a price of \$2.00 per share, the closing price of Metron at the end of the first quarter. The decline in fair value was determined to be other-than-temporary. Accordingly, an impairment loss of \$4.5 million was recorded and the investment in Metron common stock written down to a new cost basis of \$3.1 million.

Other income in 2002 consisted primarily of the foreign currency gains, with about \$0.7 million associated with the realization of translation gains realized upon the liquidation of the Company's Korean entity.

**Income tax benefit** The Company recorded an income tax benefit of \$6.2 million for fiscal 2003 compared to an income tax benefit of \$3.4 million in fiscal 2002. The income tax benefit for fiscal 2003 includes one-time benefits of \$0.9 million from the redetermination of prior years' taxes, \$1.4 million from the reversal of a valuation allowance on the net operating loss carryforwards of certain non-U.S. subsidiaries, and \$1.2 million related to the impairment loss recorded on the Company's investment in Metron stock. The reversal of the valuation allowance was based on a partial realization of the net operating loss carryforwards during fiscal 2003 and the current belief that sufficient taxable earnings will be generated in the future to allow the remaining net operating losses to be utilized. The income tax benefit for fiscal 2002 included a one-time benefit of \$1.4 million related to the repatriation of earnings from certain non-U.S. subsidiaries. The effective tax rate for fiscal 2003 was 129.4% compared to 241.8% in fiscal 2002. The difference between the fiscal 2003 effective tax rate of 129.4% and the U.S. statutory rate of 35% is primarily due to the one-time benefits described above, lower taxes on foreign operations, a tax benefit associated with export activities and a tax benefit associated with R&D activities.

**Equity in net loss of affiliates** The Company's equity in the net loss of affiliates was \$0.1 million in 2003 and represents the Company's share of losses in entities accounted for under the equity method of accounting. No equity in the net earnings of affiliates was recorded in fiscal 2002 as the Company did not have entities under the equity method of accounting during that period.

**Minority interest** The Company recorded no minority interest in 2003 as all of its consolidated subsidiaries are presently 100%-owned. For fiscal 2002, the minority interest in subsidiaries' net loss was \$0.8 million, reflecting the net losses of the Company's formerly 51%-owned Japanese subsidiaries, which became 100%-owned in February 2002.

**Net income** The Company recorded net income of \$1.3 million, or \$0.02 per diluted share, in fiscal 2003, compared to net income of \$2.8 million, or \$0.04 per diluted share, in the year-ago period.

[Table of Contents](#)**Quarterly Results of Operations**

The following table presents selected data from the Company's consolidated statements of operations for the eight quarters ended August 28, 2004. This unaudited information has been prepared on the same basis as the audited consolidated financial statements appearing elsewhere in this annual report. All adjustments which management considers necessary for the fair presentation of the unaudited information have been included in the quarters presented.

**QUARTERLY STATEMENTS OF OPERATIONS DATA**

	Fiscal 2003				Fiscal 2004			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>(In thousands)</b>								
Net sales	\$54,249	\$54,656	\$70,665	\$71,534	\$68,676	\$79,970	\$98,624	\$99,494
Gross profit	21,878	22,555	30,472	23,818	27,529	34,747	44,409	44,142
Selling, general and administrative expenses	18,922	19,833	20,264	21,288	21,044	23,345	25,525	26,262
Engineering, research and development expenses	4,073	4,233	4,683	4,814	4,603	4,821	5,343	5,361
Operating profit (loss)	(2,929)	(1,511)	5,525	(2,070)	1,882	6,581	13,541	12,519
Net income (loss)	(5,642)	647	3,957	2,313	1,637	5,023	9,175	8,935
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>(Percent of net sales)</b>								
Net sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gross profit	40.3	41.3	43.1	33.3	40.1	43.5	45.0	44.4
Selling, general and administrative expenses	34.9	36.3	28.7	29.8	30.6	29.2	25.9	26.4
Engineering, research and development expenses	7.5	7.7	6.6	6.7	6.7	6.0	5.4	5.4
Operating profit (loss)	(5.4)	(2.8)	7.8	(2.9)	2.7	8.2	13.7	12.6
Net income (loss)	(10.4)	1.2	5.6	3.2	2.4	6.3	9.3	9.0

In fiscal 2004, the Company's results included gains on the sale of equity investments, classified as other income, of \$0.8 million and \$0.3 million in the first and second quarters, respectively.

In the first quarter of fiscal 2003, the Company's results included an impairment loss, classified as other expense, of \$4.5 million related to the write-down of an equity investment. Also in the first quarter of 2003, the Company recorded a pre-tax charge of \$1.8 million primarily related to the relocation of its Upland, California operations. In the fourth quarter of 2003, the Company recorded pre-tax benefits of \$0.2 million, associated with adjustment of the aforementioned pretax charge related to the plant relocation.

Our quarterly results of operations have been, and will likely continue to be, subject to significant fluctuations due to a variety of factors, a number of which are beyond the Company's control.

**Liquidity and Capital Resources**

The Company has historically financed its operations and capital requirements through cash flow from operating activities, long-term loans, lease financing and borrowings under domestic and international short-term lines of credit. In fiscal 2000, Entegris raised capital via an initial public offering.

**Operating activities** Cash flow provided by operating activities totaled \$48.1 million, \$32.1 million and \$32.9 million in fiscal 2004, 2003 and 2002, respectively. Cash flow provided by operating activities in 2004 mainly reflected the Company's net earnings, combined with various noncash charges, including depreciation and amortization of \$25.5 million. Such items were partly offset by the impact of working capital demands.

Accounts receivable increased by \$20.8 million, reflecting the growth in sales in 2004. Days sales outstanding decreased from 68 days at the beginning of the year to 64 days at the end of the year. Inventories increased by \$6.3 million over the fiscal 2003 year-end balance. The increase reflected the higher raw material, work-in-process and semi-finished inventories required by the Company's increased sales and production activity.

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Partly offsetting the working capital increases for receivables and inventory, accounts payable and accrued liabilities rose by \$15.0 million from August 30, 2003 and were mainly associated with the Company's increased production activity and its improved sales and earnings. In addition, accrued taxes rose by \$5.7 million, mainly reflecting the higher taxes owed resulting from the Company's improved profitability.

Working capital stood at \$199.7 million at August 28, 2004, including \$75.5 million in cash and cash equivalents, and short-term investments of \$57.7 million.

**Investing activities** Cash flow used in investing activities totaled \$55.5 million, \$37.5 million and \$38.3 million in 2004, 2003 and 2002, respectively.

Acquisition of property and equipment totaled \$21.2 million, \$13.4 million and \$19.6 million in 2004, 2003 and 2002, respectively. Capital expenditures in 2004 included investments in manufacturing, tooling, computer and laboratory equipment as well as a facility expansion in Japan. The Company expects capital expenditures during fiscal 2005 to be about \$25 million, consisting mainly of spending on facility expansions, manufacturing equipment, tooling and information systems.

Acquisition of businesses totaled \$5.1 million, \$44.4 million and \$8.9 million in 2004, 2003 and 2002, respectively. In May 2004, the Company completed the acquisition of the assets of a precision parts cleaning business located in Montpellier, France in a cash transaction for total consideration of \$3.6 million. The transaction was made to expand the geographic reach of Entegris' materials integrity management off-site cleaning services. Property and equipment and intangible assets, including goodwill, of approximately \$2.6 million and \$1.1 million, respectively, were recorded in connection with the transaction. The transaction was accounted for by the purchase method. Accordingly, the Company's consolidated financial statements include the net assets and results of operations from the date of acquisition.

The Company had purchases, net of maturities, of debt securities classified as short-term investments of \$33.2 million during 2004. The Company made purchases, net of maturities, of \$20.1 million and \$8.0 million of short-term investments in 2003 and 2002, respectively.

Also, in fiscal 2004, the Company recorded proceeds of \$2.2 million in connection with its sale of 512,800 shares of Metron common stock as described above under the caption "Other income" and proceeds of \$2.7 million from the sale of various equipment.

On August 16, 2004, Metron announced that it had entered into a Stock and Asset Purchase Agreement ("Purchase Agreement") with Applied Materials, Inc. ("Applied"), pursuant to which Applied would acquire the business assets of Metron. Following the close of the proposed acquisition, Metron expects to pay cash distributions to shareholders in the range of approximately \$4.74 to \$4.80 per share, to be made in at least two cash distributions during the six-month period following the close of the transaction. The acquisition is subject to regulatory and Metron shareholder approval and other closing conditions and is expected to close by the end of the calendar year. If the transaction is consummated with cash distributions in the range indicated above, the Company would receive gross proceeds of approximately \$5.0 million.

**Financing activities** Cash provided by financing activities totaled \$1.9 million, \$11.0 million and \$5.6 million in fiscal 2004, 2003 and 2002, respectively.

The Company made payments of \$19.5 million on borrowings and received proceeds from new borrowings totaling \$16.2 million in 2004. Included in these amounts was the conversion of 1 billion Japanese Yen, or approximately \$9.2 million, from short-term borrowings to long-term debt due in three to five years. Also included was the first quarter payment of the final \$5.0 million of the \$14.0 million originally borrowed in February 2003 when the Company acquired the wafer and reticle carrier product line of Asyst Technologies, Inc.

The Company recorded proceeds of \$5.1 million, \$6.7 million and \$5.5 million in 2004, 2003 and 2002, respectively, in connection with common shares issued under the Company's stock option and stock purchase plans.

As of August 28, 2004, the Company's sources of available funds comprised \$75.5 million in cash and cash equivalents, \$57.7 million in short-term investments and various credit facilities. Entegris has an unsecured revolving credit agreement with two commercial banks with aggregate borrowing capacity of \$40 million, with no borrowings outstanding at August 28, 2004 and lines of credit with six international banks that provide for borrowings of currencies for the Company's overseas subsidiaries, equivalent to an aggregate of approximately \$16.7 million. Borrowings outstanding on these lines of credit were approximately \$6.5 million at August 28, 2004.

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Under the unsecured revolving credit agreement, we are subject to, and are in compliance with, certain financial covenants including ratios requiring a fixed charge coverage of not less than 1.10 to 1.00 and a leverage ratio of not more than 2.25 to 1.00. In addition, we must maintain a calculated consolidated and domestic tangible net worth, which, as of August 28, 2004, are \$232 million and \$125 million, respectively, while also maintaining consolidated and domestic aggregate amounts of cash and short-term investments of not less than \$75 million and \$40 million, respectively.

At August 28, 2004, the Company's shareholders' equity stood at \$372.2 million, up \$34.5 million from \$337.7 million at the beginning of the year. The components of the increase included the Company's net earnings, the proceeds and tax benefits associated with the issuance of shares issued under the Company's stock option and stock purchase plans and increases in other comprehensive income totaling \$1.0 million.

The Company believes that its cash and cash equivalents, short-term investments, cash flow from operations and available credit facilities will be sufficient to meet its working capital and investment requirements for the next 12 months. However, future growth, including potential acquisitions, may require the Company to raise capital through additional equity or debt financing. There can be no assurance that any such financing would be available on commercially acceptable terms.

The following table summarizes the maturities of the Company's significant financial obligations:

<u>(In thousands)</u>	<u>Long-term debt</u>	<u>Operating leases</u>
Fiscal year ending:		
2005	\$ 1,492	\$ 3,605
2006	1,370	2,557
2007	4,797	1,743
2008	1,030	1,234
2009	8,544	1,013
Thereafter	3,157	1,388
Total	<u>\$ 20,390</u>	<u>\$ 11,540</u>

On June 9, 2003, the Company announced that it had filed a shelf registration statement with the Securities and Exchange Commission. As amended, up to 25 million shares of the Company's common stock may be offered from time to time under the registration statement, including 17.5 million newly issued shares by Entegris and 7.5 million currently outstanding shares by certain shareholders of the Company. The Company stated that it would use the net proceeds from any future sale of new Entegris shares for general corporate purposes or to finance acquisitions. The Company would not receive any proceeds from any sale of shares by the selling shareholders. The shelf registration statement became effective as of May 19, 2004. The Company and the other selling shareholders have two years from that date to issue 25 million shares under the filing.

### **Quantitative and Qualitative Disclosure About Market Risks**

Entegris' principal financial market risks are sensitivities to interest rates and foreign currency exchange rates. The Company's current exposure to interest rate fluctuations is not significant. Most of its long-term debt at August 28, 2004 carries fixed rates of interest. The Company's cash equivalents and short-term investments are debt instruments with maturities of 12 months or less. A 100 basis point change in interest rates would potentially increase or decrease net income by approximately \$0.8 million annually.

The cash flows and earnings of the Company's foreign-based operations are subject to fluctuations in foreign exchange rates. The Company uses derivative financial instruments to manage the foreign currency exchange rate risks associated with its foreign-based operations. At August 28, 2004, the company was party to forward contracts to deliver Japanese yen and Euros with notional values of approximately \$14.0 million and \$3.0 million, respectively. A hypothetical 10% change in the foreign currency exchange rates would potentially increase or decrease net income by approximately \$3.0 million.

The Company's investment in Metron common stock is accounted for as an available-for-sale security. Consequently, the Company's financial position is exposed to fluctuations in the price of Metron stock. At August 30, 2004, the Company's investment in Metron Technology N.V. common stock had a cost basis of \$2.1 million with a fair value of \$4.7 million. Accordingly, a 10% adverse change in Metron's per share price would result in an approximate \$0.5 million decrease in the fair value of the Company's investment.

**Impact of Inflation**

The Company's consolidated financial statements are prepared on a historical cost basis, which does not completely account for the effects of inflation. Material and labor expenses are the Company's primary costs. The cost of polymers, its primary raw material, was essentially unchanged from one year ago. Entegris expects the cost of resins to increase in the upcoming fiscal year due to pricing surcharges implemented by some suppliers based on rising oil prices. Labor costs, including taxes and fringe benefits, rose slightly in fiscal 2004 and moderate increases also can be reasonably anticipated for fiscal 2005. Typically, the Company's products are not sold under long-term contracts. Consequently, the Company can adjust its selling prices, to the extent allowed by competition, to reflect cost increases caused by inflation.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

The information required by this item can be found under the subcaption "Quantitative and Qualitative Disclosure About Market Risks" of "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

ENTEGRIS, INC. AND SUBSIDIARIES  
CONSOLIDATED BALANCE SHEETS  
(In thousands, except share data)

	August 28, 2004	August 30, 2003
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 75,484	\$ 80,546
Short-term investments	57,696	24,541
Trade accounts receivable, net of allowance for doubtful accounts of \$1,790 and \$1,793	69,735	48,567
Trade accounts receivable due from affiliates	4,790	4,037
Inventories	45,186	38,163
Deferred tax assets and refundable income taxes	8,178	11,710
Other current assets	3,546	3,564
<b>Total current assets</b>	<b>264,615</b>	<b>211,128</b>
Property, plant and equipment, net	\$ 97,634	\$ 95,212
Other assets:		
Investments	7,146	8,596
Goodwill	70,164	67,480
Other intangible assets, less accumulated amortization of \$16,101 and \$10,691	24,876	29,441
Other	2,611	2,882
<b>Total assets</b>	<b>467,046</b>	<b>414,739</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
<b>Current liabilities:</b>		
Current maturities of long-term debt	\$ 1,492	\$ 2,412
Short-term borrowings	6,477	16,455
Accounts payable	15,768	9,570
Accrued liabilities	35,578	25,852
Income taxes payable	5,604	—
<b>Total current liabilities</b>	<b>64,919</b>	<b>54,289</b>
Long-term debt, less current maturities	18,898	10,070
Deferred tax liabilities	11,044	12,715
<b>Total liabilities</b>	<b>94,861</b>	<b>77,074</b>
Commitments and contingent liabilities		
<b>Shareholders' equity:</b>		
Common stock, par value \$.01; 200,000,000 shares authorized; issued and outstanding shares; 73,379,777 and 72,512,100	734	725
Additional paid-in capital	152,869	142,540
Deferred compensation expense	(1,586)	—
Retained earnings	216,963	192,207
Accumulated other comprehensive income	3,205	2,193
<b>Total shareholders' equity</b>	<b>372,185</b>	<b>337,665</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$467,046</b>	<b>\$414,739</b>

See the accompanying notes to consolidated financial statements.

**ENTEGRIS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**(In thousands, except per share data)**

	Fiscal year ended		
	August 28, 2004	August 30, 2003	August 31, 2002
Sales to non-affiliates	\$ 314,557	\$ 231,517	\$ 194,120
Sales to affiliates	32,207	19,587	28,877
<b>Net sales</b>	<b>346,764</b>	<b>251,104</b>	<b>222,997</b>
Cost of sales	195,937	152,381	134,291
<b>Gross profit</b>	<b>150,827</b>	<b>98,723</b>	<b>88,706</b>
Selling, general and administrative expenses	96,176	80,307	73,569
Engineering, research and development expenses	20,128	17,803	17,408
Other charges	—	1,598	1,563
<b>Operating profit (loss)</b>	<b>34,523</b>	<b>(985)</b>	<b>(3,834)</b>
Interest income, net	(283)	(579)	(1,466)
Other (income) expense, net	(1,111)	4,423	(973)
<b>Income (loss) before income taxes and other items below</b>	<b>35,917</b>	<b>(4,829)</b>	<b>(1,395)</b>
Income tax expense (benefit)	11,134	(6,248)	(3,373)
Equity in net loss of affiliates	13	144	—
Minority interest in subsidiaries' net loss	—	—	(798)
<b>Net income</b>	<b>\$ 24,770</b>	<b>\$ 1,275</b>	<b>\$ 2,776</b>
Earnings per common share:			
Basic	\$ 0.34	\$ 0.02	\$ 0.04
Diluted	\$ 0.32	\$ 0.02	\$ 0.04

See the accompanying notes to consolidated financial statements.

**ENTEGRIS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**  
(In thousands)

	Common shares outstanding	Common stock	Additional paid-in capital	Deferred compensation expense	Retained earnings	Accumulated other comprehensive income (loss)	Total	Comprehensive income (loss)
<b>Balance at August 25, 2001</b>	69,730	\$ 697	\$121,449	\$ —	\$188,156	\$ 2,005	\$312,307	
Shares issued pursuant to stock option plans	1,222	12	3,959	—	—	—	3,971	
Shares issued in connection with acquisition	42	1	437	—	—	—	438	
Shares issued pursuant to employee stock purchase plan	167	2	1,540	—	—	—	1,542	
Tax benefit associated with employee stock plans	—	—	5,291	—	—	—	5,291	
Foreign currency translation adjustment	—	—	—	—	—	(71)	(71)	\$ (71)
Net unrealized loss on marketable securities	—	—	—	—	—	(4,140)	(4,140)	(4,140)
Net income	—	—	—	—	2,776	—	2,776	2,776
<b>Total comprehensive loss</b>								<b>\$ (1,435)</b>
<b>Balance at August 31, 2002</b>	71,161	712	132,676	—	190,932	(2,206)	322,114	
Shares issued pursuant to stock option plans	1,163	12	4,867	—	—	—	4,879	
Shares issued in connection with acquisition	21	—	281	—	—	—	281	
Shares issued pursuant to employee stock purchase plan	167	1	1,516	—	—	—	1,517	
Tax benefit associated with employee stock plans	—	—	3,200	—	—	—	3,200	
Foreign currency translation adjustment	—	—	—	—	—	841	841	\$ 841
Net unrealized gain on marketable securities	—	—	—	—	—	1,677	1,677	1,677
Reclassification adjustment for gain on sales of equity investments included in earnings	—	—	—	—	—	(32)	(32)	(32)
Reclassification adjustment for impairment loss on equity investments included in earnings	—	—	—	—	—	1,913	1,913	1,913
Net income	—	—	—	—	1,275	—	1,275	1,275
<b>Total comprehensive income</b>								<b>\$ 5,674</b>
<b>Balance at August 30, 2003</b>	72,512	725	142,540	—	192,207	2,193	337,665	
Shares issued pursuant to stock option plans	657	7	3,451	—	(14)	—	3,444	
Shares issued in connection with acquisition	49	—	437	—	—	—	437	
Shares issued pursuant to employee stock purchase plan	155	2	1,604	—	—	—	1,606	
Deferred compensation related to restricted stock awards	7	—	2,791	(2,791)	—	—	—	
Compensation earned in connection with restricted stock awards	—	—	—	1,205	—	—	1,205	
Tax benefit associated with employee stock plans	—	—	2,046	—	—	—	2,046	
Foreign currency translation adjustment	—	—	—	—	—	1,207	1,207	\$ 1,207
Net unrealized gain on marketable securities	—	—	—	—	—	397	397	397
Reclassification adjustment for gain on sales of equity investments included in earnings	—	—	—	—	—	(592)	(592)	(592)
Net income	—	—	—	—	24,770	—	24,770	24,770
<b>Total comprehensive income</b>								<b>\$ 25,782</b>

<b>Balance at August 28, 2004</b>	<u>73,380</u>	<u>\$ 734</u>	<u>\$ 152,869</u>	<u>\$ (1,586)</u>	<u>\$ 216,963</u>	<u>\$ 3,205</u>	<u>\$ 372,185</u>
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See the accompanying notes to consolidated financial statements.

**ENTEGRIS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In thousands)

	Fiscal year ended		
	August 28, 2004	August 30, 2003	August 31, 2002
<b>Operating activities:</b>			
Net income	\$ 24,770	\$ 1,275	\$ 2,776
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	25,492	27,180	28,164
Deferred compensation expense	1,205	—	—
Impairment of property and equipment	1,345	1,156	1,136
Impairment of equity investments	100	4,452	—
Provision for doubtful accounts	46	(145)	133
Provision for deferred income taxes	1,890	(5,574)	(791)
Tax benefit from employee stock plans	2,046	3,200	5,291
Equity in net loss of affiliates	13	144	—
(Gain) loss on sale of property and equipment	(859)	(310)	185
Gain on sale of equity investments	(1,126)	(145)	—
Minority interest in subsidiaries' net loss	—	—	(798)
Changes in operating assets and liabilities, net of effect of acquisitions:			
Trade accounts receivable	(20,030)	(11,727)	859
Trade accounts receivable due from affiliates	(753)	182	2,952
Inventories	(6,295)	4,156	8,373
Accounts payable and accrued liabilities	14,990	5,222	(21,710)
Other current assets	97	(760)	5,065
Income taxes payable and refundable income taxes	5,697	4,346	1,872
Other	(493)	(516)	(646)
<b>Net cash provided by operating activities</b>	<b>48,135</b>	<b>32,136</b>	<b>32,861</b>
<b>Investing activities:</b>			
Acquisition of property and equipment	(21,179)	(13,445)	(19,568)
Acquisition of businesses, net of cash acquired	(5,133)	(44,431)	(8,943)
Purchase of intangible assets	(845)	(1,146)	(824)
Proceeds from sales of property and equipment	2,713	1,962	1,300
Proceeds from sale of equity investments	2,151	327	—
Purchases of short-term investments	(65,335)	(39,281)	(90,200)
Maturities of short-term investments	32,180	59,364	82,204
Other	(26)	(891)	(2,302)
<b>Net cash used in investing activities</b>	<b>(55,474)</b>	<b>(37,541)</b>	<b>(38,333)</b>
<b>Financing activities:</b>			
Principal payments on short-term borrowings and long-term debt	(19,453)	(13,323)	(13,704)
Proceeds from short-term borrowings and long-term debt	16,238	17,633	13,809
Issuance of common stock	5,113	6,677	5,514
<b>Net cash provided by financing activities</b>	<b>1,898</b>	<b>10,987</b>	<b>5,619</b>
Effect of exchange rate changes on cash and cash equivalents	379	134	232
<b>(Decrease) increase in cash and cash equivalents</b>	<b>(5,062)</b>	<b>5,716</b>	<b>379</b>
<b>Cash and cash equivalents at beginning of period</b>	<b>80,546</b>	<b>74,830</b>	<b>74,451</b>
<b>Cash and cash equivalents at end of period</b>	<b>\$ 75,484</b>	<b>\$ 80,546</b>	<b>\$ 74,830</b>

See accompanying notes to consolidated financial statements.

**ENTEGRIS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**Nature of Operations and Principles of Consolidation** Entegris, Inc. (the Company) is a leading provider of materials integrity management solutions that protect and transport the critical materials used in the semiconductor and other high technology industries. The consolidated financial statements include the accounts of the Company and its majority-owned subsidiaries. Intercompany profits, transactions and balances have been eliminated in consolidation.

**Fiscal Year** The Company's fiscal year is a 52-week or 53-week period ending on the last Saturday in August. Fiscal years 2004, 2003 and 2002 ended on August 28, 2004, August 30, 2003, and August 31, 2002, respectively, and are alternatively identified herein as 2004, 2003 and 2002. Fiscal 2002 included 53 weeks, while fiscal years 2003 and 2004 comprised 52 weeks.

**Basis of Presentation** Certain amounts reported in previous years have been reclassified to conform to the current year's presentation.

**Use of Estimates** The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Stock-based Compensation** The Company has two stock-based employee compensation plans. The Company accounts for these plans under the recognition and measurement principles of Accounting Principles Board Opinion (APB) No. 25, *Accounting for Stock Issued to Employees*, and related interpretations. The exercise price of the Company's employee stock options generally equals the market price of the underlying stock on the date of grant for all options granted, and thus, under APB No. 25, no compensation expense is recognized. The Company has adopted the disclosure-only provisions of SFAS No. 123, *Accounting for Stock-based Compensation*.

The accompanying table illustrates the effect on net income and earnings per share if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock-based employee compensation.

(In thousands, except share data)

	2004	2003	2002
Net income, as reported	\$24,770	\$ 1,275	\$ 2,776
Add stock-based compensation expense included in reported net earnings	747	—	—
Deduct stock-based compensation expense under the fair value based method for all awards	(7,955)	(6,549)	(5,126)
Pro forma net income (loss)	\$17,562	\$(5,274)	\$(2,350)
Basic net earnings per share, as reported	\$ 0.34	\$ 0.02	\$ 0.04
Pro forma basic net earnings (loss) per share	0.24	(0.07)	(0.03)
Diluted net earnings per share, as reported	0.32	0.02	0.04
Pro forma diluted net earnings (loss) per share	0.23	(0.07)	(0.03)

The Company determined pro forma compensation expense under the provisions of SFAS No. 123 using the Black-Scholes pricing model and the following assumptions:

	2004	2003	2002
Expected dividend yield	0%	0%	0%
Expected stock price volatility	75.00%	77.16%	77.00%
Risk-free interest rate	4.00%	3.75%	4.50%
Expected life	8 years	8 years	10 years

The weighted average fair value of options granted during 2004, 2003 and 2002 with exercise prices equal to the market price at the date of grant was \$9.30, \$5.06 and \$6.88 per share, respectively.

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**Cash, Cash Equivalents and Short-term Investments** Cash and cash equivalents include cash on hand and highly liquid debt securities with original maturities of three months or less, which are valued at cost. Debt securities with original maturities greater than three months and remaining maturities of less than one year are classified and accounted for as held-to-maturity and recorded at amortized cost, and are included in short-term investments

**Inventories** Inventories are stated at the lower of cost or market. Cost is determined by the first-in, first-out (FIFO) method.

**Property, Plant, and Equipment** Property, plant and equipment are carried at cost and are depreciated principally on the straight-line method over the estimated useful lives of the assets. When assets are retired or disposed of, the cost and related accumulated depreciation are removed from the accounts, and gains or losses are recognized in the same period. Maintenance and repairs are expensed as incurred; significant additions and improvements are capitalized. Property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable based on estimated future undiscounted cash flows.

**Investments** The Company's marketable equity investments are accounted for as available-for-sale. Accordingly, such securities are recorded at fair value, with any unrealized holding gains and losses, net of taxes, excluded from income, and recognized as a separate component of shareholders' equity. The Company's nonmarketable investments are accounted for under either the cost or equity method of accounting, as appropriate.

All equity investments are periodically reviewed to determine if declines in fair value below cost basis are other-than-temporary. Significant and sustained decreases in quoted market prices and a series of historical and projected operating losses by investees are considered in the review. If the decline in fair value is determined to be other-than-temporary, an impairment loss is recorded and the investment written down to a new cost basis.

**Goodwill and Other Intangible Assets** Goodwill is the excess of the purchase price over the fair value of net assets of acquired businesses. The Company does not amortize goodwill, but tests for impairment at least annually. Other intangible assets include, among other items, patents and unpatented technology and are amortized using the straight-line method over their respective estimated useful lives of 5 to 17 years. The Company reviews intangible assets for impairment annually or more frequently if changes in circumstances or the occurrence of events suggest the remaining value is not recoverable.

**Derivative Financial Instruments** SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, requires the Company to record derivatives as assets or liabilities on the balance sheet and to measure such instruments at fair value. Changes in fair value of derivatives are recorded each period in current results of operations or other comprehensive income, depending on whether the derivative is designated as part of a hedge transaction.

The Company periodically enters into forward foreign currency contracts to reduce exposures relating to rate changes in certain foreign currencies. Certain exposures to credit losses related to counterparty nonperformance exist. However, the Company does not anticipate nonperformance by the counterparties as they are large, well-established financial institutions. None of these derivatives is accounted for as a hedge transaction under the provisions of SFAS No. 133. Accordingly, changes in the fair value of forward foreign currency contracts are recorded as a component of net income. The fair values of the Company's derivative financial instruments are based on prices quoted by financial institutions for these instruments. The Company was a party to forward foreign currency contracts with notional amounts of \$16.9 million and \$19.0 million at August 28, 2004 and August 30, 2003, respectively.

**Foreign Currency Translation** Except for certain foreign subsidiaries whose functional currency is the United States (U.S.) dollar, assets and liabilities of foreign subsidiaries are translated from foreign currencies into U.S. dollars at current exchange rates. Income statement amounts are translated at the weighted average exchange rates for the year. Gains and losses resulting from foreign currency transactions are included in net income. For certain foreign subsidiaries whose functional currency is the U.S. dollar, currency gains and losses resulting from translation are determined using a combination of current and historical rates and are reported as a component of net income.

**Revenue Recognition/Concentration of Risk** Revenue and the related cost of sales are generally recognized upon shipment of the products. For certain customized precision cleaning equipment sales with installation and customer acceptance provisions, which constituted less than 3% of sales, revenue is recognized upon fulfillment of such provisions. The Company recognizes revenues from construction contracts for certain customized clean-in-place equipment, which constituted less than 3% of sales, under the percentage-of-completion method, measured by the cost-to-cost method.

The Company provides for estimated returns and warranty obligations when the revenue is recorded. The Company sells its products throughout the world primarily to companies in the microelectronics industry. The Company performs continuing

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credit evaluations of its customers and generally does not require collateral. Letters of credit may be required from its customers in certain circumstances. The Company maintains an allowance for doubtful accounts which management believes is adequate to cover losses on trade receivables.

Certain materials included in the Company's products are obtained from a single source or a limited group of suppliers. Although the Company seeks to reduce dependence on those sole and limited source suppliers, the partial or complete loss of these sources could have at least a temporary adverse effect on the Company's results of operations. Furthermore, a significant increase in the price of one or more of these components could adversely affect the Company's results of operations.

The Company applies the provisions of Emerging Issues Task Force Issue 00-10 (EITF 00-10), *Accounting for Shipping and Handling Fees and Costs*. Through August 30, 2003, the Company historically classified shipping and handling costs as an offset to amounts billed to customers included in net sales. Effective with the application of EITF 00-10, \$2.3 million and \$3.2 million of shipping and handling costs were reclassified from net sales to cost of goods sold for 2003 and 2002, respectively.

**Income Taxes** Deferred income taxes are provided in amounts sufficient to give effect to temporary differences between financial and tax reporting. The Company accounts for tax credits as reductions of income tax expense in the year in which such credits are allowable for tax purposes. The Company utilizes the asset and liability method for computing its deferred income taxes. Under the asset and liability method, deferred tax assets and liabilities are based on the temporary difference between the financial statement and tax basis of assets and liabilities and the enacted tax rates expected to apply to taxable income in the years in which these temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

The Company intends to continue to reinvest its undistributed international earnings in its international operations; therefore, no U.S. tax expense has been recorded to cover the repatriation of such undistributed earnings.

**Comprehensive Income (Loss)** Comprehensive income (loss) represents the change in shareholders' equity resulting from other than shareholder investments and distributions. The Company's foreign currency translation adjustments and unrealized gains and losses on marketable securities are included in accumulated other comprehensive income (loss). Comprehensive income (loss) and the components of accumulated other comprehensive income (loss) are presented in the accompanying Consolidated Statements of Shareholders' Equity.

**Recent Accounting Pronouncements** In December 2002, the Emerging Issues Task Force issued EITF No. 00-21, "Revenue Arrangements with Multiple Deliverables." This issue addresses certain aspects of the accounting for arrangements under which a company will perform multiple revenue-generating activities. In some arrangements, the different revenue-generating activities (deliverables) are sufficiently separable, and there exists sufficient evidence of their fair values to separately account for some or all of the deliverables (that is, there are separate units of accounting). In other arrangements, some or all of the deliverables are not independently functional, or there is not sufficient evidence of their fair values to account for them separately. This issue addresses when and, if so, how an arrangement involving multiple deliverables should be divided into separate units of accounting. This issue does not change otherwise applicable revenue recognition criteria. EITF No. 00-21 was applicable for the Company for revenue arrangements entered into beginning in fiscal 2004. The adoption of EITF No. 00-21 did not have a material effect on the Company's consolidated financial statements.

In December 2003, the FASB issued FASB Interpretation No. 46R (FIN 46R), *Consolidation of Variable Interest Entities*, which addresses how a business enterprise should evaluate whether it has a controlling financial interest in an entity through means other than voting rights and accordingly should consolidate the entity. FIN 46R replaces FASB Interpretation No. 46, *Consolidation of Variable Interest Entities*, which was issued in January 2003. The Company is required to apply FIN 46R to variable interests in VIEs created after December 31, 2003. For variable interests in VIEs created before January 1, 2004, the Interpretation will be applied beginning on January 1, 2005. For any VIEs that must be consolidated under FIN 46R that were created before January 1, 2004, the assets, liabilities and noncontrolling interests of the VIE initially would be measured at their carrying amounts with any difference between the net amount added to the balance sheet and any previously recognized interest being recognized as the cumulative effect of an accounting change. If determining the carrying amounts is not practicable, fair value at the date FIN 46R first applies may be used to measure the assets, liabilities and noncontrolling interest of the VIE. The Company has determined that it has no variable interest entities required to be consolidated in the Company's financial statements. The adoption of FIN 46R did not have an impact on the Company's consolidated financial statements.

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In May 2003, the FASB issued SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. The Statement clarifies the accounting for certain financial instruments that, under previous guidance, issuers could account for as equity. SFAS No. 150 requires that those instruments be classified as liabilities in statements of financial position. The Statement also includes required disclosures for financial instruments within its scope. This statement became effective for the Company during the first quarter of fiscal 2004, except for certain mandatorily redeemable financial instruments. The effective date of SFAS No. 150 has been deferred for certain mandatorily redeemable financial instruments. The Company does not currently have any financial instruments that are within the scope of this Statement.

### **(2) ACQUISITIONS**

In May 2004, the Company completed the acquisition of a precision parts cleaning business located in Montpellier, France in a cash transaction for total consideration of \$3.6 million. The transaction was made to expand the geographic reach of Entegris' materials integrity management services. Property and equipment and intangible assets, including goodwill, of approximately \$2.6 million and \$1.1 million, respectively, were initially recorded in connection with the transaction. The Company is in the process of reviewing and finalizing its valuation of the tangible and intangible assets for the transaction. The effect on the Company's results if the acquisition had occurred at the beginning of each period presented in the Consolidated Statements of Operations is not material.

Entegris completed two acquisitions in fiscal 2003. In January 2003, the Company acquired substantially all of the assets of Electrol Specialties Co. (ESC) in a cash transaction for \$6.9 million, which includes \$1.5 million in contingent consideration recorded in 2004. ESC, an Illinois-based company, designs and fabricates Clean-In-Place (CIP) stainless steel systems to customers in the biopharmaceutical industry. Identifiable intangible assets and goodwill of approximately \$1.0 million and \$3.6 million, respectively, were recorded in connection with the transaction. Entegris retained ESC's existing management team and employees, and continues to fabricate CIP products at ESC's leased facility in Illinois.

In February 2003, Entegris acquired the wafer and reticle carrier (WRC) product lines of Asyst Technologies, Inc., a California-based provider of integrated automation systems, in a cash transaction. The total acquisition cost for all assets associated with Asyst's WRC product lines and intellectual property, including associated fees and expenses, was \$39.1 million. Entegris hired key Asyst employees involved with the research and development of these product lines and moved the production of the purchased WRC product line to its Chaska, Minnesota facilities. Identifiable intangible assets and goodwill of approximately \$1.8 million and \$33.9 million, respectively, were recorded in connection with the transaction.

The identifiable intangible assets of \$2.8 million recorded to in connection with the 2003 acquisitions related to noncompete agreements, patents and customer relationships and are being amortized over periods ranging up to five years.

The Company completed two transactions in 2002. In August 2002, the Company acquired assets related to products serving the semiconductor tape and reel market for \$2.0 million. Identifiable intangible assets of approximately \$1.8 million, consisting principally of proprietary knowledge, were recorded in connection with the transaction. In February 2002, the Company purchased the 49% minority interests held in its Fluoroware Valqua Japan K.K. and Nippon Fluoroware K.K. subsidiaries for total consideration of \$5.1 million. Identifiable intangible assets of approximately \$1.3 million were recorded in connection with the transaction.

Each of the above transactions was accounted for by the purchase method. Accordingly, the Company's consolidated financial statements include the net assets and results of operations from the dates of acquisition.

### **(3) INVENTORIES**

Inventories consist of the following:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>
Raw materials.	\$15,382	\$12,061
Work-in-process	4,519	1,663
Finished goods	24,621	23,811
Supplies	664	628
	<u>\$45,186</u>	<u>\$38,163</u>

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### (4) PROPERTY, PLANT AND EQUIPMENT

Property, plant, and equipment consists of the following:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>Estimated useful lives</u>
Land	\$ 9,476	\$ 9,644	
Buildings and improvements	64,989	62,677	5-35
Manufacturing equipment	85,245	82,928	5-10
Molds	74,853	68,561	3-5
Office furniture and equipment	47,582	48,749	3-8
	<u>282,145</u>	<u>272,559</u>	
Less accumulated depreciation	184,511	177,347	
	<u>\$ 97,634</u>	<u>\$ 95,212</u>	

Depreciation expense was \$20.1 million, \$22.6 million and \$24.4 million in 2004, 2003 and 2002, respectively. The Company recorded asset impairment write-offs on molds and equipment of approximately \$1.3 million, \$1.2 million and \$1.1 million for 2004, 2003 and 2002, respectively. In 2004, \$0.4 million of impairments are included in Engineering, all other impairment losses are included in the Company's cost of sales.

### (5) INVESTMENTS

Investments include the Company's equity ownership in Metron Technology N.V. (Metron), a publicly traded security. Metron is a leading global provider of marketing, sales, services and support solutions to semiconductor materials and equipment suppliers and semiconductor manufacturers. The Company's investment in Metron is accounted for as an available-for-sale security. At August 28, 2004, the Company owned approximately 1.1 million common shares of Metron with a market value of \$4.7 million based on the closing price of \$4.44 per share on the NASDAQ Stock Market. At August 28, 2004, the unrealized gain on marketable securities was \$1.5 million, net of taxes of \$1.1 million. At August 30, 2003, the market value of the Company's investment was \$6.1 million, reflecting an unrealized gain of \$1.7 million, net of tax expense of \$1.2 million.

On August 16, 2004, Metron announced that it had entered into a Stock and Asset Purchase Agreement (Purchase Agreement) with Applied Materials, Inc. (Applied), pursuant to which Applied would acquire the business assets of Metron. Under the terms of the Purchase Agreement, Applied would pay approximately \$85 million in cash to Metron for all of Metron's worldwide assets, and would assume certain Metron liabilities. Following the close of the proposed acquisition, Metron expects to pay cash distributions to shareholders in the range of approximately \$4.74 to \$4.80 per share, to be made in at least two cash distributions during the six-month period following the close of the transaction. The acquisition is subject to regulatory and Metron shareholder approval and other closing conditions and is expected to close by the end of the calendar year. In connection with the Purchase Agreement, the Company, along with other significant shareholders of Metron, entered into a voting agreement with Applied, and has delivered its proxy to Applied, pursuant to which we have agreed to vote our shares in favor of the approval of the Purchase Agreement.

In 2004, the Company reported other income of \$1.1 million (\$0.7 million after taxes), on the sale of an aggregate 512,800 shares of Metron's common stock.

In the first quarter of 2003, the Company recorded an impairment loss, classified as other expense, of \$4.5 million, or \$3.3 million after taxes, related to the Company's investment in Metron. Prior to the impairment charge, the Company's held approximately 1.6 million shares of Metron stock with a cost basis of \$7.6 million. At November 30, 2002, the fair value of the investment was \$3.1 million, based on a price of \$2.00 per share, the closing price of Metron at that date. The decline in fair value was determined to be other-than-temporary. Accordingly, an impairment loss was recorded and the investment in Metron common stock written down to a new cost basis of \$3.1 million as of that date.

At August 28, 2004, the Company also holds equity investments totaling \$2.4 million in certain nonpublicly traded companies accounted for under either the cost or equity method of accounting, as appropriate.

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The Company's short-term investments, all of which are debt securities due within one year and are classified as held-to-maturity, consist of the following:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>
Municipal bonds	\$52,545	\$20,217
Corporate debt securities	5,151	4,324
	<u>\$57,696</u>	<u>\$24,541</u>

The amortized cost, gross unrealized gains, gross unrealized losses and the fair value of the Company's short-term investments are as follows:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>
Amortized cost	\$57,696	\$24,541
Gross unrealized gains	—	—
Gross unrealized losses	(171)	(110)
Fair value	<u>\$57,525</u>	<u>\$24,431</u>

## **(6) INTANGIBLE ASSETS**

The changes in the carrying amount of goodwill for the years ended August 28, 2004 and August 30, 2003 are as follows:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>
Beginning of year	\$67,480	\$31,310
Additions to goodwill as a result of acquisitions	2,684	36,170
End of year	<u>\$70,164</u>	<u>\$67,480</u>

Additions to goodwill in 2004 included \$1.1 million related to acquisitions in 2004 and \$1.5 million associated with a purchase price allocation adjustment of a prior year acquisition. Additions to goodwill in 2003 included \$36.0 million arising from acquisitions in 2003 and a \$0.2 million increase associated with a purchase price allocation adjustment of a prior year acquisition.

Other intangible assets, excluding goodwill, at August 28, 2004 and August 30, 2003 were as follows:

<u>(In thousands)</u>	<u>Gross carrying amount</u>	<u>Accumulated amortization</u>	<u>Net carrying value</u>
<b>2004</b>			
Patents	\$ 19,243	\$ 7,513	\$ 11,730
Unpatented technology	9,844	3,167	6,677
Employment and noncompete agreements	5,837	3,088	2,749
Other	6,053	2,333	3,720
	<u>\$ 40,977</u>	<u>\$ 16,101</u>	<u>\$ 24,876</u>
<u>(In thousands)</u>	<u>Gross carrying amount</u>	<u>Accumulated amortization</u>	<u>Net carrying value</u>
<b>2003</b>			
Patents	\$ 18,416	\$ 5,320	\$ 13,096
Unpatented technology	9,844	2,185	7,659
Employment and noncompete agreements	5,837	1,718	4,119
Other	6,035	1,468	4,567
	<u>\$ 40,132</u>	<u>\$ 10,691</u>	<u>\$ 29,441</u>

Amortization expense was \$5.4 million, \$4.5 million, and \$3.7 million in 2004, 2003 and 2002, respectively.

Estimated amortization expense for the fiscal years 2005 to 2009 and thereafter is \$4.9 million, \$4.6 million, \$4.2 million, \$3.8 million and \$2.9 million, respectively.

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**(7) ACCRUED LIABILITIES**

Accrued liabilities consist of the following:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>
Payroll and related benefits	\$18,920	\$11,194
Employee benefits	4,623	2,839
Taxes, other than income taxes	1,440	1,123
Interest	28	70
Royalties	1,411	917
Accruals related to nonrecurring charges	87	316
Donations	1,201	—
Warranty and related	2,472	2,946
Other	5,396	6,447
	<u>\$35,578</u>	<u>\$25,852</u>

**(8) WARRANTY**

The Company accrues for warranty costs based on historical trends and the expected material and labor costs to provide warranty services. The majority of products sold are generally covered by a warranty for periods ranging from 90 days to one year. The following table summarizes the activity related to the product warranty liability during 2004, 2003 and 2002:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
Beginning of year	\$2,065	\$ 735	\$1,361
Accrual for warranties issued during the period	867	1,001	206
Assumption of liability in connection with acquisition	—	1,250	—
Settlements during the period	(898)	(921)	(832)
End of year	<u>\$2,034</u>	<u>\$2,065</u>	<u>\$ 735</u>

**(9) LONG-TERM DEBT**

Long-term debt consists of the following:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>
Stock redemption notes payable in various installments along with interest of 8% and 9% through December 2010	\$ 2,585	\$ 2,961
Commercial loans secured by land and buildings payable on a monthly basis in principal installments of \$36, with interest ranging from 0.75% to 1.68% and various maturities through November 2010, denominated in Japanese Yen	2,759	1,593
Commercial loans secured by property and equipment payable on a semiannual basis in principal installments of \$47 and interest ranging from 4.5% to 6% and various maturities through December 2007, denominated in Euros	1,094	1,518
Commercial loans unsecured with quarterly interest payments of 1.55% to 1.65% and full principal due in 2007 and 2009, denominated in Japanese Yen	9,122	—
Small Business Administration loans payable on a monthly basis in principal installments of \$4 including interest ranging from 3.15% to 4.25% and various maturities through October 2020	1,871	2,842
Commercial loan secured by equipment payable on a monthly basis in principal installments of \$20 and interest of 5.0% maturity at October 2004	40	631
Industrial Revenue Bond secured by property payable on a semiannual basis with principal installments of \$50 through October 2012, and variable interest ranging from 1.05% to 2.20%, prepaid in full in 2004 August 28, 2004	—	1,050
Private bond with interest of 1.7% and interest payable on a semiannual basis and full principal due in 2008, denominated in Japanese Yen	2,007	1,881
Other, denominated in Japanese Yen	912	6
Total	<u>20,390</u>	<u>12,482</u>
Less current maturities	<u>1,492</u>	<u>2,412</u>
	<u>\$18,898</u>	<u>\$10,070</u>

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Annual maturities of long-term debt as of August 28, 2004, are as follows:

<u>Fiscal year ending</u>	<u>(In thousands)</u>
2005	\$ 1,492
2006	1,370
2007	4,797
2008	1,030
2009	8,544
Thereafter	3,157
	<hr/>
	\$ 20,390

### **(10) SHORT-TERM BANK BORROWINGS**

The Company has an unsecured revolving credit agreement, which expires in February 2005, with two commercial banks for aggregate borrowings of up to \$40 million with interest at Eurodollar rates, plus 1.125%. There was zero outstanding under this commitment at August 28, 2004. There was \$5 million outstanding at August 30, 2003 with interest at 2.69%. Under the unsecured revolving credit agreement, the Company is subject to, and is in compliance with, certain financial covenants including ratios requiring fixed charge coverage of not less than 1.10 to 1.00 and a leverage ratio of not more than 2.25 to 1.00. In addition, the Company must maintain a calculated consolidated and domestic tangible net worth, which, as of August 28, 2004, are \$232.4 million and \$125.0 million, respectively, while also maintaining consolidated and domestic aggregate amounts of cash and short-term investments of not less than \$75 million and \$40 million, respectively.

The Company has entered into unsecured line of credit agreements, which expire at various dates through 2005, with six international commercial banks, which provide for aggregate borrowings of 250,000 euros, 3.5 million Malaysia ringgits and 1.7 billion Japanese yen for its foreign subsidiaries, which is equivalent to \$16.7 million as of August 28, 2004. Interest rates for these facilities are based on a factor of the banks' reference rates and ranged from 1.375% to 10.0% as of August 28, 2004. Borrowings outstanding under these line of credit agreements at August 28, 2004 and August 30, 2003, were \$6.5 million and \$11.5 million, respectively.

### **(11) LEASE COMMITMENTS**

As of August 28, 2004, the Company was obligated under noncancellable operating lease agreements for certain equipment and buildings. Future minimum lease payments for noncancellable operating leases with initial or remaining terms in excess of one year are as follows):

<u>Fiscal year ending</u>	<u>(In thousands)</u>
2005	\$ 3,605
2006	2,557
2007	1,743
2008	1,234
2009	1,013
Thereafter	1,388
	<hr/>
Total minimum lease payments	\$ 11,540

Total rental expense for all equipment and building operating leases was \$4.7 million, \$4.7 million and \$4.8 million in 2004, 2003 and 2002, respectively. See note 22 for related party leases included above.

### **(12) OTHER CHARGES**

During the first quarter of fiscal 2003, the Company recorded a pre-tax charge of \$1.8 million related to the relocation of its Upland, California operations and certain workforce reductions. The charge included \$0.9 million in termination costs related to a workforce reduction of approximately 75 employees, \$0.4 million for estimated losses for asset impairment and \$0.5 million for future lease commitments on the Upland facility. The Company recorded a pre-tax benefit of \$0.2 million in the fourth quarter of 2003 associated with the favorable settlement of a portion of the future lease commitments included in the aforementioned charge.

In 2002, the Company's results included a charge of \$4.0 million in connection with the closure of its Chanhassen, MN plant. The charge included \$1.5 million in termination costs related to a workforce reduction of 230 employees and \$2.3 million for estimated losses for asset impairment. The Company recorded a pre-tax benefit of \$2.4 million in 2002 related to the reversal of previous accruals made in 2002 as described above and accruals recorded in 2001 related to the closures of its Castle Rock, Colorado and

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Munmak, Korea facilities. Approximately \$1.0 million of the reversal was associated with the favorable settlement of future lease commitments on the Castle Rock facility, for which the Company had recorded accruals in 2001. Lower than expected impairment costs accounted for approximately \$1.2 million of the reversals.

As of August 28, 2004, future cash outlays of \$0.1 million remained outstanding in connection with the aforementioned charges, and are primarily related to lease commitments, which run through July 2005.

### (13) INTEREST INCOME, NET

Interest income, net consists of the following:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
Interest income	\$ 1,454	\$ 1,790	\$ 2,684
Interest expense	(1,171)	(1,211)	(1,218)
Interest income, net	<u>\$ 283</u>	<u>\$ 579</u>	<u>\$ 1,466</u>

### (14) OTHER EXPENSE (INCOME), NET

Other expense (income), net consists of the following:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
(Gain) loss on sale of property and equipment	\$ (859)	\$ (310)	\$ 185
Impairment of investment in Metron	—	4,452	—
(Gain) loss on foreign currency translation	179	(201)	(808)
Gain on liquidation of foreign subsidiary	—	—	(733)
Gain on sale of equity investments	(1,126)	(145)	—
Other, net	695	627	383
Other (income) expense, net	<u>\$ (1,111)</u>	<u>\$ 4,423</u>	<u>\$ (973)</u>

### (15) INCOME TAXES

Income (loss) before income taxes was derived from the following sources:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
Domestic	\$29,226	\$(9,747)	\$(8,192)
Foreign	6,691	4,918	6,797
	<u>\$35,917</u>	<u>\$(4,829)</u>	<u>\$(1,395)</u>

Income tax expense (benefit) is summarized as follows (in thousands):

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>Current:</b>			
Federal	\$ 6,853	\$(2,611)	\$(3,797)
State	316	(58)	—
Foreign	1,603	122	562
	<u>8,772</u>	<u>(2,547)</u>	<u>(3,235)</u>
<b>Deferred:</b>			
Federal	1,864	(2,110)	220
State	727	(275)	(358)
Foreign	(229)	(1,316)	—
	<u>2,362</u>	<u>(3,701)</u>	<u>(138)</u>
	<u>\$11,134</u>	<u>\$(6,248)</u>	<u>\$(3,373)</u>

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Income tax expense (benefit) differs from the expected amounts based upon the statutory federal tax rates as follows:

(In thousands)	2004	2003	2002
Expected federal income tax at statutory rate	\$12,571	\$(1,690)	\$ (489)
State income taxes, net of federal tax effect	779	(120)	(113)
Effect of foreign source income	(742)	(2,801)	(2,267)
Extraterritorial Income/Foreign Sales Corporation income not subject to tax	(1,300)	(1,000)	—
Impairment of investment in Metron	—	408	—
Research tax credit	(260)	(450)	(400)
Tax-exempt interest	(211)	(224)	(296)
Redetermination of prior years' taxes	—	(946)	—
Other items, net	297	575	192
	<u>\$11,134</u>	<u>\$(6,248)</u>	<u>\$(3,373)</u>

At August 28, 2004, there were approximately \$16.8 million of accumulated undistributed earnings of subsidiaries outside the United States that are considered to be reinvested indefinitely. No deferred tax liability has been provided on such earnings. If they were remitted to the Company, applicable U.S. federal and foreign withholding taxes would be partially offset by available foreign tax credits.

During the years ended August 28, 2004 and August 30, 2003, respectively, \$2.0 million and \$3.2 million was added to additional paid-in capital in accordance with APB No. 25 reflecting the tax difference relating to employee stock option transactions.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at August 28, 2004 and August 30, 2003 are as follows (in thousands):

	2004	2003
Deferred tax assets:		
Accounts receivable	\$ 939	\$ 935
Inventory	2,444	2,555
Intercompany profit	1,429	1,114
Accruals not currently deductible for tax purposes	2,761	2,918
Net operating loss carryforwards	1,132	3,889
Tax credit carryforwards	340	1,847
Other, net	1,760	1,171
Total deferred tax assets	<u>10,805</u>	<u>14,429</u>
Deferred tax liabilities:		
Accelerated depreciation	3,484	4,218
Purchased intangible assets	8,205	9,316
Other, net	1,982	2,108
Total deferred tax liabilities	<u>13,671</u>	<u>15,642</u>
Net deferred tax assets (liabilities)	<u>\$ (2,866)</u>	<u>\$ (1,213)</u>

At August 28, 2004, the Company had federal net operating loss carryforwards of approximately \$1.1 million which begin to expire in 2011, state operating loss carryforwards of approximately \$6.7 million, which begin to expire in 2010, and research tax credit carryforwards of approximately \$0.3 million which begin to expire in 2009. Realization of the deferred tax assets is dependent on generating sufficient future taxable income and on the future reversal of taxable temporary differences. Although realization is not assured, the Company believes it is more likely than not that the benefit of these deferred assets will be realized.

The American Jobs Creation Act of 2004 ("the Act") was passed in October 2004 and included numerous law changes that will affect the Company's tax computations. The provisions of the Act include a new deduction for U.S. manufacturers, the repeal of the extraterritorial income exclusion and a provision regarding the repatriation of foreign earnings. The Company is studying the new law to determine what impact, if any, the Act will have on its effective tax rate.

**(16) SHAREHOLDERS' EQUITY**

**Employee Stock Ownership Plan and Trust** Entegris maintains an Employee Stock Ownership Plan and Trust (ESOT). The ESOT was amended to discontinue future contributions and to freeze participation in 1997. ESOT shares totaled 6,804,661 and 8,831,707 as of August 28, 2004 and August 30, 2003, respectively.

**Stock Option Plans** In August 1999, Entegris, Inc. established the Entegris, Inc. 1999 Long-Term Incentive and Stock Option Plan (the 1999 Plan) and the Entegris, Inc. Outside Directors' Stock Option Plan (the Directors' Plan). The maximum aggregate number of shares that may be granted under the Plans as of August 28, 2004 is 15,000,000 and 1,000,000, respectively.

Under the Directors' Plan, each outside director is granted an option to purchase 15,000 shares upon the date the individual becomes a director. Annually, each outside director is automatically granted an option to purchase 9,000 shares. Options will be exercisable six months subsequent to the date of grant. Under both the 1999 Plan and the Directors' Plan, the term of options shall be ten years and the exercise price for shares shall not be less than 100% of the fair market value of the common stock on the date of grant of such option.

Option activity for the 1999 Plan and the Directors' Plan is summarized as follows:

(Shares in thousands)	2004		2003		2002	
	Number of shares	Option price	Number of Shares	Option price	Number of Shares	Option price
Options outstanding, beginning of year	8,080	\$ 6.28	7,469	\$ 5.94	7,071	\$ 4.94
Granted	1,012	12.32	1,961	6.63	1,747	8.39
Exercised	(657)	5.27	(1,163)	4.18	(1,222)	3.25
Canceled	(167)	8.77	(187)	9.13	(127)	10.05
Options outstanding, end of year	8,268	\$ 7.05	8,080	\$ 6.28	7,469	\$ 5.94
Options exercisable, end of year	5,058	\$ 6.00	4,455	\$ 5.29	4,636	\$ 4.37
Options available for grant, end of year	3,125		4,192		5,498	

Options outstanding for the 1999 Plan and the Directors' Plan at August 28, 2004 are summarized as follows:

(Shares in thousands)	Options outstanding			Options exercisable	
	Number outstanding	Remaining contractual life	Weighted-average exercise price	Number exercisable	Weighted-average exercise price
Range of exercise prices					
\$0.96 to \$1.50	235	1.6 years	\$ 1.18	235	\$ 1.18
\$3.15	2,066	3.3 years	3.15	2,066	3.15
\$4.22	227	5.0 years	4.22	227	4.22
\$5.90	1,468	8.1 years	5.90	323	5.90
\$6.86 to \$7.50	198	6.6 years	7.47	135	7.49
\$7.53 to \$8.25	1,282	7.1 years	8.02	621	8.02
\$8.38 to \$10.00	1,117	6.8 years	9.11	821	9.18
\$10.19 to \$12.00	1,360	7.8 years	11.56	549	11.11
\$12.01 to \$15.38	315	9.0 years	13.46	81	13.63

During 2004, the Company awarded 220,000 restricted shares, net of current year forfeitures, of the Company's common stock pursuant to the Entegris, Inc. 1999 Long-Term Incentive and Stock Option Plan. The value of such stock was established by the market price on the date of the grants and was recorded as deferred compensation in the amount of \$2.8 million, which is shown as a reduction of shareholders' equity in the accompanying consolidated financial statements. The deferred compensation is being amortized ratably over the applicable restricted stock vesting periods. Compensation expense recorded in connection with the restricted shares was \$1.2 million in 2004. The remaining deferred compensation to be amortized in connection with the grants is shown as a reduction of shareholders' equity in the accompanying consolidated financial statements.

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**Employee Stock Purchase Plan** In March 2000, the Company established the Entegris, Inc. Employee Stock Purchase Plan (ESPP). A total of 4,000,000 common shares were reserved for issuance under the ESPP. The ESPP allows employees to elect, at six-month intervals, to contribute up to 10% of their compensation, subject to certain limitations, to purchase shares of common stock at the lower of 85% of the fair market value on the first day or last day of each six-month period. As of August 28, 2004, 745,861 shares had been issued under the ESPP. As of that date, plan participants had approximately \$0.3 million withheld to purchase the Company's common stock at the lower of 85% of the fair market value on the first day or last day of each six-month period ending December 31, 2004. Employees purchased 155,293, 167,471 and 167,097 shares at a weighted-average price of \$10.34, \$9.05 and \$9.23 in 2004, 2003, and 2002 respectively.

### **(17) 401(k) SAVINGS PLAN**

The Company maintains the Entegris, Inc. 401(k) Savings and Profit Sharing Plan (the 401(k) Plan) that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the Plan, eligible employees may defer a portion of their pretax wages, up to the Internal Revenue Service annual contribution limit. Entegris matches 100% of employees' contributions on the first 3% of eligible wages and 50% of employees' contributions on the next 2% of eligible wages, or a maximum match of 4% of the employee's eligible wages. In addition to the matching contribution, the Company's board of directors may, at its discretion, declare a profit sharing contribution of up to 11% of eligible wages based on the company's worldwide operating results. The employer profit sharing and matching contribution expense under the Plans was \$3.9 million, \$1.8 million, \$1.0 million in 2004, 2003 and 2002, respectively.

### **(18) EARNINGS PER SHARE (EPS)**

Basic EPS is computed by dividing net income by the weighted average number of shares of common stock outstanding during each period. The following table presents a reconciliation of the share amounts used in the computation of basic and diluted earnings per share:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
Basic earnings per share—Weighted common shares outstanding	72,957	71,636	70,358
Weighted common shares assumed upon exercise of options	3,694	3,836	3,812
Weighted common shares assumed upon vesting of restricted common stock	38	—	—
Diluted earnings per share	<u>76,689</u>	<u>75,472</u>	<u>74,170</u>

Approximately 0.8 million, 1.3 million and 0.6 million of the Company's stock options were excluded from the calculation of diluted earnings per share in 2004, 2003, and 2002, respectively, because the exercise prices of the stock options were greater than to the average price of the Company's common stock, and therefore their inclusion would have been antidilutive.

### **(19) SEGMENT INFORMATION**

The Company operates in one segment as it designs, develops, manufactures, markets and sells material integrity management products and services predominantly within the microelectronics industry. All products are sold on a worldwide basis.

The following table summarizes total net sales by markets served for 2004, 2003 and 2002, respectively:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net sales:			
Semiconductor	\$274,755	\$191,405	\$178,272
Data storage	32,761	31,221	25,191
Services	23,276	20,354	17,534
Other	15,972	8,124	2,000
	<u>\$346,764</u>	<u>\$251,104</u>	<u>\$222,997</u>

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The following tables summarize total net sales, based upon the country to which sales to external customers were made, and property, plant and equipment attributed to significant countries for 2004, 2003 and 2002, respectively:

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>Net sales:</b>			
United States	\$ 130,068	\$ 103,068	\$ 99,852
Japan	55,020	39,033	45,326
Germany	22,312	14,042	13,852
Taiwan	34,543	15,838	12,904
Singapore	26,952	15,424	10,958
Korea	19,888	10,749	7,120
Malaysia	10,883	13,438	5,894
Other	47,098	39,512	27,091
	<u>\$ 346,764</u>	<u>\$ 251,104</u>	<u>\$ 222,997</u>
<b>Property, plant and equipment:</b>			
United States	\$ 63,793	\$ 68,605	\$ 74,085
Japan	11,781	8,064	8,424
Germany	5,806	5,854	5,362
Malaysia	13,146	12,350	13,757
Other	3,108	339	476
	<u>\$ 97,634</u>	<u>\$ 95,212</u>	<u>\$ 102,104</u>

In 2004, 2003 and 2002, no single nonaffiliated customer accounted for 5% or more of net sales.

### **(20) SUPPLEMENTARY CASH FLOW INFORMATION**

<u>(In thousands)</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>Schedule of interest and income taxes paid</b>			
Interest	\$ 1,213	\$ 1,192	\$ 1,209
Income taxes, net of refunds received	1,138	(8,206)	(13,201)

### **(21) FAIR VALUE OF FINANCIAL INSTRUMENTS**

The carrying amount of cash equivalents, short-term investments and short-term debt approximates fair value due to the short maturity of those instruments. The fair value of long-term debt was estimated using discounted cash flows based on market interest rates for similar instruments and approximated its carrying value of \$18.9 million at August 28, 2004.

### **(22) RELATED-PARTY TRANSACTIONS**

**Leases** Through 2002, the Company leased office space and production facilities under various operating leases from entities related to a major shareholder of the Company. The Company was required to pay for all real estate taxes, utilities and other operating expenses. Rent paid relating to these agreements totaled \$0.3 million for 2002. The Company has no future obligations under any lease agreements with entities related to the shareholder.

In May 2002, the Company paid \$500,000 as consideration for the early termination and buyout of future lease commitments on the Castle Rock facility, which was leased from an entity related to the shareholder, as described in Note 12 under the caption "Other Charges."

**Metron Technology N.V.** As described in Note 5 under the caption "Investments", the Company owned approximately 1.1 million shares of Metron at August 28, 2004. Metron is considered an affiliate. Sales to Metron under current and previous distribution agreements were \$32.2 million, \$19.6 million and \$16.3 million in 2004, 2003 and 2002, respectively. Trade accounts receivable relating to these sales as of August 28, 2004 and August 30, 2003 were \$4.8 million and \$4.0 million, respectively.

**(23) COMMITMENTS AND CONTINGENT LIABILITIES**

On September 9, 2002, Lucent Technologies, Inc. named the Company as a defendant along with Poly-Flow Engineering Inc., FSI International, Inc. and BOC Capital Group in an action filed in circuit court in Orange County, Florida for damages arising from a chemical spill at its facility in January 2000. To date, Lucent has requested aggregate damages from all defendants in the range of \$52 million, and has specifically requested damages of \$12 million from the Company. While the outcome of this matter cannot be predicted with any certainty, based on the information to date, the Company believes that it has valid defenses to the claims and, furthermore, has adequate insurance to cover any damages assessed against the Company and as such, does not believe that the matter will have a material adverse effect on its financial position, operating results or cash flows.

In addition, from time to time, the Company is a party to various legal proceedings incidental to its normal operating activities. Although it is impossible to predict the outcome of such proceedings, facts currently available indicate that no such claims will result in losses that would have a material adverse effect on the financial condition, results of operations or cash flows of the Company.

**(24) QUARTERLY INFORMATION-UNAUDITED**

(In thousands, except per share data)	Quarter				
	First	Second	Third	Fourth	Year
<b>Fiscal 2003</b>					
Net sales	\$54,249	\$54,656	\$70,665	\$71,534	\$251,104
Gross profit	21,878	22,555	30,472	23,818	98,723
Net income (loss)	(5,642)	647	3,957	2,313	1,275
Basic earnings (loss) per share	(0.08)	0.01	0.06	0.03	0.02
Diluted earnings (loss) per share	(0.08)	0.01	0.05	0.03	0.02
<b>Fiscal 2004</b>					
Net sales	\$68,676	\$79,970	\$98,624	\$99,494	\$346,764
Gross profit	27,529	34,747	44,409	44,142	150,827
Net income	1,637	5,023	9,175	8,935	24,770
Basic earnings per share	0.02	0.07	0.13	0.12	0.34
Diluted earnings per share	0.02	0.07	0.12	0.12	0.32

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Shareholders  
Entegris, Inc.:

We have audited the accompanying consolidated balance sheets of Entegris, Inc. and subsidiaries as of August 28, 2004 and August 30, 2003, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the years in the three-year period ended August 28, 2004. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Entegris, Inc. and subsidiaries as of August 28, 2004 and August 30, 2003, and the results of their operations and their cash flows for each of the years in the three-year period ended August 28, 2004, in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

Minneapolis, Minnesota  
October 28, 2004

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM  
ON SCHEDULE**

The Board of Directors and Shareholders  
Entegris, Inc.:

Under the date of October 28, 2004, we reported on the consolidated balance sheets of Entegris, Inc. and subsidiaries as of August 28, 2004 and August 30, 2003, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the years in the three-year period ended August 28, 2004, as contained herein. In connection with our audits of the aforementioned consolidated financial statements, we also have audited the related financial statement schedule as listed in the accompanying index. The financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statement schedule based on our audits.

In our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ KPMG LLP

Minneapolis, Minnesota  
October 28, 2004

**Entegris, Inc.**  
**Schedule II—Valuation and Qualifying Accounts**  
**(In thousands)**

<u>Description</u>	<u>Balance at Beginning of Period</u>	<u>Charged (Credited) to Costs and Expenses Additions</u>	<u>Deductions</u>	<u>Balance at End of Period</u>
<u>COL. A</u>	<u>COL. B</u>	<u>COL. C</u>	<u>COL. D</u>	<u>COL. E</u>
Deducted from asset accounts:				
Year ended August 31, 2002:				
Allowance for doubtful receivables	\$ 1,608	133	57	\$ 1,798
Deducted from asset accounts:				
Year ended August 30, 2003:				
Allowance for doubtful receivables	\$ 1,798	(145)	140	\$ 1,793
Deducted from asset accounts:				
Year ended August 28, 2004:				
Allowance for doubtful receivables	\$ 1,793	46	(49)	\$ 1,790

**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None

**ITEM 9A. CONTROLS AND PROCEDURES**

Evaluation of disclosure controls and procedures. Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in the reports that are filed or submitted under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commissions' rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports that are filed under the Exchange Act is accumulated and communicated to management, including the chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure. Under the supervision of and with the participation of management, including the chief executive officer and chief financial officer, the Company has evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of August 28, 2004, and based on its evaluation, our chief executive officer and chief financial officer have concluded that these controls and procedures are effective.

Changes in internal control over financial reporting. There was no significant change in the Company's internal controls over financial reporting during its fourth quarter of fiscal 2004 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

None.

**PART III**

Certain information required by Part III is incorporated by reference to the Company's definitive proxy statement for the annual meeting of shareholders to be held on January 18, 2005 and which will be filed with the Securities and Exchange Commission pursuant to Regulation 14A within 120 days after August 28, 2004.

Except for those portions specifically incorporated in this report by reference to our proxy statement for the Annual Meeting of Shareholders to be held on January 18, 2005, no other portions of the proxy statement are deemed to be filed as part of this Report on Form 10-K.

**ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT**

The information concerning the Company's directors and officers required by this item is incorporated by reference to the information under the captions "Election of Directors", "Named Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance" in the Company's proxy statement for the Annual Meeting of Shareholders to be held on January 18, 2005.

**Audit Committee Financial Expert**

The Company's Audit Committee comprises members Roger D. McDaniel, Paul L.H. Olson and Donald M. Sullivan. The Company has determined that Mr. McDaniel qualifies as an "audit committee financial expert" as defined in Item 401(h) of Regulation S-K, and each of the Committee members is "independent" as the term is used in Item 7(d)(3)(iv) of Schedule 14A under the Securities Exchange Act.

**Code Of Ethics and Conduct**

The Company has adopted a Code of Ethics and Conduct applicable to all employees, including the principal executive officer, principal financial officer and principal accounting officer of the Company. A copy of the Entegris, Inc. Code of Ethics and Conduct is available on the Company's Web site at [www.entegris.com](http://www.entegris.com). The Company intends to post on its Web site any amendments to, or waivers from, its Code of Ethics and Conduct applicable to such senior officers.

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**ITEM 11. EXECUTIVE COMPENSATION**

The information required by this item is incorporated by reference to the information under the captions “Director Compensation” and “Summary Compensation Table” in the Company’s proxy statement for the Annual Meeting of Shareholders to be held on January 18, 2005.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS**

The information required by this item is incorporated by reference to the information under the captions “Security Ownership of Principal Shareholders” and “Security Ownership of Directors and Named Executive Officers” in the Company’s proxy statement for the Annual Meeting of Shareholders to be held on January 18, 2005.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

The information required by this item is incorporated by reference to the information under the captions “Appointment of Independent Registered Public Accounting Firm” and “Audit Committee Report” in the Company’s proxy statement for the Annual Meeting of Shareholders to be held on January 18, 2005.

**ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES**

The information required by this item is incorporated by reference to the information under the captions “Appointment of Independent Registered Public Accounting Firm” and “Audit Committee Report” in the Company’s proxy statement for the Annual Meeting of Shareholders to be held on January 18, 2005.

**PART IV**

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K**

**(a) (1.) Financial Statements**

The Financial Statements required by this item, along with the Report of Independent Registered Public Accounting Firm, are submitted in a separate section of this report as indicated in the below index:

**INDEX TO FINANCIAL STATEMENTS**

**Page  
Number in  
this Report**

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[Consolidated Balance Sheets as of August 28, 2004 and August 30, 2003](#)

[Consolidated Statements of Operations for the years ended August 28, 2004, August 30, 2003 and August 31, 2002](#)

[Consolidated Statements of Shareholders’ Equity for the years ended August 28, 2004, August 30, 2003 and August 31, 2002](#)

[Consolidated Statements of Cash Flows for the years ended August 28, 2004, August, 30, 2003 and August 31, 2002](#)

[Notes to Consolidated Financial Statements](#)

[Report of Independent Registered Public Accounting Firm](#)

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### **(a) (2.) Financial Statement Schedules**

The following Report of Independent Registered Public Accounting Firm on Schedule and the financial statement schedule “Schedule II—Valuation and Qualifying Accounts” are filed as part of this Report at the pages indicated, and should be read in conjunction with the consolidated financial statements.

**Page  
Number in  
this Report**

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Report of Independent Registered Public Accounting Firm on Schedule  
Schedule II – Valuation and Qualifying Accounts

All other schedules for which provisions are made in the applicable accounting regulation of the Securities and Exchange Commission have been omitted because the information required to be set forth therein is not applicable or is shown in the Financial Statements or notes thereto.

### **(a) (3.) Exhibits**

The following exhibits are filed herewith or incorporated by reference as required by Item 601 of Regulation S-K:

<b>Exhibit Number</b>	<b>Description of Document</b>
3.1(i)	Articles of Incorporation of Entegris, Inc.
3.2(i)	Amended and Restated Bylaws of Entegris, Inc.
4.1(i)	Specimen of Common Stock Certificate
10.1(i)	Entegris, Inc. 1999 Long-Term Incentive and Stock Option Plan
10.2(i)	Entegris, Inc. Outside Directors’ Option Plan
10.3(i)	Entegris, Inc. 2000 Employee Stock Purchase Plan
10.4(i)	Entegris, Inc. Employee Stock Ownership Plan
10.5(i)	Entegris, Inc. Pension Plan
10.6(i)	Entegris, Inc. 401(k) Savings and Profit Sharing Plan
10.7(i)	Worldwide Stocking Distributor Agreement Between Fluid Handling Group Entegris, Inc. and Metron Technology N.V. dated March 1, 2001
10.8(i)	Promissory Note between Fluoroware, Inc. and Dan Quernemoen, dated January 5, 1996
10.9(ii)	Credit Agreement dated as of November 30, 1999 among Entegris, Inc. and Norwest Bank Minnesota, N.A. and Harris Trust and Savings Bank
10.10(ii)	First Amendment to Credit Agreement dated October 2000, effective as of August 31, 2000, among Entegris, Inc. and Norwest Bank Minnesota, N.A. and Harris Trust and Savings Bank
10.11(ii)	Second Amendment to Credit Agreement dated as of March 1, 2002, among Entegris, Inc. and Norwest Bank Minnesota, N.A. and Harris Trust and Savings Bank
10.12(ii)	Consent and Amendment Agreement dated as of February 7, 2003 among Entegris, Inc. and Norwest Bank Minnesota, N.A. and Harris Trust and Savings Bank
10.13(ii)	Fourth Amendment dated as of February 26, 2003 among Entegris, Inc. and Norwest Bank Minnesota, N.A. and Harris Trust and Savings Bank
10.14(iv)	Fifth Amendment to Credit Agreement, dated as of February 17, 2004, among Entegris, Inc. and Norwest Bank Minnesota, N.A. and Harris Trust and Savings Bank
10.15(i)	Consolidation Agreement by and among Entegris, Inc., Fluoroware, Inc. and Empak, Inc., dated June 1, 1999
10.16(i)	Metron Semiconductors Europa B.V. Investor Rights Agreement dated July 6, 1995
10.17(i)	STAT-PRO(R) 3000 and STAT-PRO(R) 3000E Purchase and Supply Agreement between Fluoroware, Inc. and Miller Waste Mills, d/b/a RTP Company, dated April 6, 1998

## Table of Contents

<u>Exhibit Number</u>	<u>Description of Document</u>
10.18(i)*	PFA Purchase and Supply Agreement by and between E.I. Du Pont De Nemours and Company and Fluoroware, Inc., dated January 7, 1999, which was made effective retroactively to November 1, 1998, and supplemented by the Assignment and Limited Amendment by and between the same parties and Entegris, Inc., dated as of September 24, 1999
10.19 (iii)	Form of Executive Change in Control Agreement the Company and certain senior executive officers of the Company.
10.20 (ii)	Asset Purchase Agreement of the Wafer and Reticle Carrier Business of Asyst Technologies, Inc. by Entegris, Inc. and Entegris Cayman Ltd. entered into as of February 11, 2003
10.21 (ii)*	Patent Assignment and Cross-License and Trademark License Agreement entered into as of February 11, 2003 by and between Entegris, Inc., Entegris Cayman Ltd., and Asyst Technologies, Inc.
21.1	Subsidiaries of the Company
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

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- (i) Incorporated by reference from the Company's Registration Statement on Form S-1 (No. 333-33668), filed with the Commission on July 10, 2000, as amended through the date hereof.
  - (ii) Incorporated by reference from the Company's Report on Form 10-Q for the period ended March 1, 2003 filed by the Company April 15, 2003.
  - (iii) Incorporated by reference from the Company's Report on Form 10-K for the year ended August 31, 2003, 2003 filed by the Company November 27, 2002.
  - (iv) Incorporated by reference from the Company's Report on Form 10-Q for the period ended February 28, 2004 filed by the Company April 13, 2004.
- \* Confidential information has been omitted from these exhibits and filed separately with the SEC accompanied by a confidential treatment request pursuant to Rule 406 under the Securities Act of 1933, as amended.

Pursuant to Item 601(b)(4)(iii) of Regulation S-K, copies of instruments defining the rights of holders of certain long-term debt of Entegris are not filed, and in lieu thereof, Entegris agrees to furnish copies thereof to the SEC upon request.

(b) Reports on Form 8-K

On June 17, 2004, the Company filed a current report on Form 8-K to furnish a copy of the Company's press release announcing the Company's third quarter and year-to-date financial results for the period ended May 29, 2004.

On August 31, 2004, the Company filed a current report on Form 8-K to disclose that on August 16, 2004, Metron Technology N.V. ("Metron"), in which the Company holds a equity ownership, had entered into a Stock and Asset Purchase with Applied Materials, Inc. ("Applied") and that, in connection therewith, the Company had entered into a voting and proxy agreement with Applied, also dated as of August 16, 2004, pursuant to which it agreed to vote its Metron shares in favor of the approval of the Purchase Agreement

(c) See Exhibits listed under Item 14(a)(3).

(d) Not applicable. See Item 14(a)(2).

**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.

/s / James E. Dauwalter

James E. Dauwalter  
President and Chief Executive Officer

Dated: November 11, 2004

/s / John D. Villas

John D. Villas  
Chief Financial Officer

Dated: November 11, 2004

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below each severally constitutes and appoints each of James E. Dauwalter and John D. Villas, in any and all capacities, to sign any and all amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that the said attorney-in-fact, or their substitutes, may lawfully do, or cause to be done by virtue hereof.

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 stated and on the dates indicated.

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
<u>/s / James A. Bernards</u> James A. Bernards	Director	November 11, 2004
<u>/s/ James E. Dauwalter</u> James E. Dauwalter	President, Chief Executive Officer and Director	November 11, 2004
<u>/s/ Stan Geyer</u> Stan Geyer	Chairman of the Board of Directors	November 11, 2004
<u>/s / Paul L. H. Olson</u> Paul L.H. Olson	Director	November 11, 2004
<u>/s / Gary F. Klingl</u> Gary F. Klingl	Director	November 11, 2004
<u>/s / Roger D. McDaniel</u> Roger D. McDaniel	Director	November 11, 2004
<u>/s / Brian F. Sullivan</u> Brian F. Sullivan	Director	November 11, 2004
<u>/s / Donald M. Sullivan</u> Donald M. Sullivan	Director	November 11, 2004
<u>/s / John D. Villas</u> John D. Villas	Chief Financial Officer (Chief Financial & Accounting Officer)	November 11, 2004

## LIST OF SUBSIDIARIES

<u>Name</u>	<u>Jurisdiction of Incorporation</u>	<u>Ownership Percentage</u>
Entegris Malaysia Sdn Bhd	Malaysia	100%
Entegris Korea Inc. (JuShik Hoesa)	Korea	100%
Entegris Europe, GmbH	Germany	100%
Fluoroware Jamaica, Limited	Jamaica	100%
Empak Foreign Sales Corporation	Barbados	100%
Fluoroware South East Asia, Ltd Pte	Singapore	100%
Entegris Japan, K.K. (1)	Japan	100%
OregonLabs, LLC	Minnesota	49%
Entegris Japan Holding K.K.	Japan	100%
NT International, Inc.	Minnesota	100%
Entegris Netherlands, Inc.	Minnesota	100%
Entegris Taiwan, Inc.	Minnesota	100%
Entegris Pte. Ltd.	Singapore	100%
Atcor JCS Pte. Ltd.	Singapore	70%
Entegris France SARL	France	100%
Entegris Precision Technology Corporation	Taiwan	50%
Entegris Ireland Limited	Ireland	100%
Electrol Specialties, Inc.	Minnesota	100%
Entegris Cayman Ltd.	Cayman Islands	100%

(1) Owned by Entegris Japan Holding K.K.

**Consent of Independent Registered Public Accounting Firm**

The Board of Directors and Shareholders  
Entegris, Inc.:

We consent to incorporation by reference in the registration statements on Form S-8 (No. 333-53382) and on Form S-3 (No. 33-105962) of Entegris, Inc. of our reports dated October 28, 2004, relating to the consolidated balance sheets of Entegris, Inc. and subsidiaries as of August 28, 2004 and August 30, 2003, and the related consolidated statements of operations, shareholders' equity and cash flows for each of the fiscal years in the three-year period ended August 28, 2004, and the related financial statement schedule which reports appear in the August 28, 2004 annual report on Form 10-K of Entegris, Inc.

/s/ KPMG LLP

Minneapolis, Minnesota  
November 11, 2004

## CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, James E. Dauwalter, certify that:

1. I have reviewed this Annual Report on Form 10-K of Entegris, Inc.;
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 annual 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 annual 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) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual 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
  - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
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 (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 11, 2004

/s/ JAMES E. DAUWALTER

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James E. Dauwalter  
President and Chief Executive Officer  
(Principal Executive Officer)

## CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John D. Villas, certify that:

1. I have reviewed this Annual Report on Form 10-K of Entegris, Inc.;
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) 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
  - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
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 (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 11, 2004

/s/ JOHN D. VILLAS

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John D. Villas  
Chief Financial Officer  
(Principal Financial and Accounting Officer)

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 on Form 10-K (the "Report") of Entegris, Inc, a Minnesota corporation (the "Company"), for the year ended August 28, 2004 as filed with the Securities and Exchange Commission on the date hereof, I, James E. Dauwalter, President and Chief Executive Officer of the Company, hereby certify, 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.

Date: November 11, 2004

/s/ James E. Dauwalter

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James E. Dauwalter  
President and Chief Executive Officer

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 on Form 10-K (the "Report") of Entegris, Inc, a Minnesota corporation (the "Company"), for the year ended August 28, 2004 as filed with the Securities and Exchange Commission on the date hereof, I, John D. Villas, Chief Financial Officer of the Company, hereby certify, 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.

Date: November 11, 2004

/s/ John D. Villas

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John D. Villas  
Chief Financial Officer