

ENTEGRIS INC  
Form 10-K  
March 03, 2008

# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## Form 10-K

(Mark One)

**Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**  
For the fiscal year ended December 31, 2007

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

## ENTEGRIS, INC.

(Exact name of registrant as specified in its charter)

Delaware  
(State or Other Jurisdiction of  
Incorporation or Organization)

3500 Lyman Boulevard, Chaska, MN 55318

41-1941551  
(I.R.S. Employer  
Identification No.)

Edgar Filing: ENTEGRIS INC - Form 10-K

(Address of principal executive offices and zip code)

(952) 556-3131

(Registrant's telephone number, including area code)

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

Title of Class

Common Stock, \$0.01 Par Value

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

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

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

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

Indicate by check mark 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 Form 10-K or any amendment to this Form 10-K.

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).  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 June 30, 2007, the last business day of registrant's most recently completed second fiscal quarter, was \$1,274,251,806. Shares held by each officer and director of the registrant and by each person who owned 10 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.

As of January 31, 2008, 115,053,492 shares of the registrant's Common Stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Document: Portions of the Definitive Proxy Statement, to be filed subsequently  
Incorporated into Form 10-K: Part III



---

**PART I**

**Item 1. Business.**

THE COMPANY

Entegris is a worldwide developer, manufacturer and supplier of materials integrity management solutions to the microelectronics industry in general and to the semiconductor and data storage markets in particular. Our materials integrity management 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. Our 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. We have also leveraged our core technology capabilities to extend our materials integrity management solutions to other high technology applications such as the fuel cell market. Our products are also used to manufacture a range of other products, such as flat panel displays, high-purity chemicals, photoresists, solar cells, gas lasers, optical and magnetic storage devices and fiber optic cables. We sell our products worldwide through a direct sales force and through distributors in selected regions.

We sell a diverse portfolio of products that includes more than 16,000 standard and customized products that we believe provide the most comprehensive offering of materials integrity management products and services to the microelectronics industry. Our products include:

Microenvironment products, including wafer shippers, wafer transport and process carriers, reticle transport and storage products, standard mechanical interface pods and work-in-process boxes. These products also include shippers and trays that enable the transportation and handling of completed integrated circuits during testing, assembly and packaging operations and that prevent the degradation and damage of magnetic hard disk drives and read/write heads as they are processed and shipped.

Liquid micro-contamination control products including consumable membrane filters and purifiers and roller brushes for post Chemical Mechanical Planarization (CMP) cleaning applications.

Liquid systems products including fluid-handling products such as valves, fittings, tubing, pipe, fluid measuring and control products and containers that assure the consistent and safe delivery and storage of sophisticated chemicals between chemical manufacturers and manufacturers point-of-use, as well as the precision dispense of chemicals onto the wafer.

Gas micro-contamination products, including gas purification components and systems, that purify semiconductor process gases and the ambient manufacturing environment.

Certain of these products are unit driven and consumable products that rely on the level of semiconductor manufacturing activity to drive growth while others rely on expansion of manufacturing capacity to drive growth. Our unit driven and consumable product class includes wafer shippers, disk-shipping containers and test assembly and packaging products, membrane-based liquid filters and housings, metal-based gas filters and resin-based gas purifiers. Our capital expense driven products include our process carriers that protect the integrity of in-process wafers, components, systems and subsystems that use electro-mechanical, pressure differential and related technologies, to permit semiconductor and other electronics manufacturers to monitor and control the flow and condition of process liquids used in these manufacturing processes.

SIGNIFICANT DEVELOPMENTS

The Company was incorporated in Delaware in March 2005 in connection with a strategic merger of equals transaction between Entegris, Inc., a Minnesota corporation (Entegris Minnesota), and Mykrolis Corporation, a Delaware corporation (Mykrolis). Effective August 6, 2005, Entegris Minnesota and Mykrolis were each merged into the Company with the Company as the surviving corporation to carry on the combined businesses. For more information concerning the history of our predecessor companies see [Our History](#) below.

Effective January 1, 2006, the Company changed its fiscal year to the calendar year. As a result of this change, during 2005 the Company had a four-month transition period following the end of its prior fiscal year, running from August 28, 2005, through December 31, 2005. As a result, the financial periods presented in the Company's consolidated financial statements appearing starting at page F-1 below cover the following periods: the twelve months ended December 31, 2007 and December 31, 2006; the four-month transition period ended December 31, 2005; and the twelve months ended August 27, 2005.

Certain financial data included in the following discussion of the Company's business in Items 1 and 1A of this report is shown for twelve-month periods ended December 31, 2007, 2006 and 2005 and is presented on a pro forma combined basis.

In May 2007, the Company's Board of Directors authorized a share repurchase program to acquire up to \$250 million of the Company's stock in a modified Dutch Auction self-tender offer. Pursuant to this transaction, which was completed in June 2007, the Company purchased 21.1 million shares of its common stock at a price of \$11.80 per share, plus costs to acquire the shares, for a total cash outlay of approximately \$251.4 million. Following the completion of this tender offer, the Company had approximately 115.7 million shares of common stock outstanding. On November 15, 2007 the Company announced a share buyback program to repurchase up to \$49 million of its common stock in open market purchases under an existing stock repurchase authorization by the Company's Board of Directors. The share buyback program, which commenced on December 1, 2007, was established in accordance with the provisions of Rule 10b5-1 and Rule 10b-18 under the Securities Exchange Act of 1934.

#### 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.

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 and purification 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, liquid and gas filters and purifiers, fluid and gas handling components and integrated circuit trays. Semiconductor unit volume is the primary driver of the demand for certain of these materials and products because they are used or consumed throughout the production process and many are replenished or replaced on a regular basis. Demand for other products such as wafer transport and process carriers and equipment products are driven primarily by capacity expansion.

The manufacture of semiconductors is a highly complex process that consists of two principal segments: front-end processes and back-end processes. The front-end process begins with the delivery of raw silicon wafers from wafer manufacturers to semiconductor manufacturers and requires hundreds of highly complex and sensitive manufacturing steps, during which a variety of materials, including chemicals and gases, are introduced. We offer products for each of the primary front-end process steps, which are listed below, as well as our traditional businesses that provide products to transport in-process wafers between each of these steps.

*Deposition.* Deposition refers to placing layers of insulating or conductive materials on a wafer surface in thin films that make up the circuit elements of semiconductor devices. The two main deposition processes are physical vapor deposition, where a thin film is deposited on a wafer surface in a low-pressure gas environment, and chemical vapor deposition, where a thin film is deposited on a wafer surface using a gas medium and a chemical bonding process. In addition, electro-plating technology is utilized for the deposition of low resistance

conductive materials such as copper. The control of uniformity and thickness of these films through filtration and purification of the fluids and materials used during the process is critical to the performance of the semiconductor circuit and, consequently, the manufacturing yield.

*Chemical Mechanical Planarization.* CMP flattens, or planarizes, the topography of the film surface on the wafer to permit the patterning of small features on the resulting smooth surface by the photolithography process. Semiconductor manufacturers need our filtration and purification systems to maintain acceptable manufacturing yields through the chemical mechanical planarization process by filtering the liquid slurries, which are solutions containing abrasive particles in a chemical mixture, to remove oversized particles and contaminants that can cause defects on a wafer's surface while not affecting the functioning of the abrasive particles in the liquid slurries. In addition, manufacturers use our consumable PVA roller brushes to clean the wafer after completion of the CMP process to prepare the wafer for subsequent operations.

*Photolithography.* Photolithography is the process step that defines the patterns of the circuits to be built on the chip. Before photolithography, a wafer is pre-coated with photoresist, a light-sensitive film composed of ultra-high purity chemicals in liquid form. The photoresist is exposed to specific forms of radiation, such as ultraviolet light, electrons or x-rays, to form patterns that eventually become the circuitry on the chip. This process is repeated many times, using different patterns and interconnects between layers to form the complex, multi-layer circuitry on a semiconductor chip. As device geometries decrease and wafer sizes increase, it is even more critical that these photoresists are dispensed on to the chip with accurate thickness and uniformity, as well as with low levels of contamination, and that the process gases are free of micro-contamination so that manufacturers can achieve acceptable yields in the manufacturing process. Our liquid filtration and liquid dispense systems play a critical role in assuring the pure, accurate and uniform dispense of photoresists on to the wafer. In addition, our gas micro-contamination systems eliminate airborne amine contaminants that can disrupt effective photolithography processes.

*Etch and Resist Strip.* Etch is the process of selectively removing precise areas of thin films that have been deposited on the surface of a wafer. The hardened photoresist protects the remaining material that makes up the circuits. During etch, specific areas of the film not covered by photoresist are removed to leave a desired circuit pattern. Similarly, resist strip is a process of removing the photoresist material from the wafer after the desired pattern has been placed on the wafer. Emerging advanced etch and resist strip applications require precisely controlled gas chemistries and flow rates in order to achieve precise etch and resist strip characteristics. Our gas filters and purifiers help assure the purity of these process gas streams.

*Wet Cleaning.* Ultra-high purity chemicals and photoresists of precise composition are used to clean the wafers, to pattern circuit images and to remove photoresists after etch. Before processes such as photoresist coating, thin film deposition, ion implantation, diffusion and oxidation, and after processes, such as ion implantation and etch, the photoresists must be stripped off, and the wafer cleaned in multiple steps of chemical processes. To maintain manufacturing yields and avoid defective products, these chemicals must be maintained at very high purity levels without the presence of foreign material such as particles, ions or organic contaminants. Our liquid filters and purifiers are used to assure the purity of these chemicals.

Our wafer and reticle carriers are high purity mini-environments which carry wafers between each of the above process steps protecting them from damage and contamination during these transport operations. Our fluid handling components assure the delivery of pure liquid chemicals to each of these process steps. Front end wafer processing can involve hundreds of steps and take several weeks. As a result, a batch of 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. Thus, 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. Our materials integrity management products enable semiconductor manufacturers 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.

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. Our traditional materials integrity management products, such as wafer shippers, wafer and reticle carriers 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. This increasing complexity of semiconductor devices has resulted in a number of challenges including the need for more complex, higher-precision liquid and gas delivery, measurement, control and purification systems and subsystems in the front-end manufacturing processes and to improve time-to-market, reduce manufacturing costs, improve production quality and enhance product reliability and long-term service and support. To address these challenges, semiconductor equipment companies and device manufacturers are outsourcing the design and manufacture of liquid delivery, measurement, control and purification systems, subsystems, components, and consumables to us and to other well-established subsystem and component companies that have worldwide presence and leading technologies. The design and performance of those liquid delivery systems, subsystems, components and consumables are critical to the front-end semiconductor manufacturing process because they directly affect cost of ownership and manufacturing yields. We continually seek opportunities to work with our customers to address these challenges.

Also in response to these challenges and to achieve 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. The need for efficient and reliable materials integrity management is particularly important as new materials are introduced and as 300 mm semiconductor wafer manufacturing becomes a more prevalent manufacturing technology. Processing 300 mm 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 300 mm wafers more vulnerable to damage or contamination. These trends will present new and increasingly difficult shipping, transport, process and storage challenges. We seek to bring our advanced polymer manufacturing and advanced tool design capabilities to bear on these challenges to provide our customers with innovative materials integrity management solutions.

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.

Many of the processes used to manufacture semiconductors are also used to manufacture flat panel displays, magnetic and optical storage devices and fiber optic cables for telecommunications, resulting in the need for similar filtration, purification, control and measurement capabilities. We seek to leverage our products and expertise in serving semiconductor applications to address these important market opportunities.

OUR BUSINESS STRATEGY

Our objective is to be a global leader providing innovative materials integrity management solutions to the semiconductor and ancillary markets. We intend to build upon our position as a worldwide developer, manufacturer and supplier of liquid delivery systems, components and consumables used by semiconductor and other electronic device manufacturers to grow our business in these and other high value-added manufacturing process markets. Our strategy includes the following key elements:

*Comprehensive and Diverse Product Offerings.* The semiconductor manufacturing industry is driven by rapid technological changes and intense competition. We believe that semiconductor manufacturers are seeking process control suppliers who can provide a broad range of reliable, flexible and cost-effective products, as well as the technological and application design expertise necessary to deliver effective solutions. Our comprehensive product offering enables us to meet a broad range of customer needs and provide a single source of flexible product offerings for semiconductor device and capital equipment manufacturers as they seek to consolidate their supplier relationships to a smaller select group. In addition, we believe manufacturers of semiconductor tools are looking to their suppliers for subsystems that provide more integrated functionality and seamlessly communicate with other equipment. We believe our offering of consumables and equipment, as well as our ability to integrate them, allows us to provide advanced subsystems.

*Diversified Revenue Stream.* We target a diversified revenue stream by balancing our sales of wafer transport and process carriers as well as component and subsystem equipment products with sales of our unit-driven and consumable products. Our unit-driven and consumable products provide a relatively more stable and recurring source of revenue in an otherwise cyclical industry. Our capital expense driven products, which are generally dependent upon such factors as the construction and expansion of semiconductor manufacturing facilities and the retrofitting and renovation of existing semiconductor facilities, position us to benefit from increases in capital spending that are typically more subject to the volatility of industry cycles.

*Technology Leadership.* With the emergence of smaller and more powerful semiconductor devices, and the deployment of new materials and processes to produce them, we believe there is a need for greater materials integrity management within the semiconductor fabrication process. We seek to extend our technology by developing advanced products that address more stringent requirements for greater purification, protection and transport of high value-added materials and for contamination control, fluid delivery and monitoring, and system integration. We have continuously improved our products as our customers' needs have evolved. For example: we have developed proprietary materials blends, for use in our wafer handling product family which address the contamination concerns of advanced semiconductor processing below 100 nanometers; we have also developed a next-generation 300 mm front-opening unified pod utilizing those materials targeting the needs of 65 nm production; and we have expanded upon our proprietary two-stage dispense technology with integrated filtration for photoresist delivery, where the photoresist is filtered through one pump and precisely dispensed through a second pump at a different flow rate to reduce defects on wafers.

*Strong Customer Base.* We have established ongoing relationships with many leading original equipment manufacturers and materials suppliers in our key markets. These industry relationships have provided us with the opportunity for significant collaboration with our customers at the product design stage which has facilitated our ability to introduce new products and applications that meet our customers' needs. For example, we work with our key customers at the pre-design and design stages to identify and respond to their requests for current and future generations of products. We target opportunities to offer new technologies in emerging applications, such as copper plating, chemical mechanical planarization, wet-dry cleaning systems and photolithography. We believe that our large customer base will continue to be an important source of new product development ideas.

*Global Presence.* We have established a global infrastructure of design, manufacturing, distribution, service and support facilities to meet the needs of our customers. In addition, we may expand our global infrastructure, either through acquisition or internal development, to accommodate increased demand or we may consolidate



inefficient operations to optimize our manufacturing and other capabilities. For example, we have established sales and service offices in China in anticipation of a growing semiconductor manufacturing base in that region. As semiconductor and other electronic device manufacturers have become increasingly global, they have required that suppliers offer comprehensive local repair and customer support services. In response to this trend we transferred customer support and logistics activities to local regions in an effort to enhance our global customer contact and awareness. We maintain our customer relationships through a combination of direct sales and support personnel and selected independent sales representatives and distributors in Asia, Europe and the Middle East.

*Ancillary Markets.* We plan to leverage our accumulated expertise in the semiconductor industry by developing products for applications that employ similar production processes that utilize materials integrity management, high-purity fluids and integrated dispense system technologies. Our products are used in manufacturing processes outside of the semiconductor industry, including the manufacturing of flat panel displays, fuel cell components, high-purity chemicals, photoresists, solar cells, gas lasers, optical and magnetic storage devices and fiber optic cables. We plan to continue to identify and develop products that address materials integrity management and advanced materials processing applications where fluid management plays a critical role. We believe that by utilizing our technology to provide manufacturing solutions across multiple industries we are able to increase the total available market for our products and reduce, to an extent, our exposure to the cyclicity of any particular market.

*Strategic Acquisitions, Partnerships and Related Transactions.* We plan to pursue strategic acquisitions and business partnerships that enable us to address gaps in our product offerings, secure new customers, diversify into complementary product markets or broaden our technological capabilities and product offerings. As the dynamics of the markets that we serve shift, we will re-evaluate the ability of our existing businesses to provide value-added solutions to those markets in a manner that contributes to achieving our objectives; in the event that we conclude that a business is not able to do this, we expect to restructure or replace that business. Our decisions to divest three product lines in late 2005 and early 2006 and to divest our cleaning equipment business in 2007 were made pursuant to this strategy. Finally, we are continuously evaluating opportunities for strategic alliances and joint development efforts with key customers and other industry leaders.

#### OUR PRODUCTS

Our product portfolio includes four major categories of products: microenvironment products, liquid microcontamination control products, liquid subsystem products and gas micro-contamination products. These product categories fall into two major product classes: unit-driven and consumable products, and capital-spending driven products. Liquid micro-contamination control products are primarily unit-driven and consumable products. Microenvironment products, liquid subsystem products and gas micro-contamination products include both unit-driven and consumable products as well as capital spending driven products. Unit-driven and consumable products, including service revenue, accounted for approximately 60%, 59% and 60% of our net sales for calendar years 2007, 2006 and 2005, respectively, and capital-expense driven products accounted for approximately 40%, 41% and 40% of our net sales for the calendar years 2007, 2006 and 2005, respectively. There follows a detailed description of each of these four categories of products:

#### *Microenvironment Products*

Our microenvironment products preserve the integrity of wafers, reticles and electronic components at various stages of transport, processing and storage. Our microenvironment products fall into two sub-categories, wafer handling and finished electronic component products.

**WAFER HANDLING PRODUCTS.** We believe that 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 and 200 mm wafers. We also offer a full-pitch front-opening shipping box, or FOSB, for the transportation and automated interface of 300 mm 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.

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 100 mm through 300 mm.

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<sup>®</sup> 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.

**FINISHED ELECTRONIC COMPONENT 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 carriers for 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](http://ictray.com), a website which allows new and existing customers to select from our full range of standard and custom integrated circuit trays.

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 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.

#### *Liquid Micro-contamination Control Products*

Liquid processing occurs during multiple manufacturing steps including photolithography, deposition, planarization and surface etching and cleaning. The fluids that are used include various mixtures of acids, bases, solvents, slurries and photochemicals, which in turn are used over a broad range of operating conditions, including temperatures from 5 degrees Celsius up to 180 degrees Celsius. The design and performance of our

liquid filtration and purification products are critical to the semiconductor manufacturing process because they directly affect the cost of ownership and manufacturing yield. Specially designed proprietary filters remove sub-micron sized particles and bubbles from the different fluid streams that are used in the manufacturing process. Some of our filters are constructed with ultra-high molecular weight polyethylene flat sheet membranes that offer improved bubble clearance and gel removal, either of which can cause defects in the wafers if not removed. Our low hold-up volume disposable filters, with flat sheet membranes, use our Connectology technology to allow filter changes in less than a minute, significantly faster than conventional filters, to reduce the amount of expensive chemicals lost each time a filter is changed and to minimize operator exposure to hazardous solvents and vapors during changeout. We also offer a line of consumable PVA roller brush products to clean the wafer following the chemical mechanical planarization process. Our unique Planacore PVA roller brush is molded on the core to allow easy installation that reduces tool downtime and a dimensionally stable product that provides consistent wafer-to-wafer cleaning performance.

#### *Liquid Systems*

**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. Most of these products are made from perfluoroalkoxy or PFA, a fluoropolymer resin widely used in the semiconductor 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, fittings, tubing, pipe, chemical containers and custom fabricated products for high-purity chemical applications.

**LIQUID DELIVERY AND CONTROL SYSTEMS.** Our proprietary photochemical filtration and dispense systems integrate our patented two-stage, filter device and valve control technologies. We believe that we offer the microelectronics industry the only dispense systems with integrated filtration capability and that our proprietary patented two-stage technology has a significant advantage over conventional single-stage technology. Our two-stage technology permits the filtering and dispense functions to operate independently so that filtering and dispensing of photochemicals can occur at different rates, reducing the differential pressure across the filter, conserving expensive photochemicals and resulting in reduced defects in wafers. As described above, we offer a line of proprietary filters specifically designed to efficiently connect with these systems. Our patented digital valve control technology improves chemical uniformity on wafers and improves ease of optimized system operation. In addition, our integrated high-precision liquid dispense systems enable uniform application of photoresists for the spin-coating process, where uniformity is measured in units of Angstroms, a tiny fraction of the thickness of a human hair.

We offer a wide variety of measurement and control products for high-purity and corrosive applications. For electronic measurement and control of liquids, we provide a complete line of pressure and flow measurement and control products as well as 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.

#### *Gas Micro-Contamination Products*

Our Wafergard<sup>®</sup>, ChamberGard and Waferpure<sup>®</sup> particle and molecular filtration products purify the gas entering the process chamber in order to eliminate system and wafer problems due to particulate, atmospheric and chemical contaminants. These filters are able to retain all particles 0.003 microns and larger. Our metal

filters, such as stainless steel and nickel filters, reduce outgassing and improve corrosion resistance. Our Waferpure<sup>®</sup> and Aeronex Gatekeeper<sup>®</sup> purifiers chemically react with and absorb volatile contaminants, such as oxygen and water, to prevent contamination and our ChamberGard vent diffusers reduce particle contamination and processing cycle times. We offer a wide variety of gas purification products to meet the stringent requirements of semiconductor processing. Our Aeronex Gas Purification Systems contain dual-resin beds, providing a continuous supply of purified gas without process interruption. These gas purification systems are capable of handling higher flow rates and longer duty cycles than cartridge purifiers. Our Extraction products include filter housings and hybrid media chemical air filters which purify air entering exposure tool and process tool enclosures and remove airborne molecular contaminants.

In addition to the above four product categories, we are pursuing a number of highly engineered, advanced materials product initiatives including: an initiative to transfer our advanced polymer knowledge into the fuel cell market, where the properties of highly engineered polymers can be used in various products and manufacturing processes; and a high-performance specialty coatings business acquired during 2007 where critical components used in semiconductor and other high-technology manufacturing operations are coated by means of a low-temperature plasma-assisted chemical vapor deposition process to provide corrosion and abrasion resistance and desired conductivity and hydrophobicity properties.

#### *Worldwide Applications Development and Field Support Capabilities*

We provide strong technical support to our customers through local service groups and engineers consisting of field applications engineers, technical service groups, applications development groups and training capabilities. Our field applications engineers, located in the United States and in approximately ten other countries, work directly with our customers on product qualification and process improvements in their facilities. In addition, in response to customer needs for local technical service and fast turn-around time, we maintain regional applications laboratories. Our applications laboratories maintain process equipment that simulate customers' applications and industry test standards and provide product evaluation, technical support and complaint resolution for our customers.

#### OUR CUSTOMERS AND MARKETS

Our major customer groups include integrated circuit device manufacturers, original equipment manufacturers that provide equipment to integrated circuit device manufacturers, gas and chemical manufacturing companies and manufacturers of high-precision electronics.

Our most significant customers based on sales in fiscal 2007 include industry leaders, such as AMD, Dainippon Screen Manufacturing Co., Ltd., IBM, Komag, Inc., Motorola, Samsung America Inc., Seagate Technology, Siltronic AG, SUMCO Oregon Corp., Taiwan Semiconductor Manufacturing Co. Ltd., and UMC Group. We also sell our products to flat panel display original equipment manufacturers, materials suppliers and end-users. The major manufacturers for flat panel displays and flat panel display equipment are concentrated in Japan, Korea and other parts of Asia.

In calendar years 2007, 2006 and 2005, net sales to our top ten customers accounted for approximately 28%, 27% and 33%, respectively, of our net sales. During those same periods no single customer accounted for more than 10% of our net sales and international net sales represented approximately 74%, 71% and 71%, respectively, of our net sales. Over 2,700 customers purchased products from us during 2007.

We may enter into supply agreements with our customers to govern the conduct of our business with our customers, including the manufacture of our products. These agreements generally have a term of one to three years, but do not contain any long-term purchase commitments. Instead, we work closely with our customers to develop non-binding forecasts of the future volume of orders. However, customers may cancel their orders, change production quantities from forecasted volumes or delay production for a number of reasons beyond our control.

SALES AND MARKETING

We sell our products worldwide primarily through our direct sales force located in offices in all major semiconductor markets, as well as through independent distributors elsewhere. As of December 31, 2007, our sales and marketing force consisted of approximately 460 employees worldwide. Our direct sales force is supplemented by independent sales representatives and agents.

Our marketing efforts focus on our push/pull marketing strategy in order to maximize our selling opportunities. We work with original equipment manufacturers to persuade them to design tools that require our products and we create end-user pull demand by persuading semiconductor manufacturers to specify our products. Our industry relationships have provided us with the opportunity for significant collaboration with our customers at the product design stage that has facilitated our ability to introduce new products and applications that meet our customers' needs. In addition, we are constantly identifying for our customers the variety of analytical, purification and process control challenges that may be addressed by our products. Further, we adapt our products and technologies to resolve process control issues identified by our customers. Our sales representatives provide our customers with worldwide support and information about our products.

We believe that our technical support services are important to our marketing efforts. These services include assisting in defining a customer's needs, evaluating alternative products, designing a specific system to perform the desired separation, training users and assisting customers in compliance with relevant government regulations. In addition, we maintain a network of service centers located in the United States and in key international markets to support our products.

COMPETITION

The market for our products is highly competitive. While price is an important factor, we compete primarily on the basis of the following factors:

- |                                    |  |
|------------------------------------|--|
| historical customer relationships; | breadth of product line;                 |
| technical expertise;               | breadth of geographic presence;          |
| product quality and performance;   | advanced manufacturing capabilities; and |
| total cost of ownership;           | after-sales service.                     |
| customer service and support;      |  |

We believe that we compete favorably with respect to all of the factors listed above, but we cannot assure you that we will continue to do so. We believe that our key competitive strengths include our broad product line, the low total cost of ownership of our products, our ability to provide our customers with quick order fulfillment and our technical expertise. However, our competitive position varies depending on the market segment and specific product areas within these segments. While we have longstanding relationships with a number of semiconductor and other electronic device manufacturers, we also face significant competition from companies that have longstanding relationships with other semiconductor and electronic device manufacturers and, as a result, have been able to have their products specified by those customers for use in manufacturers' fabrication facilities. In the markets for our consumable products, we believe that our differentiated membrane and materials integrity management technologies, strong supply chain capabilities, that allow us to provide our customers with quick order fulfillment, and technical expertise, which enables us to develop membranes to meet specific customer needs and assist our customers in improving the functionality of our membranes for particular applications, allow us to compete favorably. In these markets our competitors compete against us on the basis of price, as well as alternative membrane technology having different functionality, manufacturing capabilities and breadth of geographic presence.

The market for our products is highly fragmented, and we compete with a number of different companies. Our microenvironment product lines face competition largely on a product-by-product basis. We face competition from companies such as Miraial (formerly Kakizaki), Dainichi and Shin-Etsu Polymer and from regional suppliers such as e.PAK Resources Pte. Ltd. These companies compete with us primarily in 200 mm and 300 mm applications. Our liquid systems products also face worldwide competition from companies such as Saint-Gobain, Parker, Gemu, Donaldson and Iwaki Co., Ltd. In finished electronic components products, we compete with companies such as ITW/Camtex, Peak International and 3M and from regional suppliers. Our liquid micro-contamination control products compete with product offerings from a wide range of companies including both large companies such as Pall Corporation as well as small Asian filter manufacturers. In gas micro-contamination products we compete with companies such as SAES Puregas and Mott Metallurgical Corporation. Some of our competitors are larger and have greater resources than we do. In some cases, our competitors are smaller than us, but well-established in specific product niches. We believe that none of our competitors competes with us across all of our product offerings and that, within the markets that we serve, we offer a broader line of products, make use of a wider range of process control technologies and address a broader range of applications than any single competitor.

#### RESEARCH AND DEVELOPMENT

Our aggregate research and development expenses in calendar years 2007, 2006 and 2005 were \$39.7 million, \$38.1 million and \$36.1 million, respectively. As of December 31, 2007, we had approximately 277 employees in engineering, research and development. In addition, we have followed a practice of supplementing our internal research and development efforts by licensing technology from unaffiliated third parties and/or acquiring distribution rights with respect thereto when we believe it is in our long-term interests to do so.

To meet the global needs of our customers, we have research and development capabilities in Minnesota, Massachusetts, Japan and Malaysia. Our research and development efforts are directed toward developing and improving our technology platforms for semiconductor and advanced processing applications and identifying and developing products for new applications for which fluid management plays a critical role.

We use sophisticated methodologies to research, 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 risks and threats to the integrity of the critical materials that our customers use in their manufacturing processes. 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.

Key elements of our research and development expenditures over the past three years have included the development of new product platforms to meet the manufacturing needs for 90, 65, 45 and 32 nanometer semiconductor devices. Driven by the proliferation of new materials and chemicals in the manufacturing processes and increased needs for tighter process control for 300mm wafers, investments were made for new contamination control products in the area of copper interconnects, deep ultra-violet (DUV) photolithography; and chemical and gas management technologies for advanced wafer cleans, deposition and etch equipment. Additional investments were made in the area of advanced process control, monitoring and diagnostics capabilities for future generations of semiconductor manufacturing processes. Our employees also work closely with our customers' development personnel. These relationships help us identify and define future technical

needs on which to focus our research and development efforts. In addition, we participate in Semiconductor Equipment and Materials International (SEMI), a consortium of semiconductor equipment suppliers. We also support research at academic and other institutions targeted at advances in materials science and semiconductor process development.

#### MANUFACTURING

Our customers rely on our products to assure the integrity of the critical materials used in their manufacturing processes 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, 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. In addition, we use extrusion technology to extrude a polymer mix into flat sheet and hollow fiber membranes.

**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.

**Membrane Casting.** We cast membrane by extruding a polymer into flat sheet or hollow fiber format that is passed through a chamber with controlled atmospheric conditions to control the development of voids or pores in the membrane. Once cast, the membrane is subjected to solvent extraction and annealing steps. The various properties of the membranes that we offer are developed during subsequent process steps.

**Cartridge Manufacturing.** We fabricate the membrane we manufacture as well as membranes manufactured by others into finished filtration cartridges in a variety of configurations. The fabrication process involves membrane processing into pleated and other configurations around a central core and enclosing it in framework of end caps and protective screening for use in fabricated cartridge housings. We also manufacture filter cartridges that are integrated into their own housings and incorporate our patented Connectology quick connect technology.





**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.

**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 approximately 60 tool development and tool-making staff at locations in the United States and Malaysia. 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.

#### PATENTS AND OTHER INTELLECTUAL PROPERTY RIGHTS

We rely on a combination of patent, copyright, trademark and trade secret laws and license agreements to establish and protect our proprietary rights. As of February 1, 2008 our patent portfolio included 328 current U.S. patents, 720 current foreign patents, including counterparts to U.S. filings, 124 pending U.S. patent applications, 63 pending filings under the Patent Cooperation Treaty not yet nationalized and 793 pending foreign patent applications. While we believe that patents may be important for aspects of our business, we believe that our success also depends more upon close customer contact, innovation, technological expertise, responsiveness and worldwide distribution. Additionally, while our patented technology may delay or deter a competitor in offering a competing product, we do not believe that our patent portfolio functions as a barrier to entry for any of our competitors. In addition, while we license and will continue to license technology used in the manufacture and distribution of products from third parties, except as described below, these licenses are not currently related to any of our core product technology. In connection with the separation of Mykrolis from Millipore Corporation, Mykrolis was granted licenses to certain Millipore technology. Our use of Millipore's technology is governed by the agreements governing the separation of Mykrolis from Millipore, which prohibit our use of Millipore's technology in fields of use outside the microelectronics industry. In general, where technology is used both by Millipore in the manufacture of its products and by us in the manufacture of our products, Millipore retained ownership of the technology and granted us a license to use the technology, limited to fields of use in the microelectronics industry. These restrictions could limit our ability to expand our business into markets outside the microelectronics industry, which could limit our growth.

We require each of our employees, including our executive officers, to enter into standard agreements pursuant to which the employee agrees to keep confidential all of our proprietary information and to assign to us all inventions made while employed by us.

The patent position of any manufacturer, including us, is subject to uncertainties and may involve complex legal and factual issues. Litigation is currently necessary and will likely 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.

GOVERNMENTAL REGULATION

Our operations are subject to federal, state and local regulatory requirements relating to environmental, waste management and health and safety matters, including measures relating to the release, use, storage, treatment, transportation, discharge, disposal and remediation of contaminants, hazardous substances and wastes, as well as practices and procedures applicable to the construction and operation of our plants. There can be no assurance that we will not incur material costs and liabilities or that our past or future operations will not result in exposure to injury or claims of injury by employees or the public. Although some risk of costs and liabilities related to these matters is inherent in our business, as with many similar businesses, we believe that our business is operated in substantial compliance with applicable regulations. However, new, modified or more stringent requirements or enforcement policies could be adopted, which could adversely affect us. While we expect that capital expenditures will be necessary to assure that any new manufacturing facility is in compliance with environmental and health and safety laws, we do not expect these expenditures to be material. Otherwise, we are not presently aware of any facts or circumstances that would cause us to incur significant liabilities in the future related to environmental, health and safety law compliance.

EMPLOYEES

As of February 1, 2008, we had approximately 2,781 full-time employees, including approximately 277 in engineering, research and development and approximately 460 in sales and marketing as well as approximately 241 temporary employees. Given the variability of business cycles in the semiconductor industry and the quick response time required by our customers, it is critical that we be able to quickly adjust the size of our production staff to maximize efficiency. Therefore, we use skilled temporary labor as required.

None of our employees are represented by a labor union or covered by a collective bargaining agreement other than statutorily mandated programs in European countries.

INFORMATION ABOUT OUR OPERATING SEGMENT

The Company operates in one reportable business segment that develops, manufactures and sells consumables and capital equipment products to semiconductor manufacturing companies and other companies using similar manufacturing processes, as well as OEM suppliers to those companies. In calendar years 2007, 2006 and 2005 approximately 74%, 71% and 71%, respectively, of our net sales were made to customers outside North America. Industry and geographic segment information is discussed in Note 19 to the Entegris, Inc. Consolidated Financial Statements (the Financial Statements ) included in response to Item 8 below, which Note is hereby incorporated herein by reference.

OTHER INFORMATION

On July 27, 2005, our Board of Directors adopted a shareholder rights plan (the Rights Plan ) pursuant to which Entegris declared a dividend on August 8, 2005 to its shareholders of record on that date of one preferred share purchase right (a Right ) for each share of Entegris common stock owned on August 8, 2005. Each Right entitles the holder to purchase one-hundredth of a share of a series of preferred stock at an exercise price of \$50, subject to adjustment as provided in the Rights Plan. The Rights Plan is designed to protect Entegris' shareholders from attempts by others to acquire Entegris on terms or by using tactics that could deny all

shareholders the opportunity to realize the full value of their investment. The Rights are attached to the shares of our common stock until certain triggering events specified in the Rights Agreement occur, including, unless approved by our Board of Directors, an acquisition by a person or group of specified levels of beneficial ownership of our common stock or a tender offer for our common stock. Upon the occurrence of any of these triggering events, the Rights authorize the holders to purchase at the then-current exercise price for the Rights, that number of shares of our common stock having a market value equal to twice the exercise price. The Rights are redeemable by us for \$0.01 and will expire on August 8, 2015. One of the events which will trigger the Rights is the acquisition, or commencement of a tender offer, by a person (an Acquiring Person, as defined in the shareholder rights plan), other than Entegris or any of our subsidiaries or employee benefit plans, of 15% or more of the outstanding shares of our common stock. An Acquiring Person may not exercise a Right.

Entegris products are made from a wide variety of raw materials which are generally available in quantity from alternate sources of supply. However, certain materials included in the Company's products, such as polymer resins and certain membranes, 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 interrupt our manufacturing operations and result in an adverse effect on the Company's results of operations. Furthermore, a significant increase in the price of one or more of these components could also adversely affect the Company's results of operations.

#### OUR HISTORY

Effective August 6, 2005 Entegris, Inc., a Minnesota corporation, and Mykrolis Corporation, a Delaware corporation, completed a strategic merger of equals transaction, pursuant to which they were each merged into the Company to carry on the combined businesses. Pursuant to this merger each stockholder of Entegris Minnesota received one share of Entegris for each Entegris Minnesota share held and each Mykrolis stockholder received 1.39 shares of Entegris for each Mykrolis share held. Immediately following the Merger, our Board of Directors was comprised of five directors from Entegris Minnesota and five directors from Mykrolis. Our management team is drawn from both Mykrolis and Entegris Minnesota. Our executive offices are located at 3500 Lyman Boulevard, Chaska, Minnesota 55318, and our telephone number is (952) 556-3131. Unless the context otherwise requires, the terms Entegris, we, our, or the Company mean Entegris, Inc., a Delaware corporation, and its subsidiaries; the term Mykrolis means Mykrolis Corporation and its subsidiaries when referring to periods prior to August 6, 2005; Entegris Minnesota means Entegris, Inc., a Minnesota corporation and its subsidiaries other than Entegris when referring to periods prior to August 6, 2005; and the term Merger refers to the transactions effected on August 6, 2005 in which Entegris Minnesota merged into Entegris, followed by the merger of Mykrolis into Entegris.

We were incorporated in Delaware in March 2005 under the name Eagle DE, Inc. as a wholly owned subsidiary of Entegris Minnesota. Effective August 6, 2005 Entegris Minnesota merged into us in a reincorporation merger of which we were the surviving corporation. Immediately following that merger, Mykrolis merged into us and our name was changed to Entegris, Inc. Our stock is traded on the NASDAQ National Market System under the symbol ENTG.

Entegris Minnesota 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. On July 10, 2000 Entegris Minnesota completed an initial public offering of approximately 19% of the total shares of the Company's common stock outstanding.

Mykrolis was organized as a Delaware corporation on October 16, 2000 under the name Millipore MicroElectronics, Inc. in connection with the spin-off by Millipore Corporation of its microelectronics business unit. On March 31, 2001, Millipore effected the separation of the Mykrolis business from Millipore's business by transferring to Mykrolis substantially all of the assets and liabilities associated with its microelectronics business. On August 9, 2001 Mykrolis completed an initial public offering of approximately 18% of the total shares of the Company's common stock outstanding. On February 27, 2002, Millipore completed the spin-off of Mykrolis by distributing to its stockholders the 82% of the Mykrolis common stock that it held following the Mykrolis initial public offering.

EXECUTIVE OFFICERS

The following is a list, as of December 31, 2007, of our Executive Officers. All of the Executive Officers listed below were elected to serve until the first Directors Meeting following the 2008 Annual Stockholders Meeting.

Name	Age	Office	First Elected To Office*
<u>CORPORATE OFFICERS</u>			
Gideon Argov	51	President & Chief Executive Officer	2004
Gregory B. Graves	47	Senior Vice President, Chief Financial Officer & Treasurer	2002
Jean-Marc Pandraud	54	Executive Vice President & Chief Operating Officer	2001
Bertrand Loy	42	Executive Vice President & Chief Administrative Officer	2001
Peter W. Walcott	61	Senior Vice President, Secretary & General Counsel	2001
John J. Murphy	55	Senior Vice President Human Resources	2005
John Goodman	47	Senior Vice President Chief Technology & Innovation Officer	2005

\* With either the Company or a predecessor company

*Gideon Argov* has been our President and Chief Executive Officer and a director since the effectiveness of our merger with Mykrolis. He served as the Chief Executive Officer and a director of Mykrolis since November 2004. Prior to joining Mykrolis, Mr. Argov was a Special Limited Partner at Parthenon Capital, a Boston-based private equity partnership, since 2001. He served as Chairman, Chief Executive Officer and President of Kollmorgen Corporation from 1991 to 2000. From 1988 to 1991 he served as Chief Executive Officer of High Voltage Engineering Corporation. Prior to 1988, he led consulting engagement teams at Bain and Company. He is a director of Interline Brands, Inc. and Fundtech Corporation.

*Jean-Marc Pandraud* has been our Executive Vice President and Chief Operating Officer since the effectiveness of the merger with Mykrolis. He served as the President and Chief Operating Officer of Mykrolis since January 2001. Prior to that he served as Vice President and General Manager of the Microelectronics Divisions of Millipore, a position he had held since July 1999. From 1994 until 1999, Mr. Pandraud served as the Vice President and General Manager of Millipore's Laboratory Water Division and was also Regional Manager of Millipore's Latin American operations from 1997 until 1999. Mr. Pandraud also served as the Managing Director of Millipore's French subsidiary and as European General Manager for the Millipore Analytical Division from 1988 until 1994.

*Bertrand Loy* has been our Executive Vice President and Chief Administrative Officer since the effectiveness of the merger with Mykrolis. He served as the Vice President and Chief Financial Officer of Mykrolis since January 2001. Prior to that, Mr. Loy served as the Chief Information Officer of Millipore from April 1999 until December 2000. From 1995 until 1999, he served as the Division Controller for Millipore's Laboratory Water Division. From 1989 until 1995, Mr. Loy served Sandoz Pharmaceuticals (now Novartis) in a variety of financial, audit and controller positions located in Europe, Central America and Japan.

*Gregory B. Graves* has been our Senior Vice President and Chief Financial Officer since April of 2007; prior to that he served as Senior Vice President Strategic Planning & Business Development since the effectiveness of the merger with Mykrolis. Mr. Graves served as the Chief Business Development Officer of Entegris Minnesota since September 2002 and from September 2003 until August 2004 he also served as Senior Vice President of Finance. Prior to joining Entegris Minnesota, Mr. Graves held positions in investment banking and corporate development, including at U.S. Bancorp Piper Jaffray from June 1998 to August 2002 and at Dain Rauscher from October 1996 to May 1998.

*Peter W. Walcott* has been our Senior Vice President, Secretary and General Counsel since the effectiveness of the merger with Mykrolis. He served as the Vice President, Secretary and General Counsel of Mykrolis since October 2000. Mr. Walcott served as the Assistant General Counsel of Millipore from 1981 until March 2001.

*Joseph J. Murphy* joined us as our Senior Vice President Human Resources in October of 2005. He served as the Senior Vice President Human Resources of HNTB, an engineering and architectural services firm from February 2004 until October 2005 and as Corporate Vice President, Human Resources of Cadence Design Systems, Inc. from May of 2000 through October 2003 Prior to that Mr. Murphy held senior human resource positions with L.M. Ericsson Telephone Company and with General Electric Company.

*John Goodman* has been our Senior Vice President Chief Technology & Innovation Officer since the effectiveness of the merger with Mykrolis. He served as the Managing Director of the fuel cell market sector of Entegris Minnesota since January 2005 and prior to that as president of the fuel cell market sector since June 2002. Mr. Goodman served as Executive Vice President and Chief Technology Officer of Entegris Minnesota from 1999 to 2002. Prior to that time, Mr. Goodman held a variety of positions with Fluoroware (a predecessor to Entegris Minnesota) since 1982.

AVAILABLE INFORMATION

Our Annual Report on Form 10-K, our quarterly reports on Form 10-Q and any current reports on Form 8-K that we may file or furnish to the SEC pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934 as well as any amendments to any of those reports are available free of charge on or through our website as soon as reasonably practicable after we file them with or furnish them to the SEC electronically. Our website is located at <http://www.Entegris.com>; these reports can be found under Investor Relations SEC Filings . In addition, the SEC maintains a website containing these reports that can be located at <http://www.sec.gov>. These reports may also be read and copied at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330.

At their first meeting following the Merger, on August 10, 2005, our Board of Directors adopted a code of business ethics, The Entegris Code of Business Ethics, applicable to all of our executives, directors and employees as well as a set of corporate governance guidelines. The Entegris Code of Business Ethics, the Governance Guidelines and the charters for our Audit & Finance Committee, Governance & Nominating Committee and of our Management Development & Compensation Committee all appear on our website at <http://www.Entegris.com> under Investor Relations Governance . The Governance Guidelines and committee charters are also available in print to any shareholder that requests a copy. Copies may be obtained by contacting Peter W. Walcott, our Senior Vice President & General Counsel through our corporate headquarters.

**Item 1A. Risk Factors.**

*Risks Relating to our Business and Industry*

**The semiconductor industry has historically been 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 has historically been highly cyclical with periodic downturns, which often have resulted in decreased expenditures by semiconductor manufacturers. While over the past sixteen quarters this cyclicity has moderated somewhat, there can be no assurance that the semiconductor industry will not return to the high cyclicity of the past. Even this somewhat moderated cyclicity could cause our operating results to fluctuate significantly from one period to the next.

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. During downturns our revenue is reduced and there is likely to be an increase in 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.

**The semiconductor industry is subject to rapid demand shifts, which are difficult to predict. As a result, our inability to meet demand in response to these rapid shifts may cause a reduction in our market share.**

Our ability to increase sales of our products, particularly our capital equipment products, depends in part upon our ability to ramp up the use of our manufacturing capacity for such products in a timely manner and to mobilize our supply chain. In order to meet the demands of our customers, we may be required to ramp up our manufacturing capacity in as little as a few months. If we are unable to expand our manufacturing capacity on a timely basis or manage such expansion effectively, our customers could seek such products from other suppliers, and our market share could be reduced. Because demand shifts in the semiconductor industry are rapid and difficult to foresee, we may not be able to increase capacity quickly enough to respond to such an increase in demand.

**Our annual and quarterly operating results are subject to fluctuations as a result of rapid demand shifts and our insignificant level of backlog, and if we fail to meet the expectations of securities analysts or investors, the market price of our securities may decrease significantly.**

Our sales and profitability can vary significantly from quarter to quarter and year to year. Because our expense levels are relatively fixed in the short-term, an unanticipated decline in revenue in a particular quarter could disproportionately affect our net income in that quarter. In addition, we make a substantial portion of our shipments shortly after we receive the order, and therefore we operate with a relatively modest level of backlog. As a consequence of the just-in-time nature of shipments and the modest level of backlog, our results of operations may decline quickly and significantly in response to changes in order patterns or rapid decreases in demand for our products. We anticipate that fluctuations in operating results will continue in the future. Such fluctuations in our results could cause us to fail to meet the expectations of securities analysts or investors, which could cause the market price of our securities 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.

**We may not be able to accurately forecast demand for our products.**

As noted above, we typically operate our business on a just-in-time shipment basis with a modest level of backlog and we order supplies and plan production based on internal forecasts of demand. Due to these factors, we have, in the past, and may again in the future, fail to accurately forecast demand for our products, in terms of both volume and specific products for which there will be demand. This has led to, and may in the future lead to, delays in product shipments, disappointment of customer expectations, or, alternatively, an increased risk of excess inventory and of inventory obsolescence. If we fail to accurately forecast demand for our products, our business, financial condition and operating results could be materially and adversely affected.

**Semiconductor industry up-cycles may not reach historic levels but instead may reflect a lower rate of long-term growth, similar to the electronics industry.**

Notwithstanding the severe and prolonged downturn in the semiconductor industry and the related reduction in manufacturing operations during the period 2001 to 2003, there may still be excess manufacturing capacity. In

addition, there is no new high-opportunity application to drive growth in the semiconductor industry, as was the case in 1998 with telecommunications and internet applications. Accordingly, some analysts have predicted that the semiconductor industry may experience lower growth rates during a recovery cycle than has historically been the case and that its longer-term performance may reflect this lower growth rate, which would be similar to the growth rate of the electronics industry.

**If we are unable to maintain our technological expertise in design and manufacturing processes, we will not be able to successfully compete.**

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. We believe that our future success will depend upon our ability to develop and provide products that meet the changing needs of our customers, including the transition from the use of 200 millimeter wafers to 300 millimeter wafers, the shrinking of integrated circuit line-widths and the use of new classes of materials, such as copper, titanium nitride and organic and inorganic dielectric materials, which are materials that have either a low or high resistance to the flow of electricity. This requires that we successfully anticipate and respond to technological changes in manufacturing processes in a cost-effective and timely manner. Any inability to develop the technical specifications for any of our new products or enhancements to our existing products or to manufacture and ship these products or enhancements in volume in a timely manner could harm our business prospects and significantly reduce our sales. In addition, if new products have reliability or quality problems, we may experience reduced orders, higher manufacturing costs, delays in acceptance and payment, additional service and warranty expense and damage to our reputation.

**Because our sales are concentrated on a small number of key customers, our revenue and profitability may materially decline if one or more of our key customers do not continue to purchase our existing and new products in significant quantities.**

We depend and expect to continue to depend on a limited number of customers for a large portion of our business, and changes in several customers' orders could have a significant impact on our operating results. If any one of our key customers decides to purchase significantly less from us or to terminate its relationship with us, our revenue and profitability may decline significantly. We could also lose our key customers or significant sales to our key customers because of factors beyond our control, such as a significant disruption in our customers' businesses generally or in a specific product line. These customers may stop incorporating our products into their products with limited notice to us and suffer little or no penalty for doing so. In addition, if any of our customers merge, we may experience lower overall sales from the merged companies. Because one of our strategies has been to develop long-term relationships with a few key customers in the product areas in which we focus and because we have a long product design and development cycle for most of our products and prospective customers typically require lengthy product qualification periods prior to placing volume orders, we may be unable to replace these customers quickly or at all.

**Because we are subject to order and shipment uncertainties and many of our costs are fixed, any significant changes, cancellations or deferrals of orders or shipments could cause our revenue and profitability to decline or fluctuate.**

As is typical in the microelectronics industry, we do not usually obtain long-term purchase orders or commitments from our customers. Instead, we work closely with our customers to develop non-binding forecasts of the future volume of orders. Customers may cancel their orders, change production quantities from forecasted volumes or delay production for reasons beyond our control. Order cancellations or deferrals could cause us to hold inventory for longer than anticipated, which could reduce our profitability, restrict our ability to fund our operations and cause us to incur unanticipated reductions or delays in our revenue. Our customers often change their orders multiple times between initial order and delivery. Such changes usually relate to quantities or delivery dates, but sometimes relate to the specifications of the products we are supplying. If a customer does not

timely pay for these products, we could incur significant charges against our income. In addition, our profitability may be affected by the generally fixed nature of our costs. Because a substantial portion of our costs is fixed, we may experience deterioration in gross margins when volumes decline. From time to time, we make capital investments in anticipation of future business opportunities. If we are unable to obtain the anticipated business, our revenue and profitability may decline.

**Competition from existing or new companies in the microelectronics industry could cause us to experience downward pressure on prices, fewer customer orders, reduced margins, the inability to take advantage of new business opportunities and the loss of market share.**

We operate in a highly competitive industry. We compete against many domestic and foreign companies that have substantially greater manufacturing, financial, research and development and marketing resources than we do. In addition, some of our competitors may have more developed relationships with our existing customers than we do, which may enable them to have their products specified for use more frequently by these customers. We also face competition from the manufacturing operations of our current and potential customers, who continually evaluate the benefits of internal manufacturing versus outsourcing. As more original equipment manufacturers dispose of their manufacturing operations and increase the outsourcing of their products to liquid and gas delivery system and other component companies, we may face increasing competitive pressures to grow our business in order to maintain our market share. If we are unable to maintain our competitive position, we could experience downward pressure on prices, fewer customer orders, reduced margins, the inability to take advantage of new business opportunities and a loss of market share.

**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 300 mm shipper products as well as our other products could harm our operating results.**

The growing trend toward the use of 300 mm 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 300 mm wafer shipping products, but there is no guarantee that our customers will adopt our 300 mm wafer shipping product lines as they convert existing 200 mm wafer fabrication facilities to the fabrication of 300 mm wafers or build new 300 mm wafer fabrication facilities, and sales of our shipping products for these applications would be minimal and we might not recover our development costs.

Semiconductor and other electronic device manufacturers may direct semiconductor capital equipment manufacturers to use a specified supplier's product in their equipment. Accordingly, our success depends in part on our ability to have semiconductor and other electronic device manufacturers specify that our products be used at their fabrication facilities. Some of our competitors may have more developed relationships with



semiconductor and other electronic device manufacturers, which enable them to have their products specified for use in manufacturers fabrication facilities.

**We may acquire other businesses, form joint ventures or divest businesses that could negatively affect our profitability, increase our debt and dilute your ownership of our company.**

As part of our business strategy, we have, and we expect to continue to address gaps in our product offerings, diversify into complementary product markets or pursue additional technology and customers through acquisitions, joint ventures or other types of collaborations. We also expect to adjust our portfolio of businesses to meet our ongoing strategic objectives. As a result, we may enter markets in which we have no or limited prior experience and may encounter difficulties in divesting businesses that no longer meet our objectives. Competition for acquiring attractive businesses in our industry is substantial. In executing this part of our business strategy, we may experience difficulty in identifying suitable acquisition candidates or in completing selected transactions at appropriate valuations. Alternatively, we may be required to undertake multiple transactions at the same time in order to take advantage of acquisition opportunities that do arise; this could strain our ability to effectively execute and integrate these transactions. We consider a variety of financing alternatives for each acquisition which could include borrowing additional funds, reduction of our cash balances or issue of additional shares of our common stock to complete an acquisition. This could impair our liquidity and dilute your ownership of our company. Further, we may not be able to successfully integrate any acquisitions that we do make into our existing business operations and we could assume unknown or contingent liabilities or experience negative effects on our reported results of operations from dilutive results from operations and/or from future potential impairment of acquired assets including goodwill related to future acquisitions. We may experience difficulties in operating in foreign countries or over significant geographical distances and in retaining key employees or customers of an acquired business, and our management's attention could be diverted from other business issues. We may not identify or complete these transactions in a timely manner, on a cost-effective basis or at all, and we may not realize the benefits of any acquisition or joint venture.

**Our credit agreement contains restrictions that limit our flexibility in operating our business.**

Our credit facility contains various covenants that limit our ability to engage in specified types of transactions including, among other things our ability to:

incur additional indebtedness;

pay dividends on, repurchase or make distributions in respect of our capital stock or make other restricted payments;

make certain investments;

sell certain assets;

create liens;

consolidate, merge, sell or otherwise dispose of all or substantially all of our assets; and

enter into certain transactions with our affiliates.

**Significant increases in borrowings under our revolving credit agreement would leave us with a higher degree of leverage.**

A higher degree of leverage could have important consequences for our business and your investment, including:

## Edgar Filing: ENTEGRIS INC - Form 10-K

increasing our vulnerability to adverse economic, industry or competitive developments;

requiring a substantial portion of our cash flow from operations to be dedicated to the payment of principal and interest on our indebtedness, therefore reducing our ability to use our cash flow to fund our operations, capital expenditures and future business opportunities;

exposing us to the risk of increased interest rates on certain of our borrowings;

making it more difficult for us to satisfy our obligations with respect to our indebtedness;

restricting us from making strategic acquisitions or causing us to make non-strategic divestitures;

limiting our ability to obtain additional financing for working capital, capital expenditures, product development, debt service requirements, acquisitions and general corporate or other purposes; and

limiting our flexibility in planning for, or reacting to, changes in our business or market conditions and placing us at a competitive disadvantage compared to our competitors who are less highly leveraged and who therefore, may be able to take advantage of opportunities that our leverage prevents us from exploiting.

**The failure to generate sufficient profitability may cause some or all of the Company's deferred tax assets to expire.**

As of December 31, 2007, the Company had approximately \$49.1 million in net deferred tax assets (DTAs). These DTAs include approximately \$28.4 million in foreign tax credit carryovers that can be used to offset taxable income in future periods and reduce our income taxes payable in those future periods. The foreign tax credit carryovers will expire in ten years. At this time, the Company considers it more likely than not that it will have sufficient U.S. and foreign taxable income in the future that will allow the Company to realize these DTAs. However, it is possible that some or all of these DTAs could ultimately expire unused, especially if the Company's tax profile changes as a result of acquired tax losses or tax credit carryforwards. Therefore, unless the Company is able to generate sufficient U.S. and foreign taxable income from its operations, a substantial valuation allowance to reduce the Company's DTAs may be required, which may materially increase income tax expense in the period it is taken and materially adversely affect its results of operations and financial condition.

***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.

Prices for polymers can vary widely. In the current high oil price environment, some suppliers have added and may continue to add surcharges to the prices of the polymers we purchase. While we have long-term arrangements with certain key suppliers of polymers that fix our price for purchases up to specified quantities, if our polymer requirements exceed the quantities specified, we could be exposed to higher material costs. 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 and other manufacturing difficulties that may not be well understood for an extended period of time and 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. In addition, from time to time we may upgrade or add new manufacturing equipment that may require substantial lead times to build and qualify. Delays in building and qualifying new equipment could result in a disruption of our manufacturing processes and prevent us from meeting our customers' requirements so that they would seek other suppliers.

**We incur significant cash outlays over long-term periods in order to research, develop, manufacture and market new products, that may never reach market or may have limited market acceptance.**

We make significant cash expenditures to research, develop and market new products. For example, we incurred \$39.7 million, \$38.1 million and \$36.1 million of engineering, research and development expense in 2007, 2006 and 2005, respectively. The development period for a product can be as long as five years. Following development, it may take an additional two to three years for the sales of that product to reach a substantial level. We cannot be certain of the success of a new product. A product concept may never progress beyond the development stage or may only achieve limited acceptance in the marketplace. If this occurs, we do not receive a direct return on our expenditures and may not even realize any indirect benefits. Additionally, capacity expansion may be necessary in order to manufacture a new product. If sales levels do not increase to offset the additional fixed operating expenses associated with any such expansion, our revenue and profitability could decline and our prospects could be harmed.

**We are subject to a variety of environmental laws that could cause us to incur significant expenses.**

In addition to other regulatory requirements affecting our business, we are subject to a variety of federal, state, local and foreign regulatory requirements relating to the use, disposal, clean-up of, and human exposure to, hazardous chemicals. We generate and handle materials that are considered hazardous waste under applicable law. Certain of our manufacturing operations require the discharge of substantial quantities of wastewater into publicly owned waste treatment works which require us to assure that our wastewater complies with volume and content limitations. If we fail to comply with any present or future regulations, we could be subject to future liabilities or the suspension of production. In addition, compliance with these or future laws could restrict our ability to expand our facilities or build new facilities or require us to acquire costly equipment, incur other significant expenses or modify our manufacturing processes.

**We are continually evaluating our manufacturing operations within our plants in order to achieve efficiencies and gross margin improvements. If we are unable to successfully manage transfers or realignments of our manufacturing operations, our ability to deliver product to our customers could be disrupted and our business, financial condition and results of operations could be adversely affected.**

In order to enhance the efficiency and cost effectiveness of our manufacturing operations we expect to move several product lines from one of our plants to another and to consolidate manufacturing operations in our plants. Our product lines involve technically complex manufacturing processes that require considerable expertise to operate. If we are unable to effect these transfers, realignments and consolidations in a systematic manner within established schedules or if we are unable to successfully operate relocated manufacturing processes in the destination plant, production may be disrupted and we may not be able to deliver these products to meet customer orders in a timely manner, which could harm our business.

**Loss of our key personnel could hurt our business because of their experience in the microelectronics industry and their technological expertise. Similarly, our inability to attract and retain new qualified personnel could inhibit our ability to operate and grow our business successfully.**

We depend on the services of our key senior executives and other technological experts because of their experience in the microelectronics industry and their technical expertise. The loss of the services of one or several of our key employees or an inability to attract, train and retain qualified and skilled employees, specifically research and development and engineering personnel, could result in the loss of customers or otherwise inhibit our ability to operate and grow our business successfully. In the past, during the extended downturn in the semiconductor industry our predecessor companies have had to impose salary reductions on senior employees and freeze or eliminate merit increases in an effort to maintain its financial position. Similarly, changes in accounting rules requiring fair value accounting for stock options will make it more expensive to provide our employees with equity incentives, which may require us to reduce the level of equity compensation. These actions may have an adverse effect on employee loyalty and may make it more difficult for us to attract and retain key personnel.

**If we are unable to protect our intellectual property rights, our business and prospects could be harmed.**

Our future success and competitive position depend in part upon our ability to obtain and maintain proprietary technology used in our principal product families. We rely, in part, on patent, trade secret and trademark law to protect that technology. We routinely enter into confidentiality agreements with our employees. However, there can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach or that our confidential and proprietary information and technology will not be independently developed by or become otherwise known to third parties. We have obtained a number of patents relating to our products and have filed applications for additional patents. We cannot assure you that any of our pending patent applications will be approved, that we will develop additional proprietary technology that is patentable, that any patents owned by or issued to us will provide us with competitive advantages or that these patents will not be challenged by third parties. Patent filings by third parties, whether made before or after the date of our filings, could render our intellectual property less valuable. Competitors may misappropriate our intellectual property, and disputes as to ownership of intellectual property may arise. In addition, if we do not obtain sufficient international protection for our intellectual property, our competitiveness in international markets could be significantly impaired, which would limit our growth and future revenue. Furthermore, there can be no assurance that third parties will not design around our patents.

**Protection of our intellectual property rights has and may continue to result in costly litigation.**

We may from time to time be required to institute litigation in order to enforce our patents, copyrights or other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. Such litigation could result in substantial costs and

diversion of resources and could negatively affect our sales, profitability and prospects regardless of whether we are able to successfully enforce our rights. For example, as described in Item 3. Legal Proceedings below we are engaged in multiple patent litigations with Pall Corporation. We intend to prosecute and defend these cases vigorously and expect that these lawsuits will continue for extended periods of time and that we will incur substantial costs in pursuing them. In addition it may become necessary for us to initiate other costly patent litigation against this or other competitors in order to protect and/or perfect our intellectual property rights.

**If we infringe on the proprietary technology of others, our business and prospects could be harmed.**

Our commercial success will depend, in part, on our ability to avoid infringing or misappropriating any patents or other proprietary rights owned by third parties. If we are found to infringe or misappropriate a third party's patent or other proprietary rights, we could be required to pay damages to such third party, alter our products or processes, obtain a license from the third party or cease activities utilizing such proprietary rights, including making or selling products utilizing such proprietary rights. If we are required to obtain a license from a third party, there can be no assurance that we will be able to do so on commercially favorable terms, if at all.

*International Risks*

**We conduct a significant amount of our sales activity and manufacturing efforts outside the United States, which subjects us to additional business risks and may cause our profitability to decline due to increased costs.**

Sales to customers outside the United States accounted for approximately 74% of our net sales in calendar 2007, 71% of our net sales in calendar 2006, and 71% of net sales for the calendar year ending December 31, 2005. We anticipate that international sales will continue to account for a majority of our net sales. In addition, a number of our key domestic customers derive a significant portion of their revenues from sales in international markets. We also manufacture a significant portion of our products outside the United States and are dependent on international suppliers for many of our parts. We intend to continue to pursue opportunities in both sales and manufacturing internationally. Our international operations are subject to a number of risks and potential costs that could adversely affect our revenue and profitability, including:

unexpected changes in regulatory requirements that could impose additional costs on our operations or limit our ability to operate our business;

greater difficulty in collecting our accounts receivable and longer payment cycles than is typical in domestic operations;

changes in labor conditions and difficulties in staffing and managing foreign operations;

expense and complexity of complying with U.S. and foreign import and export regulations;

liability for foreign taxes assessed at rates higher than those applicable to our domestic operations; and

political and economic instability.

In the past, we have incurred costs or experienced disruptions due to the factors described above and expect to do so in the future. For example, our operations in Asia, and particularly Korea, Taiwan and Japan, have been negatively impacted in the past as a result of regional economic instability. In addition, Taiwan and Korea account for a growing portion of the world's semiconductor manufacturing. There are currently strained relations between China and Taiwan and there are continuing tensions between North Korea and South Korea and the United States. Any adverse developments in those relations could significantly disrupt the worldwide production of semiconductors, which may lead to reduced sales of our products. Furthermore, we incur additional legal compliance costs associated with our international operations and could become subject to legal penalties in foreign countries if we do not comply with local laws and regulations, which may be substantially different from



those in the United States. In many foreign countries it is common to engage in business practices that are prohibited by United States law applicable to us such as the Foreign Corrupt Practices Act. Although we implement policies and procedures designed to ensure compliance with these laws, there can be no assurance that all of our employees, contractors and agents, as well as those companies to which we outsource certain of our business operations, including those based in or from countries where practices which violate such United States laws may be customary, will not take actions in violation of our policies. Any such violation, even if prohibited by our policies, could have an adverse effect on our business.

**Fluctuations in the value of the U.S. dollar in relation to other currencies may lead to lower net income or may cause us to raise prices, which could result in reduced net sales.**

Foreign currency exchange rate fluctuations could have an adverse effect on our net sales and results of operations. Unfavorable foreign currency fluctuations against the U.S. dollar could require us to increase prices to foreign customers, which could result in lower net sales by us to such customers. Alternatively, if we do not adjust the prices for our products in response to unfavorable foreign currency fluctuations, our profitability could decline. In addition, sales made by our foreign subsidiaries will be denominated in the currency of the country in which these products are sold, and the currency we receive in payment for such sales could be less valuable at the time of receipt versus the time of sale as a result of foreign currency exchange rate fluctuations.

**As we seek to source more of the materials from which our products are made from foreign countries we may be subject to increased import duties.**

In an effort to reduce the cost of our products or to obtain the highest quality materials available, we expect that our purchases of raw materials and components from foreign countries will increase. Those of our products manufactured in the United States or other countries from these materials and components may consequently be burdened by import duties imposed by the U.S. or those other countries and these additional costs may be substantial and may put our products at a competitive disadvantage.

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

A large percentage of the world's 300 mm wafer manufacturing currently takes place in Japan. Our market share in Japan is currently lower than in other regions we serve. 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 300 mm wafer manufacturing in Japan increases.

**Terrorist attacks, such as the attacks that occurred in New York and Washington, D.C. on September 11, 2001, and other acts of violence or war may affect the markets in which we operate and hurt our profitability.**

Terrorist attacks may negatively affect our operations and your investment. There can be no assurance that there will not be future terrorist attacks against the United States or United States businesses. These attacks or armed conflicts may directly impact our physical facilities or those of our suppliers or customers. Our primary facilities include headquarters, research and development and manufacturing facilities in the United States, sales, research and development and manufacturing facilities in Japan and Malaysia, and sales and service facilities in Europe and Asia. Also attacks may disrupt the global insurance and reinsurance industries with the result that we may not be able to obtain insurance at historical terms and levels for our facilities. Furthermore, such attacks may make travel and the transportation of our supplies and products more difficult and more expensive and may ultimately affect the sales of our products in the United States and overseas. As a result of terrorism the United States may enter into additional armed conflicts, which could have a further impact on our domestic and international sales, our supply chain, our production capacity and our ability to deliver products to our customers. The consequences of these armed conflicts and the associated instability are unpredictable and we may not be able to foresee events that could have an adverse effect on our business and your investment.



*Risks Related to the Securities Markets and Ownership of our Securities*

**Because of the past volatility of our stock price and the stock price of predecessor companies, the price of our common stock in the future may likewise be volatile so that the ability to trade our common shares may be adversely affected and our ability to raise capital through future equity financing may be reduced.**

The stock prices of both of our predecessor companies have been volatile in the past and the price of our common stock may be volatile in the future. For example: in fiscal year 2007, the closing price of our stock on the NASDAQ National Market ranged from a low of \$7.87 to a high of \$12.18.

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 report 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; volatility in the markets for high-technology stocks, general 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. These market fluctuations may cause the trading price of our common stock to decrease.

**Recently enacted changes in the securities laws and regulations are likely to increase our costs.**

The Sarbanes-Oxley Act of 2002 has required changes in some of our corporate governance, securities disclosure and compliance practices. In response to the requirements of that Act, the Securities and Exchange Commission and the NASDAQ have promulgated new rules and listing standards covering a variety of subjects. Compliance with these new rules and listing standards has increased our legal and financial and accounting costs, and we expect these increased costs to continue indefinitely. We also expect these developments to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be forced to accept reduced coverage or incur substantially higher costs to obtain coverage. Likewise, these developments may make it more difficult for us to attract and retain qualified members of our Board of Directors, particularly independent directors, or qualified executive officers.

**If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results. As a result, current and potential stockholders could lose confidence in our financial reporting, which would harm our business and the trading price of our stock.**

Effective internal controls are necessary for us to provide reliable financial reports. If we cannot provide reliable financial reports, our business and operating results could be harmed. We have in the past discovered, and may in the future discover, areas of our internal controls that need improvement. For example, during each of the fiscal 2007, 2006 and 2005 year-end audits, a material weakness in internal control over financial reporting was identified. Each of these material weaknesses represented a reasonable possibility that a material misstatement of the Company's annual or interim financial statements would not have been prevented or detected. The impact of neither of these material weaknesses required the restatement of any of our financial statements.

Any failure to implement and maintain the improvements in the controls over our financial reporting, or difficulties encountered in the implementation of these improvements in our controls, could cause us to fail to meet our reporting obligations. Any failure to improve our internal controls to address the identified material weakness could also cause investors to lose confidence in our reported financial information, which could have a negative impact on the trading price of our stock.

**Changes to financial accounting standards relating to the grant of stock options may affect our reported results of operations and could result in additional cost to provide equity incentives to our key employees.**

With the commencement of effectiveness of the requirement that employee stock option and employee stock purchase plan shares should be treated as a compensation expense using the fair value method, equity incentive techniques that previously had no impact on our reported results of operations now require that we incur significant compensation charges and our results of operations could be adversely affected.

**Provisions in our charter documents, Delaware law and our shareholder rights plan may delay or prevent an acquisition of us, which could decrease the value of your shares.**

Our certificate of incorporation and By-Laws, Delaware law and our shareholder rights plan contain provisions that could make it harder for a third party to acquire us without the consent of our Board of Directors. These provisions include limitations on actions by our stockholders by written consent. In addition, our Board of Directors has the right to issue preferred stock without stockholder approval, which could be used to dilute the stock ownership of a potential hostile acquirer. Our shareholder rights plan will permit our stockholders to purchase shares of our common stock at a 50% discount upon the occurrence of specified events, including the acquisition by anyone of 15% or more of our common stock, unless such event is approved by our Board of Directors. Delaware law also imposes restrictions on mergers and other business combinations between us and any holder of 15% or more of our outstanding common stock. Although we believe these provisions provide for an opportunity to receive a higher bid by requiring potential acquirers to negotiate with our Board of Directors, these provisions apply even if the offer may be considered beneficial by stockholders. If a change of control or change in management is delayed or prevented, the market price of our common stock could suffer.

**Your percentage ownership in us may be diluted by future issuances of capital stock, which could reduce your influence over matters on which stockholders vote.**

Subject to applicable NASDAQ standards, our Board of Directors has the authority, without action or vote of our stockholders, to issue all or any part of our authorized but unissued shares. Issuances of common stock or the exercise of employee and director stock options would dilute your percentage ownership interest, which will have the effect of reducing your influence over matters on which our stockholders vote. In addition, we may issue substantial quantities of our common stock in order to effect acquisitions which will also dilute your ownership interest. If the issuances are made at prices that reflect a discount from the then current trading price of our common stock, your interest in the book value of our common stock might be diluted.

**Item 1B. Unresolved Staff Comments.**

Not Applicable.

**Item 2. Properties.**

Our principal executive offices are located in Chaska, Minnesota. We also have manufacturing, design and equipment cleaning facilities in the United States, Japan, France and Malaysia. Information about our principal facilities is set forth below:

Location	Principal Function	Approximate Square Feet	Leased/Owned
Chaska, Minnesota	Executive Offices, Research & Manufacturing	370,000	Owned
Billerica, Massachusetts	Executive Offices, Research & Manufacturing	175,000	Leased <sup>(1)</sup>
Colorado Springs, Colorado	Manufacturing	82,000	Owned
Gilroy, California	Manufacturing; Cleaning Services	60,000	Owned <sup>(2)</sup>
Montpelier, France	Cleaning Services	53,000	Owned
Yonezawa, Japan	Manufacturing	196,000	Owned
Kulim, Malaysia	Manufacturing	195,000	Owned

(1) This lease expires March 31, 2014, but is subject to two five year renewal options.

(2) This facility is in the process of being closed and the associated assets are reported as Assets of discontinued operations and other assets held for sale as of December 31, 2007.

We lease approximately 4,200 square feet of manufacturing space in Millipore's facility located in Bedford, MA pursuant to an Amended and Restated Membrane Manufacturing and Supply Agreement that expires December 31, 2010. We also lease approximately 21,000 square feet of research and development and manufacturing space in two buildings located in San Diego, California, which was assumed pursuant to the Mykrolis acquisition of Aeronex, Inc. in 2004. Approximately 31,000 square feet of office, research and development and manufacturing space located in Franklin, MA was assumed pursuant to the Mykrolis acquisition of Extraction Systems, Inc. in 2005. The leases for this space continued for a term of approximately two years following those acquisitions and are subject to renewal options.

We also lease an aggregate of approximately 11,000 square feet of office, R&D and manufacturing space in two buildings located in Burlington, Massachusetts which we acquired in connection with our acquisition of a specialty coatings business. These leases are for a term expiring December 31, 2009.

We maintain a worldwide network of sales, service, repair and cleaning centers in the United States, Germany, France, Japan, Taiwan, Singapore, China and Korea. Leases for our facilities expire between October 2008 and March 2014. We currently expect to be able to extend the terms of expiring leases or to find suitable replacement facilities on reasonable terms.

We believe that our facilities are well-maintained and suitable for their respective operations. Except for approximately 15,000 square feet in our newly expanded Kulim, Malaysia facility, all of our facilities are utilized within a normal range of production volume.

**Item 3. Legal Proceedings.**

The following discussion provides information regarding certain litigation to which the Company was a party that were pending as of December 31, 2007.

As previously disclosed, on March 3, 2003 the Company's predecessor, Mykrolis Corporation, filed a lawsuit against Pall Corporation in the United States District Court for the District of Massachusetts alleging infringement of two of the Company's U.S. patents by certain fluid separation systems and related assemblies used in photolithography applications manufactured and sold by the defendant. The Company's lawsuit also sought a preliminary injunction preventing the defendant from the manufacture, use, sale, offer for sale or importation into the U.S. of any infringing product. On April 30, 2004, the Court issued a preliminary injunction

against Pall Corporation and ordered Pall to immediately stop making, using, selling, or offering to sell within the U.S., or importing into the U.S., its PhotoKleen EZD-2 Filter Assembly products or any colorable imitation of those products. On January 18, 2005, the Court issued an order holding Pall Corporation in contempt of court for the violation of the preliminary injunction and ordering Pall to disgorge all profits earned from the sale of its PhotoKleen EZD-2 Filter Assembly products and colorable imitations thereof from the date the preliminary injunction was issued through January 12, 2005. In addition, Pall was also ordered to reimburse Mykrolis for certain of its attorney's fees associated with the contempt and related proceedings. The Court's order also dissolved the preliminary injunction, effective January 12, 2005, based on certain prior art cited by Pall which it alleged raised questions as to the validity of the patents in suit. On February 17, 2005, the Company filed notice of appeal to the U.S. Circuit Court of Appeals for the Federal Circuit appealing the portion of the Court's order that dissolved the preliminary injunction and Pall filed a notice of appeal to that court with respect to the finding of contempt and the award of attorneys' fees. On June 13, 2007 the Court of Appeals issued an opinion dismissing Pall's appeal for lack of jurisdiction and affirming the District Court's order dissolving the preliminary injunction.

On April 6, 2006 the Company filed a lawsuit against Pall Corporation in the United States District Court for the District of Massachusetts alleging infringement of the Company's newly issued U.S. patent No. 7,021,667 by certain filter assembly products used in photolithography applications that are manufactured and sold by the defendant. The Company's lawsuit also seeks a preliminary injunction preventing the defendant from the manufacture, use, sale, offer for sale or importation into the U.S. of the infringing products. On October 23, 2006 the Company's motion for preliminary injunction was argued before the court; a decision on this motion is pending.

On August 23, 2006 the Company filed a lawsuit against Pall Corporation in the United States District Court for the District of Massachusetts alleging infringement of the Company's newly issued U.S. patent No. 7,037,424 by certain fluid separation modules and related separation apparatus, including the product known as the EZD-3 Filter Assembly, used in photolithography applications that are manufactured and sold by the defendant. It is believed that the EZD-3 Filter Assembly was introduced into the market by the defendant in response to the action brought by the Company in March of 2003 as described above. This case is currently in the preliminary stages.

As previously disclosed, on December 16, 2005 Pall Corporation filed suit against the Company in U.S. District Court for the Eastern District of New York alleging patent infringement. Specifically, the suit alleges infringement of two of plaintiff's patents by one of the Company's gas filtration products and by the packaging for certain of the Company's liquid filtration products. Both products and their predecessor products have been on the market for a number of years. The Company intends to vigorously defend this suit and believes that it will ultimately prevail. This case is currently in the discovery stage.

On May, 4, 2007 Pall Corporation filed a lawsuit against the Company in the U.S. District Court for the Eastern District of New York alleging patent infringement. Specifically, the suit alleges that certain of the Company's point-of-use filtration products infringe a newly issued Pall patent, as well as three older Pall patents. Pall's action, which relates only to the U.S., asserts that "on information and belief" the Company's Impact 2 and Impact Plus point-of-use photoresist filters infringe a patent issued to Pall on March 27, 2007, as well as three older patents. The Company intends to vigorously defend this suit and believes that it will ultimately prevail. This case is currently in the preliminary stage.

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

None.

---

**PART II**
**Item 5. Market for Entegris Common Stock, Related Stockholder Matters and Issuer Purchases of Equity Securities.**

Entegris Common Stock, \$0.01 par value, trades on the NASDAQ National Market System (NMS) under the symbol ENTG. The following table sets forth the highest and lowest sale prices of the Company shares during fiscal 2007 and 2006. As of February 1, 2008 there were 1,145 shareholders of record.

	Fiscal 2007		Fiscal 2006	
	High	Low	High	Low
First quarter	\$ 11.98	\$ 10.21	\$ 11.19	\$ 9.20
Second quarter	\$ 12.18	\$ 10.11	\$ 12.00	\$ 9.26
Third quarter	\$ 12.17	\$ 8.61	\$ 11.17	\$ 8.37
Fourth quarter	\$ 9.49	\$ 7.87	\$ 11.99	\$ 8.65

The Company has never declared or paid any cash dividends on its capital stock. The Company currently intends to retain all available earnings for use in its business or for share repurchase programs and does not anticipate paying any cash dividends in the foreseeable future. On July 27, 2005 the Entegris Board of Directors declared a dividend of one common stock purchase right for each share of Entegris Common Stock outstanding to shareholders of record on August 8, 2005, payable on August 8, 2005. For a description of the Common Stock Rights Plan see

Other Information in Item 1 above. Each right generally entitles the holder to purchase one one-hundredth of a share of a series of preferred stock of Entegris at a price of \$50.

***Comparative Stock Performance***

The following graph compares the cumulative total shareholder return on the common stock of Entegris Minnesota and the Company from August 30, 2002 through December 31, 2007 with cumulative total return of (1) The NASDAQ Composite Index, and (2) The Philadelphia Semiconductor Index.

The following graph assumes \$100 was invested at the close of trading August 30, 2002 in Entegris, Inc. common stock, the NASDAQ Composite Index and the Philadelphia Semiconductor Index and that all dividends are reinvested.

	August 30, 2002	December 31, 2002	December 31, 2003	December 31, 2004	December 31, 2005	December 31, 2006	December 31, 2007
Entegris, Inc.	100	114.07	142.30	110.18	104.30	119.80	95.55
NASDAQ Composite	100	101.75	153.43	167.49	171.03	188.80	214.99
Philadelphia Semiconductor Index	100	96.42	169.72	145.16	161.36	158.56	139.54

**Purchases of Equity Securities by the Company**

The following table provides information concerning shares of the Company's Common Stock \$0.01 par value purchased during the fourth quarter of fiscal 2007.

Period	(a) Total Number of Shares Purchased <sup>(1)</sup>	(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs
October 1 - 31, 2007				\$ 49,400,000
November 1 - 30, 2007				\$ 49,400,000
December 1 - 31, 2007	456,104	\$ 8.96	456,104	\$ 45,300,000
Total	456,104	\$ 8.96	456,104	\$ 45,300,000

- (1) The Company announced on August 31, 2006, a plan to repurchase up to \$150,000,000 of its outstanding common stock over a twelve to eighteen-month period: approximately \$100,600,000 of this stock repurchase program was effected pursuant to Accelerated Stock Buyback Agreements with Goldman Sachs & Co commenced in 2006 and completed during the third quarter of 2007 and approximately \$49,400,000 is to be effected pursuant to a Rule 10b5-1 trading plan established by the Company on November 15, 2007.

**Item 6. Selected Financial Data.**

The table that follows presents selected financial data for each of the last five fiscal years and four months ended December 31, 2005 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.

On December 13, 2005, the Company's Board of Directors approved a change in fiscal year end from a 52-week or 53-week fiscal year period ending on the last Saturday of August to December 31, effective as of December 31, 2005.

(In thousands, except per share amounts)	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005	Year ended August 28, 2004	Year ended August 30, 2003
<b>Operating Results</b>						
Net sales	\$ 626,238	\$ 672,882	\$ 199,644	\$ 347,345	\$ 329,006	\$ 238,702
Gross profit	266,237	305,078	70,207	138,183	149,857	97,034
Selling, general and administrative expenses	182,792	188,311	77,253	110,341	91,662	77,096
Engineering, research and development expenses	39,727	38,074	13,904	18,188	18,066	16,760
Operating profit (loss)	43,718	78,693	(20,950)	9,654	40,129	1,580
Income (loss) before income taxes and equity in affiliate earnings	56,619	89,556	(18,572)	14,307	41,478	(2,107)
Income tax expense (benefit)	10,356	26,936	(8,713)	1,154	13,223	(5,227)
Income (loss) from continuing operations	46,356	63,151	(9,789)	12,906	28,242	2,976
Net income (loss)	\$ 44,359	\$ 63,466	\$ (18,324)	\$ 9,393	\$ 24,770	\$ 1,275

Edgar Filing: ENTEGRIS INC - Form 10-K

<i>(In thousands, except per share amounts)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005	Year ended August 28, 2004	Year ended August 30, 2003
<b>Earnings Per Share Data</b>						
Diluted earnings (loss) per share continuing operations	\$ 0.37	\$ 0.46	\$ (0.07)	\$ 0.16	\$ 0.37	\$ 0.04
Weighted average shares outstanding diluted	124,940	138,492	135,437	79,328	76,220	74,475
<b>Operating Ratios % of net sales</b>						
Gross profit	42.5%	45.3%	35.2%	39.8%	45.5%	40.7%
Selling, general and administrative expenses	29.2	28.0	38.7	31.8	27.9	32.3
Engineering, research and development expenses	6.3	5.7	7.0	5.2	5.5	7.0
Operating profit (loss)	7.0	11.7	(10.5)	2.8	12.2	0.7
Income (loss) before income taxes and equity in affiliate earnings	9.0	13.3	(9.3)	4.1	12.6	(0.9)
Effective tax rate <sup>(1)</sup>	18.3	30.1	46.9	8.1	31.9	248.1
Net income (loss)	7.1	9.4	(9.2)	2.7	7.5	0.5
<b>Cash Flow Statement Data</b>						
Depreciation and amortization	\$ 43,776	\$ 42,905	\$ 13,754	\$ 23,599	\$ 23,813	\$ 25,876
Capital expenditures	26,919	30,860	10,311	19,472	19,633	13,876
Net cash provided by operating activities	132,017	96,076	22,598	52,323	52,896	32,131
Net cash provided by (used in) investing activities	50,800	(17,370)	(13,116)	58,807	(86,880)	(38,059)
Net cash (used in) provided by financing activities	(183,061)	(80,037)	(15,432)	3,066	1,835	10,706
<b>Balance Sheet and Other Data</b>						
Current assets	\$ 382,621	\$ 556,321	\$ 516,364	\$ 546,502	\$ 276,482	\$ 221,592
Current liabilities	125,749	92,699	111,017	124,856	63,895	54,289
Working capital	256,872	463,622	405,347	421,646	212,587	167,303
Current ratio	3.04	6.00	4.65	4.38	4.33	4.08
Long-term debt	20,373	2,995	3,383	21,800	18,898	10,070
Shareholders' equity	852,309	1,015,980	1,012,819	1,023,414	372,185	337,665
Total assets	1,035,241	1,157,618	1,142,790	1,185,620	467,046	414,739
Return on average shareholders' equity %	4.7	6.3	(1.8)	1.3	7.0	0.4
Shares outstanding at end of period	115,356	132,771	136,044	135,299	73,380	72,512

(1) Effective tax rate represents income tax expense (benefit) as a percent of income (loss) before income taxes and equity in affiliates.



---

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

You should read the following discussion and analysis of the Company's consolidated financial condition and results of operations with the consolidated financial statements and the accompanying notes to the consolidated financial statements included elsewhere in this document. *This discussion contains forward-looking statements that involve numerous risks and uncertainties, including, but not limited to, those described in the FACTORS AND UNCERTAINTIES THAT MAY AFFECT FUTURE RESULTS section of this Item 7. The Company's actual results may differ materially from those contained in any forward-looking statements.*

**Overview**

*This overview is not a complete discussion of the Company's financial condition, changes in financial condition and results of operations; it is intended merely to facilitate an understanding of the most salient aspects of its financial condition and operating performance and to provide a context for the discussion that follows. The detailed discussion and analysis that follows must be read in its entirety in order to fully understand the Company's financial condition and results of operations.*

Entegris, Inc. is a leading provider of products and services that purify, 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, Europe and the Middle East.

The Company offers a diverse product portfolio which includes more than 16,000 standard and customized products that we believe provide the most comprehensive offering of materials integrity management products and services to the microelectronics industry. Certain of these products are unit-driven and consumable products that rely on the level of semiconductor manufacturing activity to drive growth, while others rely on expansion of manufacturing capacity to drive growth. The Company's unit-driven and consumable product class includes wafer shippers, disk shipping containers and test assembly and packaging products, membrane-based liquid filters and housings, metal-based gas filters and resin-based gas purifiers, as well as PVA roller brushes for use in post-CMP cleaning applications. The Company's capital expense driven products include its process carriers that protect the integrity of in-process wafers, components, systems and subsystems that use electro-mechanical, pressure differential and related technologies to permit semiconductor and other electronics manufacturers to monitor and control the flow and condition of process liquids used in these manufacturing processes.

On December 13, 2005, the Company's Board of Directors approved a change in fiscal year end from a 52-week or 53-week fiscal year period ending on the last Saturday of August to December 31, effective as of December 31, 2005. As a result, the financial periods presented and discussed in this Annual Report on Form 10-K will be defined as follows: (i) years ended December 31, 2007 and 2006 representing the twelve months ended December 31, 2007 and 2006; (ii) four-month transition period ended December 31, 2005 representing the four months ended December 31, 2005; and (iii) year ended August 27, 2005 representing the twelve months ended August 27, 2005.

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

**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 affect certain costs such as incentive compensation and commissions, which are highly variable in nature. The Company's sales are subject to effects of industry cyclicality, technological change and substantial competition, including pricing pressures.

**Variable margin on sales** The Company's variable margin on sales is determined by selling prices and the costs of manufacturing and raw materials. This is also affected by a number of factors, which include the Company's sales mix, purchase prices of raw material (especially resin and purchased components), competition, both domestic and international, direct labor costs, and the efficiency of the Company's production operations, among others.

**Fixed cost structure** Increases or decreases in sales 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, lease expense, and depreciation and amortization. It is not possible to vary these costs easily in the short term as volumes fluctuate. Thus changes in sales volumes can affect the usage and productivity of these cost components and can have a large effect on the Company's results of operations.

**Overall Summary of Financial Results for the Year Ended December 31, 2007**

For the year ended December 31, 2007 (2007), net sales were \$626.2 million, down \$46.6 million, or 6.9%, from net sales of \$672.9 million reported for the year ended December 31, 2006 (2006) due to lower demand for the Company's products, in part reflecting the demand drivers of the semiconductor industry. The sales comparison is positively affected by approximately \$8.9 million due to the year-over-year strengthening of certain international currencies versus the U.S. dollar over the period, most notably the Euro. Net sales for 2007 were positively affected by the inclusion of approximately \$6.2 million in sales attributable to a third quarter acquisition.

Mainly reflecting the year-over-year sales decrease and the corresponding lower factory utilization, the Company reported lower gross profits and a reduced gross margin. The Company's gross margin in 2007 was 42.5% versus 45.3% a year earlier.

The Company's selling, general and administrative (SG&A) expenses decreased \$5.5 million in 2007. The year-over-year reduction reflected lower costs incurred by the Company in connection with the integration activities associated with the merger with Mykrolis as well as the benefit of lower salaries and other costs resulting from the realignment of activities after the merger.

The Company reported income from continuing operations of \$46.4 million for 2007 compared to \$63.2 million in 2006. Included in income from continuing operations in 2007 was the second quarter pre-tax gain of \$6.1 million on the sale of the Company's interest in a privately-held equity investment and the fourth quarter U.S. tax benefit of \$9.4 million associated with the repatriation and recharacterization of \$100 million of the Company's Japanese subsidiary's accumulated undistributed earnings.

During 2007, the Company generated cash of \$132.0 million from continuing operations as a result of the cash generated by the Company's net earnings, non-cash charges and the net positive impact of changes in operating assets and liabilities, most notably decreases in accounts receivable and inventory. Despite the cash generated by operations, cash and cash equivalents and short-term investments declined to \$160.7 million at December 31, 2007 compared to \$275.0 million at December 31, 2006. The decrease mainly reflects the use of \$256.1 million to purchase the Company's common shares in connection with its second quarter Dutch auction tender offer and fourth quarter Rule 10b-5-1 trading plan, \$44.9 million to acquire a specialty coatings business in the third quarter and \$26.9 million to acquire property and equipment.

**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, income taxes, business combinations and shared-based compensation. 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.

**Net Sales** The Company's net sales consist of revenue from sales of products net of trade discounts and allowances. The Company recognizes revenue upon shipment, primarily FOB shipping point, when evidence of an arrangement exists, contractual obligations have been satisfied, title and risk of loss have been transferred to the customer and collection of the resulting receivable is probable based upon historical collection results and regular credit evaluations. In most transactions, the Company has no obligations to its customers after the date products are shipped other than pursuant to warranty obligations. In the event that significant post-shipment obligations or uncertainties exist such as customer acceptance, revenue recognition is deferred as appropriate until such obligations are fulfilled or the uncertainties are resolved.

**Accounts Receivable-Related Valuation Accounts** The Company maintains allowances for doubtful accounts and for sales returns and allowances. 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 management 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 considers the age of receivable balances and historical bad debts write-off experience when determining its allowance for doubtful accounts. The Company's allowance for doubtful accounts was \$0.5 million and \$0.8 million at December 31, 2007 and December 31, 2006, respectively.

An allowance for sales returns and allowances is established based on historical trends and current trends in product returns. At December 31, 2007 and December 31, 2006, the Company's reserve for sales returns and allowances was \$2.0 million and \$1.8 million, respectively.

**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, and sales levels by product. Inventories that are considered obsolete are written off or a full valuation allowance is recorded. In addition, valuation allowances are established for inventory quantities in excess of forecasted demand. Inventory valuation allowances were \$8.9 million and \$10.1 million at December 31, 2007 and December 31, 2006, respectively.

The Company's inventories include 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 conditions, additional inventory write-downs or valuation allowances 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 discounting 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 assets is less than the assets' carrying value. The fair value of the assets then becomes the assets' new carrying value, which is depreciated over the remaining estimated useful life of the assets.

The Company assesses the impairment of goodwill at least annually, or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors considered important, which would 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
- significant decline in the Company's stock price for a sustained period, changing the Company's market capitalization relative to its net book value.

**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 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 as of December 31, 2007 compared to a \$0.7 million valuation allowance against its deferred tax assets at December 31, 2006 related to a portion of a capital loss carryforward which at that time was deemed more likely than not to be unrealized. The elimination of the valuation allowance during the quarter ended June 30, 2007 reflected the utilization of the capital loss carryforward to offset a portion of the capital gain on the sale of an equity investment.

**Warranty Claims Accrual** 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. Estimated claims could be materially different from actual results for a variety of reasons, including a change in product failure rates and service delivery costs incurred in correcting a product failure, manufacturing changes that could impact product quality, or as yet unrecognized defects in products sold. At December 31, 2007 and December 31, 2006, the Company's accrual for estimated future warranty costs was \$1.3 million and \$1.8 million, respectively.

**Business Acquisitions** The Company accounts for acquired businesses using the purchase method of accounting, which requires that the assets acquired and liabilities assumed be recorded at the date of acquisition at their respective fair values. The judgments made in determining the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives, can materially impact net income. Accordingly, for significant items, the Company typically obtains assistance from independent valuation specialists.

There are several methods that can be used to determine the fair value of assets acquired and liabilities assumed. For intangible assets, the Company normally utilizes the income method. This method starts with a forecast of all of the expected future net cash flows. These cash flows are then adjusted to present value by applying an appropriate discount rate that reflects the risk factors associated with the cash flow streams. Some of the more

significant estimates and assumptions inherent in the income method or other methods include the projected amount and timing of future cash flows and the discount rate reflecting the risks inherent in the future cash flows.

Determining the useful life of an intangible asset also requires judgment. For example, different types of intangible assets will have different useful lives and certain assets may even be considered to have indefinite useful lives. All of these judgments and estimates can significantly impact net income.

**Share-Based Compensation** Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment*, (SFAS 123(R)) requires the measurement and recognition of compensation expense for all share-based payment awards made to employees and directors based on estimated fair values. Under SFAS 123(R), the Company must estimate the value of employee stock option and restricted stock awards on the date of grant.

Prior to the adoption of SFAS 123(R), the value of employee stock options was estimated on the date of grant in connection with the determination of the pro forma share-based compensation disclosures required by SFAS 123 using the Black-Scholes model. The fair value of share-based payment awards using an option-pricing model is affected by the Company's stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, the expected stock price volatility over the term of the awards, risk-free interest rate and dividend yield assumptions, and actual and projected employee stock option exercise behaviors and forfeitures. No employee stock options have been awarded by the Company since its adoption of SFAS 123(R).

Restricted stock and restricted stock unit awards are valued based on the Company's stock price on the date of grant.

Because share-based compensation expense recognized in the Consolidated Statement of Operations is based on awards ultimately expected to vest, it has been recorded net of estimated forfeitures. SFAS 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based on historical experience. If factors change and the Company employs different assumptions in the application of SFAS 123(R) in future periods, the share-based compensation expense recorded under SFAS 123(R) may differ significantly from what was recorded in the current period.

Certain restricted stock and restricted stock unit awards involve stock to be issued upon the achievement of performance conditions (Performance Shares) under the Company's stock incentive plans. Such performance shares become available subject to time-based vesting conditions if, and to the extent that, financial performance criteria for the applicable fiscal year or multi-year period are achieved. Accordingly, the number of performance shares earned will vary based on the level of achievement of financial performance objectives for the applicable period. Until such time that the Company's performance can ultimately be determined, each quarter the Company estimates the number of performance shares more likely than not to be earned based on an evaluation of the probability of achieving the performance objectives. Such estimates are revised, if necessary, in subsequent periods when the underlying factors change the Company's evaluation of the probability of achieving the performance objectives. Accordingly, share-based compensation expense associated with performance shares recorded under SFAS 123(R) may differ significantly from what was recorded in the current period.

## Results of Operations

### Twelve months ended December 31, 2007 compared to twelve months ended December 31, 2006

The following table sets forth the results of operations and the relationship between various components of operations, stated as a percent of net sales, for the years ended December 31, 2007 and December 31, 2006. The Company's historical financial data was derived from its consolidated financial statements and related notes included elsewhere in this annual report.

<i>( in thousands )</i>	Year ended December 31, 2007		Year ended December 31, 2006	
		% of net sales		% of net sales
Net sales	\$ 626,238	100.0%	\$ 672,882	100.0%
Cost of sales	360,001	57.5	367,804	54.7
Gross profit	266,237	42.5	305,078	45.3
Selling, general and administrative expenses	182,792	29.2	188,311	28.0
Engineering, research and development expenses	39,727	6.3	38,074	5.7
Operating profit	43,718	7.0	78,693	11.7
Interest income, net	(5,245)	(0.8)	(9,205)	(1.4)
Other income, net	(7,656)	(1.2)	(1,658)	(0.2)
Income before income taxes and equity in earnings of affiliates	56,619	9.0	89,556	13.3
Income tax expense	10,356	1.7	26,936	4.0
Equity in net earnings of affiliates	(93)	(0.0)	(531)	(0.1)
Net income from continuing operations	\$ 46,356	7.4	\$ 63,151	9.4

**Net sales** For the year ended December 31, 2007 (2007), net sales were \$626.2 million, down \$46.6 million, or 6.9%, from sales for the year ended December 31, 2006 (2006). Net sales for fiscal 2007 included favorable foreign currency translation effects of \$8.9 million. This reflected the strengthening of certain international currencies versus the U.S. dollar, most notably the Euro. On a geographic basis, total sales to North America were 26%, Asia Pacific 36%, Europe 15% and Japan 23% in 2007. Sales from products of the high-purity semiconductor coatings business acquired in the third quarter totaled \$6.2 million in 2007.

Demand drivers for the Company's business primarily consist of semiconductor fab utilization and production (unit-driven) as well as capital spending for new or upgraded semiconductor fabrication facilities (capital-driven). The Company analyzes sales of its products by these two key drivers. Both unit-driven and capital-driven sales in 2007 decreased as compared with 2006. Sales of unit-driven products represented 60% of sales and sales of capital-driven products represented 40% of total sales in 2007. This compares to a unit-driven to capital-driven ratio of 59:41 for the year ended December 31, 2006, indicating a consistent pattern of demand within the industry over the past twelve months.

Sales of unit-driven products fell 6% in 2007 as semiconductor fab utilization rates were relatively flat. Unit-driven products have average lives of less than 18 months or need to be replaced based on usage levels. These products include liquid filters used in the photolithography, CMP and wet etch and clean processes, and in wafer shippers used to ship raw wafers, particularly at wafer sizes of 150mm and below, as well as in chip trays and data storage components used to ship 65mm and 95mm disk drives. Sales of wafer shippers declined 11%, while sales of disk shippers fell 17% primarily due to lower sales of 65mm shippers.

Year-over-year sales of capital-driven products decreased 11% in 2007. Capital-driven products include wafer process carriers, gas microcontamination control systems used in the deployment of advanced photolithography processes, fluid handling systems, including dispense pumps used in the photolithography process, and integrated liquid flow controllers used in various processes around the fab. Sales of liquid systems also declined in the latter

half of 2007, reflecting the general slowing in the industry. Wafer transport products, such as 300mm FOUP products, also fell, particularly at some North American customers. Sales of gas microcontamination control products fell 5% after reaching peak levels in 2006.

**Gross profit** Gross profit for the year ended December 31, 2007 decreased by \$38.8 million, to \$266.2 million, a decrease of 12.7% from \$305.1 million for 2006. The gross margin rate for 2007 was 42.5% versus 45.3% for 2006.

The gross profit decline was primarily due to the lower utilization of the Company's production facilities compared to the prior period. Production volumes were considerably lower in 2007 as the Company sold inventory on hand to satisfy customer demand, particularly in the first half of the year. Prices for raw materials were relatively stable on a year-over-year basis.

Gross margin for 2007 also was affected by \$2.2 million in transition costs such as travel, sampling and customer qualification costs related to the transfer of four product lines from U.S. facilities to the Company's facility in Kulim, Malaysia. Costs of \$2.9 million associated with the consolidation or closure of manufacturing facilities in the U.S. and Singapore also reduced gross profit in 2007.

Gross margin in 2007 included a \$0.8 million cost of sales charge associated with the fair market value write-up of inventory acquired in the purchase of the assets of the high-purity semiconductor coatings business acquired in the third quarter of 2007. The inventory write-up was recorded as part of the purchase price allocation and is charged to cost of sales over inventory turns of the acquired inventory.

Gross profit in 2006 was reduced by costs of \$2.8 million incurred in connection with the consolidation of manufacturing facilities in the U.S., Germany and Japan. Offsetting these charges to 2006 gross profit was a gain of \$0.7 million on the sale of a facility recognized during the second quarter of 2006. Gross profit in the third and fourth quarters of 2006 was lower than the strong levels achieved earlier in the year due to manufacturing inefficiencies experienced at a North American plant in the third quarter and expenses incurred in the fourth quarter in connection with a comprehensive worldwide review of the Company's manufacturing operations to identify and resolve manufacturing inefficiencies.

**Selling, general and administrative expenses** Selling, general and administrative (SG&A) expenses of \$182.8 million for 2007 decreased \$5.5 million, or 3%, compared to \$188.3 million in 2006. SG&A expenses, as a percent of net sales, increased to 29.2% from 28.0% a year earlier.

The year-over-year decrease in SG&A costs reflects the lower SG&A expenses incurred by the Company in connection with the integration activities associated with the Mykrolis merger and other realignment activities, as well as the benefit of the consolidation of various sales, marketing and other corporate functions during 2006. Costs of \$2.6 million were incurred by the Company in 2007 in connection with the integration and realignment activities associated with the Mykrolis merger, compared to \$12.1 million in 2006. The costs included in this category generally relate to expenses incurred to integrate Mykrolis' operations and systems into the Company's pre-existing operations and systems. These costs include, but are not limited to, the integration of information systems, employee benefits and compensation, accounting/finance, tax, treasury, risk management, compliance, administrative services, sales and marketing and other functions and include severance and retention costs. The year-over-year decrease in SG&A expenses also includes a decline in incremental share-based compensation expense of \$3.0 million, offset by an increase in professional fees of \$2.2 million.

**Engineering, research and development expenses** Engineering, research and development (ER&D) expenses rose by \$1.7 million, or 4.3%, to \$39.7 million in 2007 compared to \$38.1 million in 2006. ER&D expenses as a percent of net sales were 6.3% compared to 5.7% a year ago. The increase reflected higher product sampling costs as the Company continued to focus on the support of current product lines and the development of new products and manufacturing technologies.

**Interest income, net** Net interest income was \$5.2 million in 2007 compared to \$9.2 million in 2006. The decrease reflects lower average invested balances compared to a year ago primarily related to the Company's use of cash to finance the repurchase of its common shares during the second quarter of 2007.

**Other income** Other income in 2007 includes a pre-tax gain of \$6.1 million on the sale of the Company's interest in a privately held equity investment accounted for using the cost method. Proceeds from the sale totaled \$6.6 million.

**Income tax expense** The Company recorded income tax expense of \$10.4 million in 2007, compared to income tax expense of \$26.9 million in 2006. The effective tax rate was 18.3% in 2007 compared with a 30.1% rate a year earlier.

The Company's 2007 tax rate was lower than statutory rates for a number of reasons. In the fourth quarter of 2007, the Company's Japanese subsidiary declared a dividend of 6.8 billion yen (approximately U.S. \$60 million) and also loaned 4.6 billion yen (approximately U.S. \$40 million) to the Company. The resulting recharacterization of \$100 million of the Japanese subsidiary's accumulated undistributed earnings resulted in a fourth quarter tax benefit of \$9.4 million, net of state income tax expense.

The Company also benefited from a tax holiday in Malaysia whereby, as a result of employment commitments, research and development expenditures and capital investments made by the Company, income from certain manufacturing activities in Malaysia was exempt from tax with tax benefits in 2007 in the amount of \$2.1 million. In 2006, the Company's benefit from the tax holiday was \$2.8 million. The 2007 effective tax rate was also lower due to a corporate income tax refund of \$0.8 million resulting from new legislation in Germany and a \$0.9 million favorable adjustment recorded to recognize the reconciliation of the Company's 2006 federal tax return and tax accounts. Partially offsetting these reductions was an increase to the Company's tax contingency reserves.

#### **Discontinued operations**

The Company's businesses classified as discontinued operations recorded losses of \$2.0 million, net of taxes, in 2007. These results included an operating loss of \$1.4 million, a pre-tax impairment charge of \$2.6 million recorded in connection with the write-down of long-lived assets to fair value less cost to sell and a tax benefit of \$0.7 million related to a reduction in the Company's deferred tax asset valuation allowance, resulting from the utilization of a capital loss carryforward to offset a portion of the capital gain on the sale of an equity investment.

The Company's discontinued operations recorded income of \$0.3 million net of taxes for 2006. The after-tax earnings of discontinued operations in 2006 included a tax benefit of \$1.6 million associated with a decrease in the Company's deferred tax asset valuation allowance described above. The change in the valuation allowance resulted from the settlement of negotiations regarding the terms of sale of a discontinued operation which established the characterization of certain gains and losses.

**Net income** The Company recorded net income of \$44.4 million, or \$0.36 per diluted share, in 2007, compared to net income of \$63.5 million, or \$0.46 per diluted share, in 2006. Income from continuing operations for 2007 was \$46.4 million, or \$0.37 per diluted share, compared to income from continuing operations of \$63.2 million, or \$0.46 per diluted share, in the prior year.

#### **Twelve months ended December 31, 2006 compared to twelve months ended December 31, 2005 (Unaudited)**

The following table sets forth the results of operations and the relationship between various components of operations, stated as a percent of net sales, for the years ended December 31, 2006 and December 31, 2005. The Company's historical financial data were derived from its consolidated financial statements and related notes



Edgar Filing: ENTEGRIS INC - Form 10-K

included elsewhere in this annual report. The 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 period presented.

<i>(Dollars in thousands)</i>	Year ended December 31, 2006		Year ended December 31, 2005 (Unaudited)	
		% of net sales		% of net sales
Net sales	\$ 672,882	100.0%	\$ 432,591	100.0%
Cost of sales	367,804	54.7	271,862	62.8
Gross profit	305,078	45.3	160,729	37.2
Selling, general and administrative expenses	188,311	28.0	156,207	36.1
Engineering, research and development expenses	38,074	5.7	26,068	6.0
Operating profit (loss)	78,693	11.7	(21,546)	(5.0)
Interest income, net	(9,205)	(1.4)	(4,519)	(1.0)
Other income, net	(1,658)	(0.2)	(2,138)	(0.5)
Income (loss) before income taxes and equity in earnings of affiliates	89,556	13.3	(14,889)	(3.4)
Income tax expense (benefit)	26,936	4.0	(10,558)	(2.4)
Equity in net (earnings) loss of affiliates	(531)	(0.1)	149	
Net income (loss) from continuing operations	\$ 63,151	9.4	\$ (4,480)	(1.0)

**Net sales** For the year ended December 31, 2006 (2006), net sales were \$672.9 million, up \$240.3 million, or 55.5%, from sales reported for the year ended December 31, 2005 (2005). The increase in net sales reflects the inclusion of sales from the former Mykrolis operations for the full year in 2006 versus only the five-month period from August 6, 2005 through December 31, 2005 for the prior period. Such incremental sales totaled \$192.0 million and accounted for approximately 80% of the year over-year increase. Net sales for fiscal 2006 included unfavorable foreign currency translation effects, principally related to the Japanese yen, versus the U.S. dollar in the amount of \$4.5 million. On a geographic basis, total sales to North America were 28%, Asia Pacific 33%, Europe 16% and Japan 23% in 2006.

Demand drivers for the Company's business primarily are comprised of semiconductor fab utilization and production (unit-driven) as well as capital spending for new or upgraded semiconductor fabrication facilities (capital-driven). The Company analyzes sales of its products by these two key drivers. Sales of unit-driven products represented 59% of sales and sales of capital-driven products represented 41% of total sales in 2006. This compares to a unit-driven to capital-driven ratio of 60:40 for the year ended December 31, 2005.

Sales of unit-driven products grew in 2006 as semiconductor fab utilization rates remained strong and stable. Unit-driven products have average lives of less than 18 months or need to be replaced based on usage levels. These products include liquid filters used in the photolithography, CMP and wet etch and clean processes and in wafer shippers used to ship raw wafers, particularly at wafer sizes of 150mm and below, as well as in chip trays and data storage components used to ship 65mm and 95mm disk drives. Demand for liquid filters remained relatively stable for most of these semiconductor applications, but sales of these products to non-semiconductor customers declined modestly. Sales of wafer shippers increased modestly due to higher sales of 200mm wafer shipper products. Sales of disk shippers for data storage products were also higher, as the market for 95mm devices remained strong.

Year-over-year sales of capital-driven products generally improved in 2006, with strong sales during the first half of the year and a decline during the second half of 2006, reflecting a general slowing of the industry, particularly

in North America. Capital-driven products include wafer process carriers, gas microcontamination control systems, used in the deployment of advanced photolithography processes, fluid handling systems, including dispense pumps used in the photolithography process, and integrated liquid flow controllers used in various processes around the fab. Sales of liquid systems grew during the first half of the year, but declined later in 2006, reflecting a general slowing in the industry.

Wafer transport products, such as 300mm FOUP products, also reflected slower capital spending, particularly at some North American customers. Sales of gas microcontamination control products reached the all-time high in 2006, reflecting the market acceptance of the Company's gas purification systems and liquid lens system used on advanced lithography steppers.

Sequentially, sales for the fourth quarter of 2006 were 1% lower than the third quarter of 2006 due to lower sales of capital-driven products. Unit-driven sales remained stable, reflecting flat levels of wafer starts and semiconductor production. This was in contrast to significantly lower sales of capital-driven products, due in part to softening in demand, particularly from North American customers.

**Gross profit** Gross profit for the year ended December 31, 2006 increased by \$144.3 million to \$305.1 million, an increase of 89.8% from \$160.7 million for the comparable 2005 period. The gross margin percentage for 2006 was 45.3% versus 37.2% for the comparable 2005 period.

The gross profit and gross margin improvements for the year ended December 31, 2006 compared to the prior year were mainly due to the addition of the former Mykrolis operations, particularly the inclusion of sales of gas microcontamination and liquid microcontamination product lines as these products typically carry higher gross margins than the Company's other products. The Company also benefited from improved sales levels resulting in improved utilization of its manufacturing facilities. Prices for raw materials were relatively stable sequentially and compared to the year-ago period.

Gross profit in 2006 was reduced by costs of \$2.8 million incurred in connection with the consolidation of manufacturing facilities in the U.S., Germany and Japan. Offsetting these charges to 2006 gross profit was a gain of \$0.7 million on the sale of a facility recognized during the second quarter of 2006. Gross profit in the third and fourth quarters of 2006 was lower than the strong levels achieved earlier in the year due to manufacturing inefficiencies experienced at a North American plant in the third quarter and expenses incurred in the fourth quarter in connection with a comprehensive worldwide review of the Company's manufacturing operations to identify and resolve manufacturing inefficiencies.

Gross profit in 2005 was significantly affected by the inclusion of \$23.8 million in incremental charges associated with the fair market value write-up of inventory acquired in the merger with Mykrolis. The inventory write-up was recorded as part of the purchase price allocation and was charged to cost of sales over inventory turns of the acquired inventory during the third and fourth quarters of 2005. Also during 2005, the Company incurred costs of \$8.4 million associated with the realignment of manufacturing facilities in the U.S., Germany and Japan and its production and administrative activities, including \$3.7 million in accelerated depreciation and impairment charges associated with assets sold or in connection with realignment activities.

**Selling, general and administrative expenses** Selling, general and administrative (SG&A) expenses of \$188.3 million for 2006 increased \$32.1 million, or 20.6% compared to \$156.2 million in the comparable period a year ago. SG&A expenses as a percent of net sales fell to 28.0% from 36.1% a year earlier. The lower SG&A costs as a percent of net sales reflect the benefit of cost reductions associated with the merging of the two entities.

The year-over-year increase in SG&A costs reflect the addition of SG&A expenses associated with Mykrolis' infrastructure as well as increased amortization of intangibles of \$7.4 million. Costs of \$12.1 million were incurred by the Company in connection with the integration and realignment activities associated with the Mykrolis merger compared to \$23.4 million in 2005. The costs included in the latter category generally relate to

expenses incurred to integrate Mykrolis operations and systems into the Company's pre-existing operations and systems. These costs include, but are not limited to, the integration of information systems, employee benefits and compensation, accounting/finance, tax, treasury, risk management, compliance, administrative services, sales and marketing and other functions and includes severance and retention costs. SG&A costs fell during the second half of 2006 as cost containment measures were put in place in the face of slowing sales and as integration activities were completed.

**Engineering, research and development expenses** Engineering, research and development (ER&D) expenses rose by \$12.0 million, or 46.1%, to \$38.1 million in 2006 compared to \$26.1 million for the year ended December 31, 2005. The increases mainly reflect the inclusion of ER&D expenses associated with former Mykrolis operations. ER&D expenses as a percent of net sales were 5.7% compared to 6.0% in the prior year. The Company continued to focus on supporting current product lines and developing new products and manufacturing technologies.

**Interest income, net** Net interest income was \$9.2 million in 2006 compared to \$4.5 million in the prior-year period. The increase reflects the considerably higher rates of interest available on the Company's investments in short-term debt securities as well as the higher average net invested balance compared to the prior-year period, associated in part with the cash and short-term investments acquired in the Mykrolis merger.

**Income tax expense (benefit)** The Company recorded income tax expense of \$26.9 million in 2006 compared to an income tax benefit of \$10.6 million for the comparable period a year ago. The effective tax rate was 30.1% in fiscal 2006 compared with a 70.9% rate a year earlier. The Company's 2006 tax rate was lower than statutory rates due to the benefits associated with export activities and a tax holiday in Malaysia whereby as a result of employment commitments, research and development expenditures and capital investments made by the Company, income from certain manufacturing activities in Malaysia was exempt from tax with tax benefits in 2006 in the amount of \$2.8 million. In 2005, the Company's had tax benefits from the Malaysian tax holiday in the amount of \$1.0 million.

**Discontinued operations** The Company's businesses classified as discontinued operations recorded a loss before income taxes of \$1.9 million in 2006. The income from discontinued operations included a tax benefit of \$1.6 million recorded in the first quarter of 2006 related to the change in the deferred tax asset valuation allowance resulting from the resolution of a matter with respect to the characterization of certain gains and losses.

**Net income** The Company recorded net income of \$63.5 million, or \$0.46 per diluted share, in 2006, compared to a net loss of \$15.5 million, or \$0.16 per diluted share, in the comparable 2005 period. Income from continuing operations for fiscal 2006 was \$63.2 million, or \$0.46 per diluted share, compared to a net loss of \$4.5 million, or \$0.03 per diluted share, in the prior-year period.

#### **Four Months Ended December 31, 2005 Compared To Four Months Ended December 31, 2004 (Unaudited)**

The following table sets forth the results of operations and the relationship between various components of operations, stated as a percent of net sales, for the four-month periods ended December 31, 2005 and 2004. The Company's historical financial data were derived from its consolidated financial statements and related notes included elsewhere in this annual report. The 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 period presented.

<i>(Dollars in thousands)</i>	Four months ended December 31, 2005		Four months ended December 31, 2004 (Unaudited)	
		% of net sales		% of net sales
Net sales	\$ 199,644	100.0%	\$ 114,529	100.0%
Cost of sales	129,437	64.8	66,588	58.1
Gross profit	70,207	35.2	47,941	41.9
Selling, general and administrative expenses	77,253	38.7	31,453	27.5
Engineering, research and development expenses	13,904	7.0	6,149	5.4
Operating (loss) profit	(20,950)	(10.5)	10,339	9.0
Interest income, net	(2,440)	(1.2)	(473)	(0.4)
Other expense, net	62		214	0.2
(Loss) income before income taxes and equity in (earnings) loss of affiliates	(18,572)	(9.3)	10,598	9.3
Income tax (benefit) expense	(8,713)	(4.4)	2,984	2.6
Equity in net (earnings) loss of affiliates	(70)		27	
Net (loss) income from continuing operations	\$ (9,789)	(4.9)	\$ 7,587	6.6

**Net sales** Net sales were \$199.6 million for the four months ended December 31, 2005, up 74% compared to \$114.5 million in the four months ended December 31, 2004. Sales from Mykrolis operations totaled \$89.6 million, accounting for slightly more than the overall period-over-period increase. Sales were adversely affected by approximately \$3.5 million due to the weakening of international currencies versus the U.S. dollar, most notably in Japan. On a geographic basis, total regional sales to North America were 31%, Asia Pacific 33%, Europe 14% and Japan 22%.

Industry indicators during the 2005 period were largely positive. Semiconductor device makers and foundries reported continued high fab utilization rates, both at the advanced technology nodes and for NAND flash and other memory devices. Capital spending was also generally favorable.

These trends were reflected across unit-driven products. In particular, sales of liquid filtration and purification products, which represent almost half of unit-driven sales, improved over the comparable period a year earlier. Strength in Japan and North America was offset by relative weakness in Europe, whose order trends typically trail those in other geographies.

Sales of wafer shippers rose during the period, driven by demand for product for 200mm and below. Sales of other unit-driven products were mixed. Strong sales of gas microcontamination filters and purifiers, which are used on a broad spectrum of gas and vacuum based tools, offset lower sales of shippers for data storage devices and matrix trays for finished electronic products.

Among capital-driven products, sales of 300mm wafer carriers improved over the comparable period a year earlier. Sales of these products are primarily driven by the timing of new fab construction, and as such, demand can be variable from period to period. Sales of liquid systems products were also higher than the year-ago period.

**Gross profit** Gross profit in the four months ended December 31, 2005 increased by \$22.3 million to \$70.2 million, an increase of 46% from the \$47.9 million reported in the four months ended December 31, 2004. The gross margin percentage for the four months ended December 31, 2005, was 35.2 % versus 41.9% in the comparable period of 2004.

The gross margin rate for the four months ended December 31, 2005 was significantly below the rate for the same period in the prior year for a number of reasons. The main factor was the \$17.8 million incremental cost of sales charge associated with the fair market value write-up of inventory acquired in the merger with Mykrolis. The inventory write-up was recorded as part of the purchase price allocation and was charged to cost of sales over inventory turns of the acquired inventory and was fully expensed by the end of the quarter ended

November 26, 2005. Costs of \$4.8 million associated with the consolidation of manufacturing facilities in the U.S., Germany and Japan also reduced gross profit. Although price increases for resins began to moderate, on a year-over-year basis, the Company's gross margin was lower due to higher material costs for certain products.

**Selling, general and administrative expenses** Selling, general and administrative (SG&A) expenses increased \$45.8 million, or 146%, to \$77.3 million in the four months ended December 31, 2005, up from \$31.5 million in the comparable four-month period a year earlier. Due to the magnitude of the increase, SG&A expenses, as a percent of net sales, rose to 38.7% from 27.5% a year earlier.

The increase in SG&A costs reflected the addition of SG&A expenses of \$31.0 million associated with Mykrolis' infrastructure and increased amortization of intangibles of \$4.7 million, as well as costs of \$11.3 million incurred by the Company in connection with the integration activities associated with the Mykrolis merger. The costs included in this category generally relate to expenses incurred to integrate Mykrolis operations and systems into the Company's pre-existing operations and systems. These costs include, but are not limited to, the integration of information systems, employee benefits and compensation, accounting/finance, tax, treasury, risk management, compliance, administrative services, sales and marketing and other functions and includes severance and retention costs. The year-over-year increase also included incremental share-based compensation expense of \$9.6 million.

**Engineering, research and development expenses** Engineering, research and development (ER&D) expenses were \$13.9 million in the four months ended December 31, 2005, up 126% from \$6.1 million in the four months ended December 31, 2004. ER&D expenses, as a percent of net sales, increased to 7.0% from 5.4%, reflecting the inclusion of Mykrolis ER&D expenses. The Company continued to focus on the support of current product lines and the development of new products and manufacturing technologies.

Interest income, net Net interest income was \$2.4 million in the four months ended December 31, 2005 compared to \$0.5 million in the same four-month period a year earlier. The increase reflected the higher rates of interest available on the Company's investments in short-term debt securities as well as the higher average net invested balance compared to the prior-year period, associated in part with the short-term investments acquired in the Mykrolis merger.

**Income tax expense** The Company recorded an income tax benefit of \$8.7 million in the four months ended December 31, 2005 compared to income tax expense of \$3.0 million in the four months ended December 31, 2004. The effective tax rate was (46.9)% in the 2005 period, compared to 28.2% in the 2004 period.

During the four months ended December 31, 2005, the Company recorded a tax benefit of \$1.1 million, plus interest, related to the refund of certain Minnesota corporate income taxes previously paid for fiscal years 2000 and 2001 based upon certain rulings. In both periods, the Company's effective tax rate benefited from a tax benefit associated with export activities and a tax credit associated with research and development (R&D) activities. In addition, the Company benefited from a tax holiday in Malaysia, whereby as a result of employment and R&D expenditure commitments made by the Company, income from certain manufacturing activities in Malaysia was exempt from tax, with tax benefits in the four months ended December 31, 2005 in the amount of \$0.2 million.

Income tax expense in the four months ended December 31, 2004 included a \$0.5 million tax benefit that was recorded in connection with the resolution of a U.S. federal income tax refund claim made by the Company.

**Discontinued operations** The Company's businesses classified as discontinued operations recorded a net loss of \$8.5 million, net of tax, in the four months ended December 31, 2005. The results included impairment charges of \$6.7 million, net of tax, associated with write-downs of long-lived assets to fair value less cost to sell. These product lines were sold in late calendar 2005 and the first quarter of calendar 2006.

**Net (loss) income** The Company recorded a net loss of \$18.3 million, or \$0.14 per diluted share, in the four-month period ended December 31, 2005 compared to net income of \$6.6 million, or \$0.09 per diluted share, in the four-month period ended December 31, 2004. The loss from continuing operations for the 2005 four-month period was \$9.8 million, or \$0.07 per share, compared to net income of \$7.6 million, or \$0.10 per share, in the 2004 four-month period.

## Quarterly Results of Operations

The following table presents selected data from the Company's consolidated statements of operations for the eight quarters ended December 31, 2007. 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 (UNAUDITED)

	Year ended December 31, 2006				Year ended December 31, 2007			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>(In thousands)</i>								
Net sales	\$ 156,406	\$ 179,296	\$ 169,880	\$ 167,300	\$ 159,571	\$ 153,508	\$ 151,811	\$ 161,348
Gross profit	72,827	86,981	75,838	69,432	68,508	65,494	65,510	66,725
Selling, general and administrative expenses	51,697	51,553	43,284	41,777	45,944	44,317	43,983	48,548
Engineering, research and development expenses	9,042	9,977	9,651	9,404	10,534	9,679	9,409	10,105
Operating profit	12,088	25,451	22,903	18,251	12,030	11,498	12,118	8,072
Net income	11,353	18,193	17,821	16,099	10,383	14,777	8,417	10,782
<i>(Percent of net sales)</i>								
Net sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gross profit	46.6	48.5	44.6	41.5	42.9	42.7	43.2	41.4
Selling, general and administrative expenses	33.1	28.8	25.5	25.0	28.8	28.9	29.0	30.1
Engineering, research and development expenses	5.8	5.6	5.7	5.6	6.6	6.3	6.2	6.3
Operating profit	7.7	14.2	13.5	10.9	7.5	7.5	8.0	5.0
Net income	7.3	10.1	10.5	9.6	6.5	9.6	5.5	6.7

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 August 2005, the Company financed its merger with Mykrolis Corporation through the issuance of common stock and stock options.

**Operating activities** Net cash flow provided by operating activities totaled \$132.0 million for the year ended December 31, 2007. Cash flow primarily related to net earnings, and the effect of non-cash charges, including depreciation and amortization of \$43.8 million, and share-based compensation expense of \$10.3 million.

Also adding to operating cash flow was the net positive impact of changes in operating assets and liabilities, most notably declines in receivables and inventory. Working capital stood at \$256.9 million at December 31, 2007, including \$160.7 million in cash and cash equivalents, down from \$463.6 million as of December 31, 2006, including \$275.0 million in cash, cash equivalents and short-term investments.

During 2007, accounts receivable, net of foreign currency translation adjustments, decreased by \$20.1 million, reflecting lower sales and an improvement in the Company's days sales outstanding, which were 63 days at year end compared to 70 days at the beginning of the year. Net of foreign currency translation adjustments, inventories decreased in 2007 by \$24.1 million from December 31, 2006 due to reduced production activity and improved management of inventories.

**Investing activities** Cash flow provided by investing activities totaled \$50.8 million in the twelve months ended December 31, 2007. The company had proceeds from maturities and sales of short-term investments, net of purchases, of \$121.1 million during 2007. Proceeds of \$2.0 million from the sale of various property and equipment were recorded in the twelve months ended December 31, 2007. The Company owned no short-term investments at December 31, 2007. Cash flow from investing activities also included proceeds from the sale of the Company's interest in a privately-held equity investment totaling \$6.6 million.

The acquisition of a specialty coatings business in August 2007 totaled \$44.9 million. Acquisition of property and equipment totaled \$26.9 million, primarily for additions related to the facility expansion in Malaysia, manufacturing equipment, tooling and information systems. The Company expects total capital expenditures of approximately \$30 million for calendar 2008. The Company also invested \$6.1 million in equities of privately-held companies.

**Financing activities** Net cash used in financing activities totaled \$183.1 million during 2007. As described below, the Company repurchased and retired \$256.1 million of common stock during the year. Proceeds from borrowings received under various debt agreements during the year were \$131.1 million. The Company made payments of \$88.1 million on borrowings. The Company received proceeds of \$29.9 million in connection with common shares issued under the Company's stock option and stock purchase plans.

In June 2007, the Company's Board of Directors authorized a share repurchase program to acquire up to \$250 million of the Company's stock. In a modified Dutch Auction tender offer completed in June 2007, the Company purchased 21.1 million shares of its common stock at a price of \$11.80 per share, plus costs to acquire the shares, for a total cash outlay of approximately \$251.4 million.

In August 2006, the Company entered into an accelerated share repurchase agreement (ASRA) and a collared accelerated repurchase agreement (CASRA) with Goldman, Sachs & Co. The Company completed the transaction in August 2007. The Company received an additional 0.4 million shares under the CASRA and paid an additional \$0.6 million under the ASRA, respectively.

In November 2007, the Company's Board of Directors authorized a Rule 10b-5-1 trading plan to acquire up to \$49.2 million of the Company's common stock. Under the trading plan, the Company purchased 0.5 million shares of its common stock at a total cost of \$4.1 million.

The Company executed a new credit agreement in 2007, which expires in June 2010, and allows for aggregate borrowings of up to \$85 million with interest at LIBOR rates plus an incremental factor ranging from 0.75% to 1.25% based on the current funded debt to EBITDA ratio (as defined therein). Under the credit agreement, which includes a \$60 million revolver and a \$25 million one-year term note, the Company is prohibited from paying cash dividends. The Company is also subject to, and is in compliance with, certain financial covenants including a leverage ratio of funded debt to EBITDA (as defined therein) of not more than 3.00 to 1.00. In addition, the Company must maintain consolidated aggregate amounts of cash and cash equivalents (which under the agreement may also include auction rate securities classified as short-term investments) of not less than \$50 million. In June 2007, the Company drew down the \$25 million term note facility and subsequently paid the note down completely in December 2007. Under the terms of the agreement, the \$25 million term note facility is no longer available. As of December 31, 2007, the remaining revolver facility of \$60 million under the credit agreement was available with no borrowings outstanding.

At December 31, 2007, the Company's shareholders' equity was \$852.3 million, down 16% from \$1,016.0 million at the beginning of the period. The decrease is primarily a result of the repurchase and retirement of the Company's stock as described above. This was offset partially by the Company's net earnings of \$44.4 million, the proceeds of \$29.9 million received in connection with shares issued under the Company's stock option and stock purchase plans, and the increase to additional paid-in capital of \$10.6 million associated with the Company's share-based compensation expense and related tax benefits recorded during the period.

As of December 31, 2007, the Company's sources of available funds comprised \$160.7 million in cash and cash equivalents, as well as funds available under various credit facilities. Entegris has a credit agreement with one domestic commercial bank with available borrowing capacity of \$60 million, with no borrowings outstanding, as of December 31, 2007. The Company also has a line of credit with three international banks that provide for borrowings of currencies for two of the Company's overseas subsidiaries, equivalent to an aggregate of approximately \$21.0 million. There was \$17.8 million in borrowings outstanding on these lines of credit at December 31, 2007.

As described in greater detail at Note 21 to its consolidated financial statements, the Company executed a new domestic credit agreement in February 2008, which expires in February 2013, with a total borrowing capacity of \$230 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:

<i>(In thousands)</i>	<b>Total</b>	<b>Maturity by fiscal year</b>					<b>Thereafter</b>
		<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	
<i>Contractual obligations related to off-balance sheet arrangements:</i>							
Operating leases	\$ 30,158	\$ 9,576	\$ 6,353	\$ 5,517	\$ 2,873	\$ 2,598	\$ 3,241
Foreign currency contracts	286	286					
<b>Total</b>	<b>\$ 30,444</b>	<b>\$ 9,862</b>	<b>\$ 6,353</b>	<b>\$ 5,517</b>	<b>\$ 2,873</b>	<b>\$ 2,598</b>	<b>\$ 3,241</b>
<i>Contractual obligations reflected in the balance sheet:</i>							
Long-term debt	\$ 29,683	\$ 9,310	\$ 9,327	\$ 11,046			
Pension obligations	\$ 5,423	570	456	491	711	458	2,737
<b>Total</b>	<b>\$ 35,106</b>	<b>\$ 9,880</b>	<b>\$ 9,783</b>	<b>\$ 11,537</b>	<b>\$ 711</b>	<b>\$ 458</b>	<b>\$ 2,737</b>

The Company adopted FIN 48, *Accounting for Uncertainty in Income Taxes-an Interpretation of FASB Statement No. 109* as of January 1, 2007. The Company had \$16.6 and \$11.7 million of total gross unrecognized tax benefits at December 31, 2007 and the date of adoption, respectively. The timing of any payments which could result from these unrecognized tax benefits will depend on a number of factors. Accordingly, the Company cannot make reasonably reliable estimates of the amount and period of potential cash settlements, if any, with taxing authorities.



### **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 interest-bearing cash equivalents and certain long-term debt are subject to interest rate fluctuations. Most of the Company's long-term debt at December 31, 2007 carries fixed rates of interest. The Company's cash equivalents are instruments with maturities of three months or less. A 100 basis point change in interest rates would potentially increase or decrease annual net income by approximately \$0.7 million annually.

The cash flows and earnings of the Company's foreign-based operations are subject to fluctuations in foreign exchange rates. The Company occasionally uses derivative financial instruments to manage the foreign currency exchange rate risks associated with its foreign-based operations. At December 31, 2007, the Company was party to forward contracts to deliver Japanese yen, Taiwanese dollars, Euros, Israeli new shekels, Malaysia ringgits, and Singapore dollars with notional values of approximately \$8.5 million, \$6.0 million, \$7.8 million, \$1.5 million, \$7.0 million and \$2.8 million, respectively. A hypothetical 10% change in the foreign currency exchange rates would potentially result in exchange gains or losses that could increase or decrease net income by approximately \$2.1 million.

On February 6, 2007, the Company entered into a 10-month Japanese yen-based cross-currency interest rate swap, with aggregate notional principal amounts of 2.4 billion Japanese yen and \$20 million that matured on November 30, 2007. This swap effectively hedged a portion of the Company's net investment in its Japanese subsidiary. During the term of this transaction, the Company remitted to, and received from, its counterparty interest payments based on rates that were reset quarterly equal to three-month Japanese LIBOR and three-month U.S. LIBOR rates, respectively. The Company designated this hedging instrument as a hedge of a portion of the net investment in its Japanese subsidiary, and used the spot rate method of accounting to value changes of the hedging instrument attributable to currency rate fluctuations. Accordingly, a \$2.1 million adjustment in the fair market value of the hedging instrument related to changes in the spot rate was recorded as a charge to Foreign currency translation within accumulated other comprehensive loss in shareholders' equity in 2007 to offset changes in a portion of the yen-denominated net investment in the Company's Japanese subsidiary and will remain there until the net investment is disposed. The Company recorded \$0.7 million in net interest income in 2007 in connection with the cross-currency interest rate swap.

### **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 materials, including polymers and stainless steel, was generally flat compared to one year ago due to increased production capacity of suppliers, despite higher oil prices. Entegris expects the cost of these materials to increase notably in 2008 due to the tightening of production capacity of its suppliers, a weak U.S. dollar driving strong demand for these materials overseas, particularly polymer-based resins, and projected higher oil prices. Labor costs, including taxes and fringe benefits rose slightly in fiscal 2007 and moderate increases also can be reasonably anticipated for fiscal 2008. The Company's products are sold under contractual arrangements with its large customers and at current market prices to other customers. Consequently, the Company can adjust its selling prices, to the extent allowed by competition and contractual arrangements, to reflect cost increases caused by inflation. However, many of these cost increases may not be recoverable.

---

**FACTORS AND UNCERTAINTIES THAT MAY AFFECT FUTURE RESULTS**

The matters discussed in this Annual Report on Form 10-K include forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include but are not limited to statements about:

our strategy;

our revenues;

sufficiency of our cash resources;

product development;

our research and development and other expenses; and

our operations and legal risks.

Discussions containing these forward-looking statements may be found throughout this report including in the items entitled Business (Item 1), Risk Factors (Item 1A), and Management's Discussion and Analysis of Financial Condition and Results of Operations (Item 7), as well as any amendments thereto reflected in subsequent filings with the SEC. These statements are based on current management expectations and are subject to substantial risks and uncertainties which could cause actual results to differ materially from the results expressed in, or implied by, these forward-looking statements. When used herein or in such statements, the words anticipate, believe, estimate, expect, may, will, shall, or similar expressions and the negative thereof and similar expressions as they relate to Entegris or its management are intended to identify such forward-looking statements. We undertake no obligation to publicly release any revisions to the forward-looking statements or reflect events or circumstances after the date of this Annual Report on Form 10-K except as required by law.

**Item 7a. Quantitative and Qualitative Disclosures about Market Risk.**

The information required by this item can be found under the subcaption Quantitative and Qualitative Disclosures 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.**

The information called for by this item is set forth in the Consolidated Financial Statements covered by the Report of Independent Registered Public Accounting Firm at the end of this report.

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

None.

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

**(a) EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES**

## Edgar Filing: ENTEGRIS INC - Form 10-K

Management evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act), as of December 31, 2007, the end of the fiscal period covered by this report on Form 10-K. The Securities and Exchange Commission, or SEC, rules define the term "disclosure controls and procedures" to mean a company's controls and other procedures that are designed to ensure that information required to be disclosed in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time period specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation,

controls and procedures designed to ensure that information required to be disclosed by a company in its reports filed under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Based on the evaluation of the effectiveness of our disclosure controls and procedures by our management team with the participation of the Chief Executive Officer and the Chief Financial Officer, our Chief Executive Officer and our Chief Financial Officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were not effective as of such date because of the existence of a material weakness in our internal control over financial reporting related to accounting for income taxes as described below.

**(b) MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Exchange Act Rule 13a-15(f). The Company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles (U.S. GAAP) and includes those policies and procedures that:

- (1) Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company;
- (2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and
- (3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2007. In making this assessment, management used the control criteria framework of the Committee of Sponsoring Organizations (COSO) of the Treadway Commission published in its report entitled *Internal Control - Integrated Framework*. As a result of this assessment, management identified a material weakness in the internal control over our financial reporting related to ineffective controls over the accounting for income taxes. Specifically, the Company did not have sufficient tax personnel with adequate expertise to effectively monitor and review the process to prepare the income tax provision. This control deficiency resulted in errors in the interim and annual consolidated financial statements related to both the prior and current periods and there is a reasonable possibility that a material misstatement of the Company's annual or interim consolidated financial statements would not be prevented nor detected on a timely basis. Based on this material weakness, management concluded that the Company's internal control over financial reporting was not effective as of December 31, 2007. KPMG LLP, an independent registered public accounting firm, has issued an auditors' report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2007.

**(c) REMEDIATION PLAN RELATED TO 2007 10K MATERIAL WEAKNESS**

We have not fully remediated the material weakness relating to accounting for income taxes. Management is committed to improving the internal control over financial reporting to remediate this material weakness and ensuring compensating controls are in place, where necessary. Therefore, in response to the foregoing, we, with the oversight of our Audit Committee, have implemented the following corrective actions and plan to adopt certain additional measures to remediate our material weakness in accounting for income taxes.

Completed the transition of the tax department leadership to our recently hired Vice President of Tax who has significant public accounting, public company and international tax experience.

Utilized a third-party tax service provider to complete a significant review and reconciliation of all major deferred tax accounts.

Utilized a third party tax service provider to complete a review of FIN 48 tax contingencies.

Hired a new tax manager, in December 2007, with significant public company tax experience.

Additionally, our plan to remediate the material weakness relating to accounting for income taxes includes the following measures:

Obtaining the control benefit from recently hired experienced tax staff who have public accounting and/or public company experience;

Hiring additional experienced tax professionals with public accounting and/or public company income tax experience; and

Continuing to improve our review processes and procedures over the preparation, reconciliation and analysis of its income tax provision and income tax-related accounts.

**(d) CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING**

There was no change in the Company's internal control over financial reporting during the most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, internal control over financial reporting.

**Item 9B. Other Information.**

None.

**PART III**

**Item 10. Directors, Executive Officers and Corporate Governance.**

The information called for by this item with respect to registrant's directors, including information relating to the independence of certain directors, identification of the audit committee and the audit committee financial expert and with respect to corporate governance is set forth under the caption "Election of Directors and Corporate Governance", respectively in the Company's definitive Proxy Statement for the Entegris, Inc. Annual Meeting of Stockholders to be held on May 7, 2008, and to be filed with the Securities and Exchange Commission on or about April 6, 2008, which information is hereby incorporated herein by reference.

The information called for by this item with respect to registrant's compliance with Section 16(a) of the Securities Exchange Act of 1934, as amended, is set forth under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" in the Company's definitive Proxy Statement for the Entegris, Inc. Annual Meeting of Stockholders to be held on May 7, 2008, and to be filed with the Securities and Exchange Commission on or about April 6, 2008, which information is hereby incorporated herein by reference.

Information called for by this item with respect to registrant's executive officers is set forth under "Executive Officers" in Item 1 of this report.

The Company has adopted a code of ethics, the Entegris, Inc. Code of Business Ethics, which applies to all employees of the registrant including the registrant's Chief Executive Officer, Chief Financial Officer and Chief accounting Officer. A copy of the Entegris, Inc. Code of Business Ethics is posted on our website at <http://www.Entegris.com>, under "Investor Relations Governance". The Entegris, Inc. Code of Business Ethics is available in print to any stockholder that requests a copy. A copy of the Entegris, Inc. Code of Business Ethics may be obtained by contacting Peter W. Walcott, the Company's Senior Vice President & General Counsel at the Company's headquarters. The Company intends to comply with the requirements of Item 10 of Form 8-K with respect to any waiver of the provisions of the Entegris, Inc. Code of Business Ethics applicable to the registrant's Chief Executive Officer, Chief Financial Officer or Chief Accounting Officer by posting notice of any such waiver at the same location on our website.

**Item 11. Executive Compensation.**

The information called for by this item is set forth under the caption "COMPENSATION OF EXECUTIVE OFFICERS", "MANAGEMENT DEVELOPMENT & COMPENSATION COMMITTEE" and "REPORT OF THE MANAGEMENT DEVELOPMENT & COMPENSATION COMMITTEE", respectively, in the Company's definitive Proxy Statement for the Entegris, Inc. Annual Meeting of Stockholders to be held on May 7, 2008, and to be filed with the Securities and Exchange Commission on or about April 6, 2008, which information is hereby incorporated herein by reference.

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

The following information is provided as of December 31, 2007, with respect to our compensation plans under which equity securities are authorized for issuance. The only equity securities currently authorized for issuance under our compensation plans are common stock for awards or options to acquire our common stock.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) <sup>(1)</sup> (c)
Equity compensation plans approved by security holders	8,007,073	\$ 8.70	7,952,720 <sup>(2)</sup>
Equity compensation plans not approved by security holders	379,270	\$ 8.68	934,721 <sup>(3)</sup>
<b>Total</b>	<b>8,386,343</b>	<b>\$ 8.70</b>	<b>8,887,441<sup>(2)(3)</sup></b>

(1) Includes shares of Entegris common stock available for award or to support option grants under the 2001 Equity Incentive Plan and the 2003 Employment Inducement and Acquisition Stock Option Plan as well as under the 1999 Long Term Incentive and Stock Option Plan and Outside Directors Option Plan, each of first two enumerated plans contains an evergreen provision that annually increases the number of shares available for award or to support option grants by 1% and 0.25%, respectively, of the number of shares of common stock outstanding on the date of the Annual Meeting of Stockholders.

(2) This figure has been reduced for outstanding restricted shares of common stock and the maximum available number of performance shares as of December 31, 2007 in the amount of 2,834,660.

(3) This figure has been reduced by 106,763 outstanding restricted shares of common stock as of December 31, 2007.

The securities issued and available for issue pursuant to equity compensation plans not approved by security holders listed in the table above refers to the Entegris, Inc. 2003 Employment Inducement and Acquisition Stock Option Plan which was adopted by the Board of Directors of Mykrolis and assumed by the Company by action of its Board of Directors effective August 10, 2005. This stock option plan provides for the grant of stock options covering an aggregate of 486,500 shares of the Common stock, \$0.01 par value, of the Company to newly hired (or rehired) employees and to employees of companies acquired by Entegris. The plan has a term of ten years and provides that all stock options granted under the plan carry an exercise price of fair market value on the date of grant. This plan also contains an evergreen provision that annually increases the number of shares available for award or to support option grants by 0.25% of the number of shares of common stock outstanding on the date of the Annual Meeting of Stockholders during the term of the plan.

The information called for by Item 403 of Regulation S-K is set forth under the caption OWNERSHIP OF ENTEGRIS COMMON STOCK in the Company's definitive Proxy Statement for the Entegris, Inc. Annual Meeting of Stockholders to be held on May 7, 2008, and to be filed with the Securities and Exchange Commission on or about April 6, 2008, which information is hereby incorporated herein by reference.

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

The information called for by this item with respect to certain transactions and relationships between the registrant and directors, executive officers and five percent stockholders is set forth under the caption **MANAGEMENT AND ELECTION OF DIRECTORS-Nominees for Election as Directors** in the Company's definitive Proxy Statement for the Entegris, Inc. Annual Meeting of Stockholders to be held on May 7, 2008, and to be filed with the Securities and Exchange Commission on or about April 6, 2008, which information is hereby incorporated herein by reference.

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

The information called for by this item with respect to the fees paid to and the services performed by the registrant's principal accountant is set forth under the caption **ACCOUNTANTS** in the Company's definitive Proxy Statement for the Entegris, Inc. Annual Meeting of Stockholders to be held on May 7, 2008, and to be filed with the Securities and Exchange Commission on or about April 6, 2008, which information is hereby incorporated herein by reference.



**PART IV**

**Item 15. Exhibits, Financial Statement Schedules, and Reports on Form 8-K.**

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

1. **Financial Statements.** The Consolidated Financial Statements listed under Item 8 of this report and in the Index to Consolidated Financial Statements on page F-1 of this report that is incorporated by reference.

2. **Exhibits.**

A. *The following exhibits are incorporated by reference:*

**Reg. S-K  
Item 601(b)  
Reference**

<b>Document Incorporated</b>	<b>Referenced Document on file with the Commission</b>
(2) Agreement and Plan of Merger, dated as of March 21, 2005, by and among Entegris, Inc., Mykrolis Corporation and Eagle DE, Inc.	Included as Annex A in the joint proxy statement/prospectus included in S-4 Registration Statement of Entegris, Inc. and Eagle DE, Inc. (No. 333-124719)
(2) Agreement and Plan of Merger, dated as of March 21, 2005, by and between Entegris, Inc., and Eagle DE, Inc.	Included as Annex B in the joint proxy statement/prospectus included in S-4 Registration Statement of Entegris, Inc. and Eagle DE, Inc. (No. 333-124719)
(2) Form of Master Separation and Distribution Agreement between Millipore Corporation and Mykrolis Corporation	Exhibit 2.1 to Mykrolis Corporation Form S-1 Registration Statement (No. 333-57182)
(2) Form of General Assignment and Assumption Agreement between Millipore Corporation and Mykrolis Corporation	Exhibit 2.2 to Mykrolis Corporation Form S-1 Registration Statement (No. 333-57182)
(3) Amended and Restated Certificate of Incorporation of Entegris, Inc.	Included as Annex C-2 in the joint proxy statement/prospectus included in S-4 Registration Statement of Entegris, Inc. and Eagle DE, Inc. (No. 333-124719)
(3) By-laws of Entegris, Inc.	Included as Annex D in the joint proxy statement/prospectus included in S-4 Registration Statement of Entegris, Inc. and Eagle DE, Inc. (No. 333-124719)
(4) Form of certificate representing shares of Common Stock, \$.01 par value per share	Exhibit 4.1 to Form S-4 Registration Statement of Entegris, Inc. and Eagle DE, Inc. (No. 333-124719)
(4) Rights Agreement dated July 26, 2005, between Entegris and Wells Fargo Bank, N.A as rights agent	Exhibit 4.1 to Entegris, Inc. (Entegris Minnesota) Current Report on Form 8-K filed with the Securities and Exchange Commission on July 29, 2005
(10) Entegris, Inc. 1999 Long-Term Incentive and Stock Option Plan*	Entegris, Inc. Registration Statement on Form S-1 (No. 333-33668)

\* A management contract or compensatory plan

Edgar Filing: ENTEGRIS INC - Form 10-K

<b>Reg. S-K Item 601(b) Reference</b>	<b>Document Incorporated</b>	<b>Referenced Document on file with the Commission</b>
(10)	Entegris, Inc. Outside Directors Stock Option Plan*	Entegris, Inc. Registration Statement on Form S-1 (No. 333-33668)
(10)	Entegris, Inc. 2000 Employee Stock Purchase Plan	Entegris, Inc. Registration Statement on Form S-1 (No. 333-33668)
(10)	2001 Equity Incentive Plan*	Exhibit 10.1 to Mykrolis Corporation Form S-1 Registration Statement (No. 333-57182)
(10)	2003 Employment Inducement and Acquisition Stock Option Plan*	Exhibit 10.6 to Mykrolis Corporation Form 10-Q Quarterly Report for the period ended September 27, 2003
(10)	Supplemental Executive Retirement Plan for Key Salaried Employees*	Exhibit 10.28 to Mykrolis Corporation Form 10-K Annual Report for the year ended December 31, 2002
(10)	2002 Deferred Compensation Plan for Senior Management*	Exhibit 10.29 to Mykrolis Corporation Form 10-K Annual Report for the year ended December 31, 2002
(10)	Lease Agreement, dated April 1, 2002 Between Nortel Networks HPOCS Inc. And Mykrolis Corporation, relating to Executive office, R&D and manufacturing facility located at 129 Concord Road Billerica, MA	Exhibit 10.1.3 to Mykrolis Corporation Quarterly Report on Form 10-Q, for the period ended March 31, 2002
(10)	Master Patent License Agreement	Exhibit 10.8 to Mykrolis Corporation Form S-1 Registration Statement (No. 333-57182)
(10)	Master Patent Grantback License Agreement	Exhibit 10.9 to Mykrolis Corporation Form S-1 Registration Statement (No. 333-57182)
(10)	Master Trademark License Agreement	Exhibit 10.11 to Mykrolis Corporation Form S-1 Registration Statement (No. 333-57182)
(10)	Master Invention Disclosure Assignment	Exhibit 10.12 to Mykrolis Corporation Form S-1 Registration Statement (No. 333-57182)
(10)	Master Trade Secret and Know-How Agreement	Exhibit 10.13 to Mykrolis Corporation Form S-1 Registration Statement (No. 333-57182)
(10)	Tax Sharing Agreement	Exhibit 10.14 to Mykrolis Corporation Form S-1 Registration Statement (No. 333-57182)
(10)	Amended and Restated Membrane Manufacture and Supply Agreement	Exhibit 10.1 to Entegris, Inc. Form 10-Q report for the period ended December 31, 2005
(10)	Restricted Stock Award Agreement, dated as of November 21, 2004, between Mykrolis Corporation and Gideon Argov*	Exhibit 10.32 to Mykrolis Corporation Form 10-K Annual Report for the year ended December 31, 2004
(10)	Form of Restricted Stock Award Agreement, dated as of December 9, 2004, between the Company and each of its executive officers*	Exhibit 10.34 to Mykrolis Corporation Form 10-K Annual Report for the year ended December 31, 2004

\* A management contract or compensatory plan

Edgar Filing: ENTEGRIS INC - Form 10-K

**Reg. S-K  
Item 601(b)  
Reference**

	<b>Document Incorporated</b>	<b>Referenced Document on file with the Commission</b>
(10)	Agreement and Plan of Merger by and among Mykrolis Corporation, Stingray Merger Corporation, Extraction Systems, Inc. and the Representative of the Holders of all of the Capital Stock of Extraction Systems, Inc. dated as of March 3, 2005	Exhibit 10.35 to Mykrolis Corporation Form 10-K Annual Report for the year ended December 31, 2004
(10)	Letter Agreement, dated as of March 21, 2005, by and between Mykrolis Corporation and Jean-Marc Pandraud*	Exhibit 10.6 to Mykrolis Corporation's Quarterly Report on Form 10-Q for the quarter ended April 2, 2005
(10)	Letter Agreement, dated as of March 21, 2005, by and between Mykrolis Corporation and Peter W. Walcott*	Exhibit 10.8 to Mykrolis Corporation's Quarterly Report on Form 10-Q for the quarter ended April 2, 2005
(10)	Amended and Restated Employment Agreement, dated as of May 4, 2005, by and between Mykrolis Corporation and Gideon Argov*	Exhibit 10.13 to Mykrolis Corporation's Quarterly Report on Form 10-Q for the quarter ended April 2, 2005
(10)	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	Entegris, Inc. Registration Statement on Form S-1 (No. 333-33668)
(10)	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	Entegris, Inc. Registration Statement on Form S-1 (No. 333-33668)
(10)	Credit Agreement, dated as of June 8, 2007, by and among Entegris, Inc., Wells Fargo Bank NA, as agent, and the other banks party thereto	Exhibit 10.1 to Entegris, Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2007
(10)	Form of Indemnification Agreement between Entegris, Inc. and each of its executive officers and Directors	Exhibit 10.30 to Entegris, Inc. Annual Report on Form 10-K for the period ended August 27, 2005
(10)	Form of Executive Change of Control Termination Agreement between Entegris, Inc. and each of its executive officers*	Exhibit 10.31 to Entegris, Inc. Annual Report on Form 10-K for the period ended August 27, 2005
(10)	Employment Separation Agreement and Release between Entegris, Inc. and Stan Geyer (assumed by the Company)*	Exhibit 10.32 to Entegris, Inc. Annual Report on Form 10-K for the period ended August 27, 2005
(10)	Employment Agreement and Release between Entegris, Inc. and Michael W. Wright, effective August 6, 2005*	Exhibit 10.34 to Entegris, Inc. Annual Report on Form 10-K for the period ended August 27, 2005

\* A management contract or compensatory plan

**Reg. S-K  
Item 601(b)  
Reference**

	<b>Document Incorporated</b>	<b>Referenced Document on file with the Commission</b>
(10)	Entegris, Inc. 401 (k) Savings and Profit Sharing Plan (2005 Restatement)*	Exhibit 10.35 to Entegris, Inc. Annual Report on Form 10-K for the period ended August 27, 2005
(10)	Letter Agreement, dated as of August 10, 2005, by and between Entegris, Inc. and Bertrand Loy*	Exhibit 10.36 to Entegris, Inc. Annual Report on Form 10-K for the period ended August 27, 2005
(10)	Letter Agreement, dated as of August 10, 2005, by and between Entegris, Inc. and Greg Graves*	Exhibit 10.37 to Entegris, Inc. Annual Report on Form 10-K for the period ended August 27, 2005
(10)	Letter Agreement, dated as of August 10, 2005, by and between Entegris, Inc. and John Goodman*	Exhibit 10.39 to Entegris, Inc. Annual Report on Form 10-K for the period ended August 27, 2005
(10)	Form of Entegris, Inc. Restricted Stock Award Agreement*	Exhibit 10.2 to Entegris, Inc. Quarterly Report on Form 10-Q for the period ended November 27, 2005
(10)	Employment Offer Agreement with John J. Murphy*	Exhibit 10.2 to Entegris, Inc. Quarterly Report on Form 10-Q for the period ended December 31, 2005
(10)	Entegris, Inc. Form of 2006 Equity Incentive Award Agreement	Exhibit 10.1 to Entegris, Inc. Quarterly Report on Form 10-Q for the period ended April 1, 2006,
(10)	Accelerated Stock Buyback Agreement with Goldman, Sachs & Co., dated as of August 30, 2006 and related Supplemental Confirmation	Exhibit 10.1 to Entegris, Inc. Quarterly Report on Form 10-Q for the period ended September 30, 2006
(10)	Collared Accelerated Stock Buyback Agreement with Goldman, Sachs & Co., dated as of August 30, 2006, and related Supplemental Confirmation	Exhibit 10.2 to Entegris, Inc. Quarterly Report on Form 10-Q for the period ended September 30, 2006

**B. The Company hereby files as exhibits to this Annual Report on Form 10-K the following documents:**

**Reg. S-K  
Item 601(b)  
Reference**

	<b>Documents Filed Herewith</b>
(10.1)	Translation of Loan Agreement, dated November 2, 2007, between Nihon Entegris KK and Sumitomo Mitsui Banking Corporation
(10.2)	Translation of Specialised Overdraft Account Agreement, dated November 2, 2007, between Nihon Entegris KK and Bank of Tokyo-Mitsubishi UFJ, Ltd.
(10.3)	Trust Agreement between Entegris, Inc. Fidelity Management Trust Company and Entegris Inc. 401(k) Savings and Profit Sharing Plan Trust, Dated December 29, 2007.
(10.4)	Entegris, Inc. Form of 2007 Equity Incentive Award Agreement*
(21.1)	Subsidiaries of Entegris, Inc.
(23.1)	Consent of Independent Registered Public Accounting Firm
(24.1)	Power of Attorney by the Directors of Entegris, Inc.
(31.1)	Certifications required by Rule 13a-14(a) in accordance with Section 302 of the Sarbanes-Oxley Act of 2002.
(31.2)	Certifications required by Rule 13a-14(a) in accordance with Section 302 of the Sarbanes-Oxley Act of 2002.
(32.1)	Certifications required by Rule 13a-14(b) and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
(32.2)	Certifications required by Rule 13a-14(b) and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

\* A management contract or compensatory plan

## 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.

## ENTEGRIS, INC.

Dated: March 3, 2008

By */s/* GIDEON ARGOV  
**Gideon Argov**  
**President & Chief Executive Officer**

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

SIGNATURE	TITLE	DATE
<i>/s/</i> GIDEON ARGOV <b>Gideon Argov</b>	Chief Executive Officer and Director	March 3, 2008
<i>/s/</i> GREGORY B. GRAVES <b>Gregory B. Graves</b>	Chief Financial Officer	March 3, 2008
<i>/s/</i> LYNN BLAKE <b>Lynn Blake</b>	Chief Accounting Officer	March 3, 2008
JAMES E. DAUWALTER* <b>James E. Dauwalter</b>	Director (Chairman of the Board)	March 3, 2008
<u>MICHAEL A. BRADLEY*</u> <b>Michael A. Bradley</b>	Director	March 3, 2008
MICHAEL P.C. CARNS* <b>Michael P.C. Carns</b>	Director	March 3, 2008
<u>DANIEL W. CHRISTMAN*</u> <b>Daniel W. Christman</b>	Director	March 3, 2008
GARY F. KLINGL* <b>Gary F. Klingl</b>	Director	March 3, 2008
<u>PAUL L.H. OLSON*</u> <b>Paul L.H. Olson</b>	Director	March 3, 2008
ROGER D. MCDANIEL*	Director	March 3, 2008

Edgar Filing: ENTEGRIS INC - Form 10-K

**Roger D. McDaniel**

BRIAN F. SULLIVAN\*

Director

March 3, 2008

**Brian F. Sullivan**

\*By

/s/ PETER W. WALCOTT  
**PETER W. WALCOTT, ATTORNEY-IN-FACT**



ENTEGRIS, INC.

INDEX TO FINANCIAL STATEMENTS

<u>Reports of Independent Registered Public Accounting Firm</u>	F-2
<u>Consolidated Balance Sheets at December 31, 2007 and 2006</u>	F-4
<u>Consolidated Statements of Operations for the years ended December 31, 2007 and December 31, 2006, the four months ended December 31, 2005 and the year ended August 27, 2005</u>	F-5
<u>Consolidated Statements of Shareholders' Equity and Comprehensive Income (Loss) for the years ended December 31, 2007 and 2006, the four months ended December 31, 2005 and the year ended August 27, 2005</u>	F-6
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2007 and December 31, 2006, four months ended December 31, 2005 and the year ended August 27, 2005</u>	F-8
<u>Notes to Consolidated Financial Statements</u>	F-9

---

**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 (the Company) as of December 31, 2007 and 2006, and the related consolidated statements of operations, shareholders' equity and comprehensive income (loss), and cash flows for the years ended December 31, 2007, and 2006, the four-month period ended December 31, 2005, and the year ended August 27, 2005. We also have audited the Company's internal control over financial reporting as of December 31, 2007, based on the criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A.(b) *Management's Report on Internal Control Over Financial Reporting*. Our responsibility is to express an opinion on these consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the consolidated financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. A material weakness related to accounting for income taxes has been identified and included in management's assessment. This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2007 consolidated financial statements.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Entegris, Inc. as of December 31, 2007 and 2006, and the results of its operations and its cash flows for the years ended December 31, 2007, and 2006, the four-month period ended December 31, 2005, and the year ended August 27, 2005, in conformity with U.S. generally accepted accounting principles.

Also, in our opinion, because of the effect of the aforementioned material weakness on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2007, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Our opinion on the effectiveness of internal control over financial reporting does not affect our opinion on the consolidated financial statements.

As discussed in Note 15 to the consolidated financial statements, the Company adopted the provisions of Financial Accounting Standards Board Interpretation No. 48 *Accounting for Uncertainty in Income Taxes as an interpretation of FASB Statement No. 109* as of January 1, 2007.

KPMG LLP

Minneapolis, Minnesota

March 3, 2008

## ENTEGRIS, INC. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS

<i>(In thousands, except share data)</i>	December 31, 2007	December 31, 2006
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 160,655	\$ 154,806
Short-term investments		120,168
Trade accounts and notes receivable, net	112,053	127,396
Inventories	73,120	93,426
Deferred tax assets and deferred tax charges	23,238	45,149
Assets of discontinued operations and other assets held for sale	4,187	7,903
Other current assets	9,368	7,473
<b>Total current assets</b>	<b>382,621</b>	<b>556,321</b>
Property, plant and equipment, net	121,157	120,987
Other assets:		
Investments	13,871	7,731
Goodwill	402,125	394,531
Other intangible assets, net	76,370	68,877
Deferred tax assets and other noncurrent tax assets	35,323	5,157
Other	3,774	4,014
<b>Total assets</b>	<b>\$ 1,035,241</b>	<b>\$ 1,157,618</b>
<b>LIABILITIES AND SHAREHOLDERS EQUITY</b>		
<b>Current liabilities:</b>		
Current maturities of long-term debt	\$ 9,310	\$ 401
Short-term borrowings	17,802	
Accounts payable	24,260	24,952
Accrued liabilities	57,659	56,479
Income taxes payable	12,493	10,025
Liabilities of discontinued operations and assets held for sale	4,225	842
<b>Total current liabilities</b>	<b>125,749</b>	<b>92,699</b>
Long-term debt, less current maturities	20,373	2,995
Pension benefit obligation and other liabilities	21,320	20,356
Deferred tax liabilities and other noncurrent tax liabilities	15,490	25,588
Commitments and contingent liabilities		
<b>Shareholders equity:</b>		
Preferred stock, par value \$.01; 5,000,000 shares authorized; none issued and outstanding as of December 31, 2007 and 2006		
Common stock, par value \$.01; 400,000,000 shares authorized; issued and outstanding shares: 115,355,560 and 132,770,676	1,154	1,328
Additional paid-in capital	701,510	793,058
Prepaid forward contract for share repurchase		(5,000)
Retained earnings	145,462	228,936
Accumulated other comprehensive income (loss)	4,183	(2,342)
<b>Total shareholders equity</b>	<b>852,309</b>	<b>1,015,980</b>

Edgar Filing: ENTEGRIS INC - Form 10-K

<b>Total liabilities and shareholders equity</b>	\$	1,035,241	\$	1,157,618
--	----	-----------	----	-----------

See the accompanying notes to consolidated financial statements.

F-4

## ENTEGRIS, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF OPERATIONS

	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
<i>(In thousands, except per share data)</i>				
Sales to non-affiliates	\$ 626,238	\$ 672,882	\$ 199,644	\$ 332,654
Sales to affiliates				14,691
<b>Net sales</b>	626,238	672,882	199,644	347,345
Cost of sales	360,001	367,804	129,437	209,162
<b>Gross profit</b>	266,237	305,078	70,207	138,183
Selling, general and administrative expenses	182,792	188,311	77,253	110,341
Engineering, research and development expenses	39,727	38,074	13,904	18,188
<b>Operating profit (loss)</b>	43,718	78,693	(20,950)	9,654
Interest income, net	(5,245)	(9,205)	(2,440)	(2,538)
Other (income) expense, net	(7,656)	(1,658)	62	(2,115)
<b>Income (loss) before income taxes and equity in (earnings) loss of affiliates</b>	56,619	89,556	(18,572)	14,307
Income tax expense (benefit)	10,356	26,936	(8,713)	1,154
Equity in net (earnings) loss of affiliates	(93)	(531)	(70)	247
<b>Income (loss) from continuing operations</b>	46,356	63,151	(9,789)	12,906
(Loss) income from operations of discontinued businesses, net of taxes	(891)	315	(1,867)	(3,513)
Impairment loss on assets of discontinued businesses, net of taxes	(1,106)		(6,668)	
<b>(Loss) income from discontinued operations, net of taxes</b>	(1,997)	315	(8,535)	(3,513)
<b>Net income (loss)</b>	\$ 44,359	\$ 63,466	\$ (18,324)	\$ 9,393
Basic earnings (loss) per common share:				
Continuing operations	\$ 0.38	\$ 0.47	\$ (0.07)	\$ 0.17
Discontinued operations	(0.02)	0.00	(0.06)	(0.05)
Net income (loss)	\$ 0.36	\$ 0.47	\$ (0.14)	\$ 0.12
Diluted earnings (loss) per common share:				
Continuing operations	\$ 0.37	\$ 0.46	\$ (0.07)	\$ 0.16
Discontinued operations	(0.02)	0.00	(0.06)	(0.04)
Net income (loss)	\$ 0.36	\$ 0.46	\$ (0.14)	\$ 0.12
Weighted shares outstanding				
Basic	122,557	135,116	135,437	77,137
Diluted	124,940	138,492	135,437	79,328

See the accompanying notes to consolidated financial statements.

## ENTEGRIS, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY AND COMPREHENSIVE INCOME (LOSS)

<i>(In thousands)</i>	Common shares outstanding	Common stock	Additional paid-in capital	Deferred compensation expense	Prepaid Forward Contract for Share Repurchase	Retained earnings	Accumulated other comprehensive income (loss)	Total	Comprehensive income (loss)
<b>Balance at August 28, 2004</b>	73,380	\$ 734	\$ 152,869	\$ (1,586)		\$ 216,963	\$ 3,205	\$ 372,185	
Shares issued under employee stock plans	774	8	4,327					4,335	
Shares issued in connection with prior year acquisition	37		437					437	
Shares issued in connection with Mykrolis acquisition	60,785	608	603,162					603,770	
Value of options assumed in connection with Mykrolis acquisition			33,407					33,407	
Deferred compensation recorded in connection with Mykrolis acquisition				(4,142)				(4,142)	
Deferred compensation related to restricted stock awards	547	5	21,638	(21,643)					
Share-based compensation expense				5,465				5,465	
Repurchase and retirement of shares	(224)	(2)	(732)			(1,096)		(1,830)	
Tax benefit associated with employee stock plans			821					821	
Foreign currency translation							1,086	1,086	\$ 1,086
Net unrealized gain on marketable securities							71	71	71
Reclassification adjustment for gain on sale of equity investments							(1,584)	(1,584)	(1,584)
Net income						9,393		9,393	9,393
<b>Total comprehensive income</b>									\$ 8,966
<b>Balance at August 27, 2005</b>	135,299	1,353	815,929	(21,906)		225,260	2,778	1,023,414	
Reclassification upon adoption of SFAS No. 123 (R)			(21,906)	21,906					
Shares issued under employee stock option plans	745	7	3,832					3,839	
Share-based compensation expense			11,053					11,053	
Tax benefit associated with stock plans			104					104	
Foreign currency translation							(7,225)	(7,225)	\$ (7,225)
Net change in unrealized loss on marketable securities, net of tax							(42)	(42)	(42)
Net loss						(18,324)		(18,324)	(18,324)
<b>Total comprehensive loss</b>									\$ (25,591)
<b>Balance at December 31, 2005</b>	136,044	1,360	809,012			206,936	(4,489)	1,012,819	
Shares issued under employee stock plans	5,607	57	19,962					20,019	
Share-based compensation expense			14,776					14,776	
Repurchase and retirement of common stock	(8,880)	(89)	(53,445)		(5,000)	(41,466)		(100,000)	

Edgar Filing: ENTEGRIS INC - Form 10-K

Tax benefit associated with stock plans	2,753		2,753	
Foreign currency translation		2,171	2,171	\$ 2,171
Net change in unrealized gain on marketable securities, net of tax		204	204	204
Minimum pension liability adjustment to initially apply SFAS No. 158		(228)	(228)	
Net income	63,466		63,466	63,466
<b>Total comprehensive income</b>				\$ 65,841

F-6



## ENTEGRIS, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY AND COMPREHENSIVE INCOME (LOSS)

<i>(In thousands)</i>	Common shares outstanding	Common stock	Additional paid-in capital	Deferred compensation expense	Prepaid Forward Contract for Share Repurchase	Retained earnings	Accumulated other comprehensive income (loss)	Total	Comprehensive income (loss)
<b>Balance at December 31, 2006</b>	132,771	1,328	793,058		(5,000)	228,936	\$ (2,342)	1,015,980	
Adoption of FIN No. 48						1,110		1,110	
Adjusted beginning balance	132,771	1,328	793,058		(5,000)	230,046	(2,342)	1,017,090	
Shares issued under employee stock plans	4,573	46	29,810					29,856	
Share-based compensation expense			10,344					10,344	
Repurchase and retirement of common stock	(21,988)	(220)	(131,946)		5,000	(128,943)		(256,109)	
Tax benefit associated with stock plans			244					244	
Foreign currency translation							7,383	7,383	\$ 7,383
Net change in unrealized gain on marketable securities, net of tax							(135)	(135)	(135)
Minimum pension liability adjustment							(723)	(723)	(723)
Net income						44,359		44,359	44,359
Total comprehensive income									\$ 50,884
<b>Balance at December 31, 2007</b>	115,356	\$ 1,154	\$ 701,510	\$	\$	\$ 145,462	\$ 4,183	\$ 852,309	

The accumulated balances for each component of accumulated other comprehensive income (loss) are as follows:

<i>(In thousands)</i>	Foreign currency translation	Net unrealized gain (loss) on marketable securities	Minimum pension liability adjustment	Total accumulated other comprehensive income (loss)
<b>Balance at August 28, 2004</b>	\$ 1,719	\$ 1,486	\$	\$ 3,205
Foreign currency translation	1,086			1,086
Change in unrealized gain on marketable securities, net of tax of \$43		71		71
Reclassification adjustment for gain on sale of equity investments, net of tax of \$1,142		(1,584)		(1,584)
<b>Balance at August 27, 2005</b>	2,805	(27)		2,778
Foreign currency translation	(7,225)			(7,225)
Change in unrealized loss on marketable securities, net of tax of \$26		(42)		(42)
<b>Balance at December 31, 2005</b>	(4,420)	(69)		(4,489)
Foreign currency translation	2,171			2,171
Change in unrealized gain on marketable securities, net of tax of \$125		204		204
Minimum pension liability adjustment, net of tax of \$113			(228)	(228)
<b>Balance at December 31, 2006</b>	(2,249)	135	(228)	(2,342)
Foreign currency translation	7,383			7,383
Change in unrealized gain on marketable securities, net of tax of \$83		(135)		(135)
Minimum pension liability adjustment, net of tax of \$522			(723)	(723)

Edgar Filing: ENTEGRIS INC - Form 10-K

<b>Balance at December 31, 2007</b>	\$	5,134	\$	\$	(951)	\$	4,183
-------------------------------------	----	-------	----	----	-------	----	-------

See the accompanying notes to consolidated financial statements

F-7

## ENTEGRIS, INC. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
<b>Operating activities:</b>				
Net income (loss)	\$ 44,359	\$ 63,466	\$ (18,324)	\$ 9,393
Adjustments to reconcile net income (loss) to net cash provided by operating activities:				
Loss (income) from discontinued operations	1,997	(315)	8,535	3,513
Depreciation and amortization	43,776	42,905	13,754	23,599
Stock-based compensation expense	10,344	14,776	11,053	5,465
Impairment of property and equipment	4,098	1,505	3,034	3,321
Impairment of intangibles	235			
Provision for doubtful accounts	(227)	(508)	(609)	212
Provision for deferred income taxes	(20,434)	11,155	(11,699)	(5,047)
Charge for fair value mark-up of acquired inventory sold	836		17,837	5,946
Tax benefit from employee stock plans				821
Excess tax benefit from employee stock plans	(244)	(3,031)	(104)	
Equity in net (earnings) loss of affiliates	(93)	(531)	(70)	247
Gain on sale of property and equipment	(274)	(903)	(103)	(901)
Gain on sale of equity investments	(6,068)			(2,914)
Changes in operating assets and liabilities, excluding effects of acquisitions:				
Trade accounts receivable and notes receivable	20,054	(16,960)	7,275	451
Trade accounts receivable due from affiliates				4,790
Inventories	24,061	(24,280)	1,123	2,522
Accounts payable and accrued liabilities	(2,935)	(10,357)	(3,862)	4,037
Other current assets	(1,695)	3,189	(2,331)	79
Income taxes payable and refundable income taxes	14,682	7,669	(3,106)	(3,912)
Other	(455)	8,296	195	701
<b>Net cash provided by operating activities</b>	<b>132,017</b>	<b>96,076</b>	<b>22,598</b>	<b>52,323</b>
<b>Investing activities:</b>				
Acquisition of property and equipment	(26,919)	(30,860)	(10,311)	(19,472)
Acquisition of businesses, net of cash acquired	(44,911)			(10,157)
Purchase of intangible assets		(1,008)	(732)	(727)
Proceeds from sales of property and equipment	2,021	3,866	113	2,191
Proceeds from sale of equity investments	6,568			5,020
Purchase of equity investments	(6,126)			
Purchases of short-term investments	(269,822)	(170,205)	(14,265)	(108,766)
Proceeds from sale or maturities of short-term investments	390,915	181,412	12,079	93,235
Cash and cash equivalents acquired through acquisition of Mykrolis				97,498
Other	(926)	(575)		(15)
<b>Net cash provided by (used in) investing activities</b>	<b>50,800</b>	<b>(17,370)</b>	<b>(13,116)</b>	<b>58,807</b>
<b>Financing activities:</b>				
Principal payments on short-term borrowings and long-term debt	(88,115)	(3,087)	(22,853)	(21,568)
Proceeds from short-term borrowings and long-term debt	131,063		3,478	22,129
Repurchase and retirement of common stock	(256,109)	(100,000)		(1,830)
Excess tax benefit from employee stock plans	244	3,031	104	
Issuance of common stock	29,856	20,019	3,839	4,335
<b>Net cash (used in) provided by financing activities</b>	<b>(183,061)</b>	<b>(80,037)</b>	<b>(15,432)</b>	<b>3,066</b>
<b>Discontinued operations:</b>				
Net cash provided by (used in) operating activities	1,237	1,754	611	(5,511)

Edgar Filing: ENTEGRIS INC - Form 10-K

Net cash provided by (used in) investing activities		13,017	1,863	(1,286)
<b>Net cash provided by (used in) discontinued operations</b>	1,237	14,771	2,474	(6,797)
Effect of exchange rate changes on cash and cash equivalents	4,856	(1,472)	(3,724)	426
<b>Increase (decrease) in cash and cash equivalents</b>	5,849	11,968	(7,200)	107,825
<b>Cash and cash equivalents at beginning of period</b>	154,806	142,838	150,038	42,213
<b>Cash and cash equivalents at end of period</b>	\$ 160,655	\$ 154,806	\$ 142,838	\$ 150,038

**Supplemental Cash Flow Information**

Non-cash transactions:

Acquisition of Mykrolis, net of transaction costs				\$ 637,609
Equipment purchases in accounts payable	\$ 1,198			
Schedule of interest and income taxes paid:				
Interest paid	\$ 691	\$ 463	\$ 367	\$ 840
Income taxes, net of refunds received	\$ 3,794	\$ 2,502	\$ 683	\$ 9,482

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 is a worldwide developer, manufacturer and supplier of materials integrity management solutions to the microelectronics industry in general and to the semiconductor and data storage markets in particular. 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.

The Company was incorporated in Delaware in June 2005 under the name Eagle DE, Inc. (Eagle DE) as a wholly owned subsidiary of Entegris, Inc., a Minnesota corporation (Entegris Minnesota). Effective August 6, 2005, Entegris Minnesota and Mykrolis Corporation, a Delaware corporation, completed a strategic merger of equals transaction, pursuant to which they were each merged into the Company to carry on the combined businesses. Pursuant to the merger the Company's name was changed to Entegris, Inc. The stock-for-stock transaction was accounted for under the purchase method of accounting as an acquisition of Mykrolis by the Company.

**Fiscal Year** On December 13, 2005, the Company's Board of Directors approved a change in fiscal year end from a 52-week or 53-week fiscal year period ending on the last Saturday of August to a fiscal year ending December 31. The Company's new fiscal quarters consist of 13 week periods that end on Saturday, except in the fourth quarter. The Company's fiscal quarters in 2007 ended on March 31, 2007, June 30, 2007, September 29, 2007 and December 31, 2007. As a result, the financial periods presented and discussed are as follows: (i) the years ended December 31, 2007 and 2006 represent the twelve months ended December 31, 2007 and 2006, respectively; (ii) the four-month transition period represents the four months ended December 31, 2005; and (iii) the year ended August 27, 2005 represents the twelve months ended August 27, 2005.

**Basis of Presentation** Certain amounts reported in previous years have been reclassified to conform to the current year's presentation. These classifications were largely due to the classification of discontinued operations and had no effect on the amounts of total assets, net income, shareholders' equity or cash flow of the Company.

In the fourth quarter and year ended December 31, 2007, the Company identified certain errors, primarily related to prior years, in its tax-related accounts. The impact of correcting these errors increased income tax expense in the fourth quarter and year ended December 31, 2007 by \$1.9 million and \$0.8 million, respectively, with corresponding increases to the income taxes payable and reserves for tax contingencies, and a decrease to deferred tax assets. Neither the origination nor the correction of the errors was material to the Company's consolidated financial statements.

The Company had 400 million shares of authorized common stock at December 31, 2007 and 2006, as indicated in the accompanying consolidated balance sheets. The Company erroneously reflected authorized common shares of 200 million in its 2006 report.

**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, particularly receivables, inventories, goodwill and intangibles, accrued expenses and income taxes and related accounts, 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.

**Share-based Compensation** In December 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standard (SFAS) No. 123R, *Share-Based Payment*. SFAS No. 123R focuses primarily on accounting for transactions in which an entity obtains employee services through share-

based payment transactions. SFAS No. 123R requires a public entity to measure the cost of employee services received in exchange for the award of equity instruments based on the fair value of the award at the date of grant. The cost is to be recognized over the period during which an employee is required to provide services in exchange for the award.

SFAS No. 123R also requires the benefit of tax deductions in excess of recognized compensation expense to be reported as a financing cash flow, rather than as an operating cash flow as prescribed under previous accounting rules. This requirement reduces net operating cash flows and increases net financing cash flows in periods subsequent to adoption. Total cash flows remain unchanged from those reported under previous accounting rules. Effective August 28, 2005, the Company adopted the provisions of SFAS No. 123R using the modified prospective method. Results of operations for prior annual periods have not been restated to reflect recognition of stock-based compensation expense. Upon adoption of SFAS No. 123R, the Company applied an estimated forfeiture rate to unvested awards. Previously, the Company recorded forfeitures as incurred.

Prior to the adoption of SFAS No. 123R, the Company followed the intrinsic value method in accordance with APB 25 to account for its employee stock options and employee share purchase plan. Accordingly, no compensation expense was recognized for share purchase rights granted in connection with the issuance of stock options under the Company's employee stock option plan or employee stock purchase plan; however, compensation expense was recognized in connection with the issuance of restricted stock awards. The adoption of SFAS No. 123R primarily resulted in a change in the Company's method of recognizing stock-based compensation and estimating forfeitures for unvested awards. See Note 16 to the Consolidated Financial Statements for additional information on share-based compensation.

**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 available for sale and are recorded at fair value, and are classified as short-term investments.

**Allowance for Doubtful Accounts** An allowance for uncollectible trade receivables is estimated based on a combination of write-off history, aging analysis and any specific, known troubled accounts.

**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 or group of asset(s) may not be recoverable based on estimated future undiscounted cash flows. The amount of impairment, if any, is measured as the difference between the net book value and the estimated fair value of the asset(s).

**Investments** 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 whether declines, if any, in fair value below cost basis are other-than-temporary. 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.

**Fair Value of Financial Instruments** The carrying value of cash equivalents, short-term investments, accounts receivable, accounts payable 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 at December 31, 2007.

**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 amortizable intangible assets include, among other items, patents, unpatented and other developed technology and customer-based intangibles, and are amortized using the straight-line method over their respective estimated useful lives of 3 to 12 years. The Company reviews intangible assets for impairment 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 since they are large, well-established financial institutions. Except as described in the following paragraph, 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 \$33.6 million and \$58.3 million at December 31, 2007 and 2006, respectively.

On February 6, 2007, the Company entered into a 10-month Japanese yen-based cross-currency interest rate swap, with aggregate notional principal amounts of 2.4 billion Japanese yen and \$20 million that matured on November 30, 2007. This swap effectively hedged a portion of the Company's net investment in its Japanese subsidiary. During the term of this transaction, the Company remitted to, and received from, its counterparty interest payments based on rates that were reset quarterly equal to three-month Japanese LIBOR and three-month U.S. LIBOR rates, respectively. The Company designated this hedging instrument as a hedge of a portion of the net investment in its Japanese subsidiary, and used the spot rate method of accounting to value changes of the hedging instrument attributable to currency rate fluctuations. As such, a \$2.1 million adjustment in the fair market value of the hedging instrument related to changes in the spot rate was recorded as a charge to Foreign currency translation in shareholders' equity in 2007 to offset changes in a portion of the yen-denominated net investment in the Company's Japanese subsidiary and will remain there until the net investment is disposed. The Company recorded \$0.7 million in net interest income in 2007 in connection with the cross-currency interest rate swap.

**Foreign Currency Translation** Assets and liabilities of foreign subsidiaries are translated from foreign currencies into U.S. dollars at period-end exchange rates, and the resulting gains and losses arising from translation of net assets located outside the U.S. are recorded as a cumulative translation adjustment, a component of accumulated other comprehensive income (loss) in the consolidated balance sheets. Income statement amounts are translated at the weighted average exchange rates for the year. Translation adjustments are not adjusted for income taxes as substantially all translation adjustments relate to permanent investments in non-U.S. subsidiaries. Gains and losses resulting from foreign currency transactions are included in other income, net in the consolidated statements of operations.

**Revenue Recognition/Concentration of Risk** Revenue and the related cost of sales are generally recognized upon shipment of the products. Revenue for product sales is recognized upon delivery, when title and risk of loss have been transferred to the customer; collectibility is reasonably assured, and pricing is fixed or determinable.

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 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.

**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. 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 collects various sales and value-added taxes on certain product and service sales, which are accounted for on a net basis.

Except as indicated in Note 15 as relates to 11.4 billion yen (approximately \$100 million), the Company intends to continue to reinvest its remaining undistributed international earnings in its international operations indefinitely; therefore, no U.S. tax expense has been recorded to cover the repatriation of such undistributed earnings.

The Company's policy for recording interest and penalties associated with audits and unrecognized tax benefits is to record such items as a component of income before taxes. Penalties are recorded in other expense and interest paid or received is recorded in interest expense or interest income, respectively, in the statement of operations.

**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, unrealized gains and losses on marketable securities and minimum pension liability adjustments 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 and comprehensive income (loss).

**Recent Accounting Pronouncements** In June 2006, the Financial Accounting Standards Board (FASB) ratified the Emerging Issues Task Force (EITF) consensus on EITF Issue No. 06-3, *How Taxes Collected From Customers and Remitted to Governmental Authorities Should Be Presented in the Income Statement* (EITF No. 06-3). The scope of EITF No. 06-3 includes any tax assessed by a governmental authority that is directly imposed on a revenue-producing transaction between a seller and a customer, and provides that a company may adopt a policy of presenting taxes either gross within revenue or on a net basis. For any such taxes that are reported on a gross basis, a company should disclose the amounts of those taxes for each period for which an income statement is presented if those amounts are significant. This statement is effective to financial reports for interim and annual reporting periods beginning after December 15, 2006. EITF No. 06-3 became effective for the Company as of January 1, 2007. The Company collects various sales and value-added taxes on certain product and service sales, which are accounted for on a net basis.

In July 2006, the FASB issued FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109* (FIN No. 48). FIN No. 48 was effective for the Company as of January 1, 2007. FIN No. 48 defines the threshold for recognizing the benefits of tax positions in the financial statements as more-likely-than-not to be sustained upon examination. The interpretation also provides



guidance on the de-recognition, measurement and classification of income tax uncertainties, along with any related interest and penalties. FIN No. 48 also requires expanded disclosure at the end of each annual reporting period including a tabular reconciliation of unrecognized tax benefits. In accordance with FIN No. 48, the Company reports the difference between the net amount of assets and liabilities recognized in the statement of financial position prior to and after the application of FIN No. 48 as a cumulative effect adjustment to the January 1, 2007 balance of retained earnings. The adoption of FIN No. 48 is further described in Note 15.

In September 2006, the FASB issued Statement of Financial Accounting Standard (SFAS) No. 157, *Fair Value Measurements* (SFAS No. 157). This statement provides a single definition of fair value, a framework for measuring fair value and expanded disclosures concerning fair value. Previously, different definitions of fair value were contained in various accounting pronouncements, creating inconsistencies in measurement and disclosures. SFAS No. 157 applies under those previously issued pronouncements that prescribe fair value as the relevant measure of value, except SFAS No. 123(R) and related interpretations and pronouncements that require or permit measurement similar to fair value, but are not intended to measure fair value. SFAS No. 157 is effective for the Company as of January 1, 2008. The adoption of SFAS No. 157 is currently not expected to have a material impact on the Company's consolidated financial statements.

In February 2008, the FASB issued FASB Staff Position (FSP) Financial Accounting Standard (FAS) 157-1, *Application of FASB Statement No. 157 to FASB Statement No. 13 and Its Related Interpretive Accounting Pronouncements That Address Leasing Transactions*, and FSP FAS 157-2, *Effective Date of FASB Statement No. 157*. FSP FAS 157-1 removes leasing from the scope of SFAS No. 157, *Fair Value Measurements*. FSP FAS 157-2 delays the effective date of SFAS No. 157 from 2008 to 2009 for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). See SFAS No. 157 discussion above.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities - Including an amendment of FASB Statement No. 115* (SFAS No. 159). SFAS No. 159 permits entities to choose to measure many financial instruments and certain other items at fair value. The objective is to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions. SFAS 159 is effective for the Company as of January 1, 2008. The adoption of SFAS No. 159 is currently not expected to have a material impact on the Company's consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (revised 2007) *Business Combinations* (SFAS No. 141(R)). SFAS No. 141(R) retains the fundamental requirements of the original pronouncement requiring that the purchase method be used for all business combinations. SFAS No. 141(R) defines the acquirer as the entity that obtains control of one or more businesses in the business combination, establishes the acquisition date as the date that the acquirer achieves control and requires the acquirer to recognize the assets acquired, liabilities assumed and any noncontrolling interest at their fair values as of the acquisition date. SFAS No. 141(R) also requires that acquisition-related costs be recognized separately from the acquisition. SFAS No. 141(R) is effective for the Company in 2009. The Company is currently assessing the impact of SFAS No. 141(R) on its consolidated financial statements.

In December 2007, the FASB issued Statement No. 160, *Noncontrolling Interests in Consolidated Financial Statements* (SFAS No. 160). SFAS No. 160 clarifies that a noncontrolling interest in a subsidiary should be reported as equity in the consolidated financial statements. Consolidated net income should include the net income for both the parent and the noncontrolling interest with disclosure of both amounts on the consolidated statement of income. The calculation of earnings per share will continue to be based on income amounts attributable to the parent. SFAS No. 160 is effective for the Company in 2009. The Company is currently assessing the impact of SFAS No. 160 on its consolidated financial statements.

**(2) ACQUISITIONS AND DIVESTITURES**

On August 16, 2007, the Company acquired the specialty coatings business of a privately-held company located in Burlington, Massachusetts. This specialty coatings business develops and applies proprietary low-temperature, high-purity coatings to critical wafer handling components used in ion implant operations as well as to other critical components used in semiconductor manufacturing and other applications.

The purchase price was \$44.9 million in cash, including transaction costs of \$0.2 million and contingent consideration of \$3.1 million paid to the seller as certain financial metrics related to calendar 2007 results were met. This acquisition was accounted for under the purchase method of accounting and the results of operations of this specialty coatings business are included in the Company's consolidated financial statements since August 16, 2007. Pro forma results are not included as this acquisition does not constitute a material business combination.

The above purchase price has been preliminarily allocated based on estimates of the fair values of assets acquired and liabilities assumed, as summarized in the table below. The final valuation of net assets is expected to be completed as soon as possible, but no later than one year from the acquisition date.

*(In thousands):*

Inventory	\$ 1,478
Equipment	600
Other intangible assets	26,500
Goodwill	16,633
<b>Total assets acquired</b>	<b>\$ 45,211</b>
Current liabilities	(300)
<b>Net assets acquired</b>	<b>\$ 44,911</b>

The amount allocated to acquired inventories above replacement cost was \$0.8 million. Accordingly, the results of operations for the year ended December 31, 2007 include an incremental charge of \$0.8 million in cost of sales.

The \$26.5 million of other intangible assets included \$16.1 million of customer relationships (12-year economic consumption life), \$10.0 million of developed technologies (12-year economic consumption life), and \$0.4 million of employment and non-competition agreements (2.4-year average economic consumption life). These intangible assets were valued at fair value as determined by the Company with the assistance of an independent valuation specialist.

The goodwill recorded in connection with the acquisition will not be amortized, but is deductible for tax purposes. The goodwill is expected to be realized through the benefits of cost-saving synergies associated with the leveraging of the Company's manufacturing and administrative functions as well as the enhancement of sales and marketing efforts through the Company's global sales and distribution network and product offerings.

**Acquisition of Mykrolis Corporation**

On August 6, 2005, Entegris merged with Mykrolis Corporation (Mykrolis) in a transaction accounted for as an acquisition for a purchase price of approximately \$645.0 million, which included Entegris common stock and vested share awards, as well as transaction costs.

Mykrolis was a worldwide developer, manufacturer and supplier of liquid and gas delivery systems, components and consumables used to precisely measure, deliver, control and purify the process liquids, gases and chemicals that are used in the semiconductor manufacturing process. Its products were also used to manufacture a range of other products, such as flat panel displays, high-purity chemicals, photoresists, solar cells, gas lasers, optical and

magnetic storage devices and fiber optic cables. Mykrolis sold its products worldwide through a direct sales force and through distributors in selected regions. The acquisition was made to expand the Company's global network, expand its product offering base and enhance the leverage of its manufacturing and administrative functions.

The fair value of Entegris equity securities was derived using an average market price per share of Entegris common stock of \$9.94, which was based on Entegris' average stock price for the period two days before through two days after the terms of the acquisition were agreed to and announced on March 21, 2005, net of registration costs associated with the issued securities. Under the terms of the merger agreement, each outstanding share of Mykrolis common stock was exchanged for 1.39 shares of Entegris common stock in a tax-free transaction. Accordingly, no amount of goodwill is expected to be deductible for tax purposes.

The acquisition was accounted for as a purchase business combination. Under the purchase method of accounting, the assets acquired and liabilities assumed from Mykrolis are recorded at the date of acquisition, at their respective fair values. The consolidated financial statements and reported results of operations of Entegris issued after completion of the acquisition reflect these values. The Company's consolidated financial statements include the net assets and results of operations from August 6, 2005, the date of acquisition.

The following table summarizes the components of the purchase price:

<i>(In thousands, except per share data)</i>	<b>Conversion Calculation</b>	<b>Fair Value</b>
<b>Common stock</b>		
Mykrolis common stock outstanding as of August 6, 2005	43,730	
Exchange ratio	1.39	
Entegris common stock issued	60,785	
Value of Entegris' common stock	\$ 9.94	\$ 604,202
<b>Stock options</b>		
Value of Entegris stock options issued in exchange for Mykrolis stock options as of August 6, 2005 <sup>(1)</sup>		33,407
Other transaction costs		7,389
<b>Total estimated purchase price</b>		<b>\$ 644,998</b>

- (1) Estimated fair value of 8,790 Entegris stock options (in thousands) issued as of August 6, 2005 in exchange for 6,323 Mykrolis outstanding stock options (in thousands), calculated using the Black-Scholes option pricing model, modified for dividends, with model assumptions estimated as of March 21, 2005 and an Entegris stock price of \$9.94.

**Allocation of Purchase Price**

The above purchase price has been allocated based on the fair values of assets acquired and liabilities assumed.

*(In thousands)*

Book value of net assets acquired	\$ 283,137
Less existing goodwill and other intangible assets	51,134
 Book value of tangible net assets acquired	 232,003
Remaining allocation:	
Increase inventories to fair value <sup>(a)</sup>	23,783
Decrease property, plant and equipment to fair value <sup>(b)</sup>	(10,273)
Record identifiable intangible assets <sup>(c)</sup>	75,800
Increase benefit plan liabilities to fair value <sup>(d)</sup>	(1,059)
Decrease net assets to be sold to fair value <sup>(b)(e)</sup>	(22,756)
Increase other net assets to fair value	1,938
Adjustments of tax-related assets and liabilities <sup>(f)</sup>	25,366
Goodwill <sup>(g)</sup>	320,196
 Purchase price	 \$ 644,998

Since the Company's initial allocation of the purchase price in August 2005, the significant revisions to the Company's estimates related primarily to net assets to be sold (\$5.9 million decrease) and tax adjustments (\$2.7 million increase).

The following table summarizes the allocation of the Mykrolis purchase price to the fair values of the assets acquired and liabilities assumed (In thousands):

Cash, cash equivalents and short-term investments	\$ 120,525
Accounts receivable, inventories and other current assets	125,325
Property, plant and equipment	31,247
Other intangible assets	75,800
Goodwill	320,196
Other assets	55,628
 Total assets acquired	 728,721
Current liabilities	(74,578)
Other liabilities	(13,287)
 Total liabilities assumed	 (87,865)
 Deferred compensation Unvested options and restricted stock awards	 4,142
 Net assets acquired	 \$ 644,998

(a) The fair value of acquired inventories, developed in consultation with independent valuation specialists, was determined as follows:

Finished goods the estimated selling price less the cost of disposal and reasonable profit for the selling effort.

Edgar Filing: ENTEGRIS INC - Form 10-K

Work in process the estimated selling price of finished goods less the cost to complete, cost of disposal and reasonable profit on the selling and remaining manufacturing efforts.

Raw materials estimated current replacement cost, which equaled Mykrolis historical cost.

F-16

The increase in inventories to record the fair values of finished goods and work in process were as follows:

<i>(In thousands)</i>	
Finished goods	\$ 17,401
Work in process	6,382
<b>Total</b>	<b>\$ 23,783</b>

- (b) The fair value of acquired property, plant and equipment, developed in consultation with independent valuation specialists, was valued at its value-in-use, unless there was a known plan to dispose of an asset. Assets to be disposed of were valued at prevailing market rates, less costs to sell.
- (c) The Company worked with independent valuation specialists to determine the fair value of identifiable intangible assets, which were as follows:

<i>(In thousands of dollars)</i>	Fair value	Useful life in years	Weighted average life in years
Developed technology	\$ 38,500	3 6	4.6
Trademarks and trade names	9,000	3 8	4.9
Customer relationships and other	28,300	9	9.0
<b>Total</b>	<b>\$ 75,800</b>		

The total weighted average life of identifiable intangible assets acquired from Mykrolis that are subject to amortization is 6.25 years.

Developed technology represents the technical processes, intellectual property, and institutional understanding that were acquired from Mykrolis with respect to products, compounds and/or processes for which development had been completed.

The fair value of identifiable intangible assets was determined using the income approach on a project-by-project basis. This method starts with a forecast of expected future net cash flows. These net cash flow projections do not anticipate any revenue or cost synergies. These cash flows are then adjusted to present value by applying an appropriate discount rate that reflects the risk factors associated with the cash flow streams, some of which are more certain than others.

The valuations were based on the information that was available as of the acquisition date and the expectations and assumptions that have been deemed reasonable by the Company's management. No assurance can be given, however, that the underlying assumptions or events associated with such assets will occur as projected. For these reasons, among others, the actual results may vary from the projected results.

- (d) The increase to fair value for acquired benefit plans was \$1.1 million for pension benefit obligations. The fair value of the pension obligations, determined in consultation with independent actuarial specialists, includes assumptions relating to economic factors such as interest rates of high quality fixed income investments, demographic factors such as salary growth projections and other data, such as expected employee terminations. The underlying assets of the plans were measured using market rates as of the acquisition date.
- (e) The decrease for net assets to be sold is based on fair value less cost to sell at disposal. On September 12, 2005 the Company announced that it would divest the gas delivery (GD) product line included in the Mykrolis acquisition. The assessment and formulation of a plan to exit the GD business began in the period leading up to the date of consummation. This divestiture was completed in



February 2006. The GD product line includes mass flow controllers, pressure controllers and vacuum gauges that are used by customers in manufacturing operations to measure and control process gas flow rates and to control and monitor pressure and vacuum levels during the manufacturing process. As part of the purchase accounting allocation for Mykrolis, the \$13.1 million fair value of the assets of the GD business was classified as an asset held for sale.

- (f) Gives effect to the estimated tax effects of the acquisition.
- (g) In accordance with the requirements of SFAS No. 142, *Goodwill and Other Intangible Assets* (SFAS No.142), the goodwill associated with the merger will not be amortized. None of the goodwill is deductible for tax purposes. The goodwill recorded in connection with the acquisition is expected to be realized through the benefits of cost-saving synergies associated with the leveraging of the Company's manufacturing and administrative functions as well as the enhancement of sales and marketing through the company's expanded global network and product offerings.

**Pro Forma Results**

The following unaudited pro forma financial information presents the combined results of operations of the Company as if the acquisition of Mykrolis had occurred as of the beginning of the years presented. The unaudited pro forma financial information is not necessarily indicative of what the Company's consolidated results of operations actually would have been had the acquisition occurred at the beginning of each year. In addition, the unaudited pro forma financial information does not attempt to project the future results of operations of the combined company.

<i>(In thousands of dollars, except per share data) (Unaudited)</i>	Year ended August 27, 2005	Year ended August 28, 2004
Net sales	\$ 602,204	\$ 528,073
Income from continuing operations	42,393	45,709
Net income	29,171	34,499
Per share amounts:		
Income from continuing operations per common share-basic	0.31	0.37
Net income per common share basic	0.22	0.27
Income from continuing operations per common share-diluted	0.30	0.35
Net income per common share diluted	0.21	0.26

The unaudited pro forma financial information above gives effect to the following:

- a. The elimination of transactions between Entegris and Mykrolis, which upon completion of the merger would be considered intercompany. This reflects the elimination of inter-company sales and associated intercompany profit.
- b. Incremental amortization and depreciation expense of approximately \$6.6 million and \$7.3 million in 2005 and 2004, respectively, related to the estimated fair value of identifiable intangible assets and property, plant and equipment from the purchase price allocation. Identifiable intangible assets are being amortized over their estimated useful lives over a range of 3 to 9 years and property, plant and equipment is being depreciated over the estimated useful lives of the underlying assets.
- c. The pro forma data includes the results of operations for Entegris, Inc. for the twelve months ended August 27, 2005 and August 28, 2004 for 2005 and 2004, respectively, while the results of operations for Mykrolis are included for the twelve-month periods ended July 2, 2005 and July 3, 2004, respectively.
- d. The above pro forma results have been reclassified to segregate the operating results of discontinued operations.



The unaudited pro forma financial information above for the year ended August 28, 2004 excludes the purchase accounting impact of the incremental charge of \$23.8 million reported in cost of sales for the sale of acquired inventory that was written up to fair value.

### Divestitures and Discontinued Operations

In June 2007, the Company announced its intent to divest its cleaning equipment business. This divestiture is expected to be completed no later than June 2008. The cleaning equipment business sells precision cleaning systems to semiconductor and hard disk drive customers for use in their manufacturing operations. In conjunction with the establishment of management's plan to sell the cleaning equipment business, the fair value of the assets of that business was tested for impairment and, where applicable, adjusted to fair value less costs to sell. During 2007 the Company determined that long-lived assets of \$2.6 million were impaired and accordingly recorded a pretax charge to Impairment loss on assets of discontinued operations. The assets and liabilities of the cleaning equipment business have been classified as Assets of discontinued operations and assets held for sale and Liabilities of discontinued operations in the accompanying consolidated balance sheets.

On September 12, 2005, the Company announced that it would divest its gas delivery, life science and tape and reel product lines. The gas delivery products included mass flow controllers, pressure controllers and vacuum gauges that are used by customers in manufacturing operations to measure and control process gas flow rates and to control and monitor pressure and vacuum levels during the semiconductor manufacturing process. The life sciences products included stainless steel clean in place systems for life sciences applications. Tape and reel products included the Stream product line, 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 electronics.

The assets and liabilities of the life sciences product line and the assets of the tape and reel product line were sold in December 2005 for net proceeds of \$0.8 million and \$1.0 million, respectively. The Company closed the sale of the gas delivery assets in February 2006. After adjustments for severance, sublease payments and other closing costs, the net proceeds of the sale totaled \$13.1 million. As part of the purchase accounting allocation of the acquisition of Mykrolis, the fair value of the assets of the gas delivery product line were classified as assets held for sale as of the date of the August 6, 2005 acquisition. Accordingly, the Company adjusted its purchase price allocation related to the assets of the gas delivery product line and did not recognize a gain or loss from the sale.

The consolidated financial statements have been reclassified to segregate as discontinued operations the assets and liabilities, and operating results of, the product lines divested for all periods presented. The summary of operating results from discontinued operations is as follows:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Net sales	\$ 4,891	\$ 9,227	\$ 18,125	\$ 19,754
Loss from discontinued operations, before income taxes	\$ (3,996)	\$ (1,906)	\$ (10,387)	\$ (5,639)
Income tax benefit	1,999	2,221	1,852	2,126
(Loss) income from discontinued operations, net of taxes	\$ (1,997)	\$ 315	\$ (8,535)	\$ (3,513)

Net assets of discontinued operations at December 31, 2007 and 2006 consisted of the following:

<i>(In thousands)</i>	December 31, 2007	December 31, 2006
Accounts receivable	\$ 276	\$ 1,564
Inventory	3,029	353
Assets held for sale	882	5,986
Total assets of discontinued operations and assets held for sale	4,187	7,903
Total liabilities associated with discontinued operations and assets held for sale	4,225	842
Net assets (liabilities) of discontinued operations	\$ (38)	\$ 7,061

No interest expense was allocated to the operating results of discontinued operations. The after-tax earnings of discontinued operations in the year ended December 31, 2006 included a tax benefit of \$1.6 million associated with a decrease in the Company's deferred tax asset valuation allowance resulting from the resolution of a matter with respect to the characterization of certain gains and losses.

Assets of discontinued operations and other assets held for sale shown in the consolidated balance sheet as of December 31, 2007 include the net assets of the cleaning equipment business carried at \$4.2 million. Assets of discontinued operations and other assets held for sale shown in the consolidated balance sheet as of December 31, 2006 include the net assets of the cleaning equipment business carried at \$5.7 million and a building located in Germany unrelated to the cleaning equipment business held for sale carried at \$2.2 million. This building was sold in 2007 for proceeds of \$1.9 million.

### (3) ACCOUNTS RECEIVABLE

Accounts receivable and notes receivable from customers at December 31, 2007 and 2006 consist of the following:

<i>(In thousands)</i>	2007	2006
Accounts receivable	\$ 99,236	\$ 112,451
Notes receivable	13,316	15,767
	112,552	128,218
Less allowance for doubtful accounts	499	822
	\$ 112,053	\$ 127,396

### (4) INVENTORIES

Inventories at December 31, 2007 and 2006 consist of the following:

<i>(In thousands)</i>	2007	2006
Raw materials	\$ 21,237	\$ 30,679
Work-in-process	3,496	4,019
Finished goods <sup>(a)</sup>	47,455	58,032
Supplies	932	696
	\$ 73,120	\$ 93,426

Edgar Filing: ENTEGRIS INC - Form 10-K

- (a) Includes consignment inventories held by customers for \$6,428 and \$6,102 at December 31, 2007 and 2006 respectively.

F-20

**(5) PROPERTY, PLANT AND EQUIPMENT**

Property, plant, and equipment at December 31, 2007 and 2006 consist of the following:

<i>(In thousands)</i>	2007	2006	Estimated useful lives in years
Land	\$ 10,826	\$ 9,924	
Buildings and improvements	72,001	70,225	5-35
Manufacturing equipment	100,319	94,722	5-10
Molds	85,669	78,673	3-5
Office furniture and equipment	63,611	55,695	3-8
	332,426	309,239	
Less accumulated depreciation	211,269	188,252	
	\$ 121,157	\$ 120,987	

Depreciation expense for the fiscal years ended December 31, 2007 and 2006, four months ended December 31, 2005, and fiscal year ended August 27, 2005 was \$24.9 million, \$25.3 million, \$7.8 million, and \$18.5 million, respectively. The Company recorded asset impairment write-offs on molds and equipment due to abandonment of approximately \$4.1 million, \$1.5 million, \$3.0 million, and \$3.3 million for the fiscal years ended December 31, 2007 and 2006, four months ended December 31, 2005, and fiscal year ended August 27, 2005, respectively. In the four months ended December 31, 2005, \$0.5 million of the impairments are included in selling, general and administrative expenses; all other impairment losses are included in cost of sales.

**(6) INVESTMENTS****Equity Investments**

At December 31, 2007 and 2006, the Company held equity investments totaling \$13.9 million and \$7.7 million, respectively. These investments all represent interests in privately-held companies. Investments representing \$10.1 million of the total at December 31, 2007 are accounted for under equity method of accounting, with the remaining \$3.8 million accounted for under the cost method.

During 2007, the Company recorded other income of \$6.1 million on the sale of the Company's interest in a privately held equity investment accounted for using the cost method with a carrying value of \$0.5 million. Proceeds from the sale totaled \$6.6 million.

On August 16, 2004, Nortem N.V. (formerly Metron Technology N.V.), a publicly traded security in which the Company held an equity interest, announced that it had entered into an agreement with Applied Materials, Inc. (Applied), pursuant to which Applied would acquire the business assets of Nortem. On December 14, 2004, upon completion of the sale to Applied of substantially all of its assets and the outstanding shares of Nortem's worldwide operating subsidiaries, Nortem entered into liquidation.

Subsequently, Nortem paid two liquidation distributions to shareholders of record in the amount of \$4.77 per Nortem share for each of the remaining 1.1 million shares owned by the Company. Accordingly, based on the Company's carrying value of \$2.1 million, \$2.00 per share, and the \$5.0 million cash distribution, the Company recorded a pre-tax gain of \$2.9 million that was reflected as other income in the year ended August 27, 2005.

In addition, as a result of the liquidation activities of Nortem, Nortem ceased to be an affiliate of the Company as of February 2005. Since that date the Company no longer classifies its trade receivable due from Nortem separately in its consolidated balance sheet, nor have sales after that date been categorized as sales to affiliates. Sales to Nortem under previous distribution agreements classified as sales to affiliates were \$14.7 million in the year ended August 27, 2005.

**Short-term Investments**

Short-term investments at December 31, 2006 consist of the following:

<i>(In thousands)</i>	<b>2006</b>
Variable rate demand notes	\$ 16,825
Auction rate securities	78,550
Corporate debt securities	24,793
	\$ 120,168

The amortized cost, gross unrealized losses and fair value of the Company's short-term investments at December 31, 2006 are as follows:

<i>(In thousands)</i>	<b>2006</b>
Amortized cost	\$ 120,170
Gross unrealized losses	(2)
Fair value	\$ 120,168

The contractual maturities of the Company's short-term investments at December 31, 2006 are as follows:

<i>(In thousands)</i>	<b>2006</b>
Within one year	\$ 120,168
Fair value	\$ 120,168

Realized gains and losses were not material for the fiscal years ended December 31, 2007 and 2006, the four months ended December 31, 2005, and the fiscal year ended August 27, 2005.

**(7) INTANGIBLE ASSETS**

The changes in the carrying amount of goodwill for the years ended December 31, 2007 and 2006 are as follows:

<i>(In thousands)</i>	<b>2007</b>	<b>2006</b>
Beginning of period	\$ 394,531	\$ 404,300
Acquisition of specialty coatings business	16,633	
Adjustments to Mykrolis purchase price allocation	(6,981)	(9,499)
Impairment of goodwill associated with assets held for sale	(408)	
Other, including foreign currency translation	(1,650)	(270)
End of year	\$ 402,125	\$ 394,531

As of December 31, 2007, goodwill amounted to approximately \$402.1 million, an increase of \$7.6 million from the balance at December 31, 2006. The increase relates primarily to a business acquisition completed in August 2007 as described in Note 2. The increase was partially offset by the allocation of goodwill to the discontinued cleaning equipment business also described in Note 2, foreign currency translation and changes associated with various tax-related purchase price adjustments related to the Mykrolis acquisition completed in August 2005.



Edgar Filing: ENTEGRIS INC - Form 10-K

Other intangible assets, excluding goodwill, at December 31, 2007 and 2006 were as follows:

<i>(In thousands)</i>	2007			Weighted average life in years
	Gross carrying amount	Accumulated amortization	Net carrying value	
Patents	\$ 17,855	\$ 13,323	\$ 4,532	9.1
Unpatented technology	7,988	5,260	2,728	10.0
Developed technology	48,500	20,943	27,557	6.1
Trademarks and trade names	9,000	5,513	3,487	4.9
Customer relationships	44,100	7,888	36,212	10.2
Employment and noncompete agreements	3,407	2,893	514	4.7
Other	4,203	2,863	1,340	5.6
	\$ 135,053	\$ 58,683	\$ 76,370	7.9

<i>(In thousands)</i>	2006			Weighted average life in years
	Gross carrying amount	Accumulated amortization	Net carrying value	
Patents	\$ 17,835	\$ 11,228	\$ 6,607	9.1
Unpatented technology	8,139	4,542	3,597	10.0
Developed technology	38,500	12,020	26,480	4.6
Trademarks and trade names	9,000	3,212	5,788	4.9
Customer relationships	28,000	4,303	23,697	9.1
Employment and noncompete agreements	3,968	3,439	529	5.3
Other	4,349	2,170	2,179	5.8
	\$ 109,791	\$ 40,914	\$ 68,877	7.0

Amortization expense was \$18.9 million, \$17.6 million, \$6.0 million, and \$5.1 million in the fiscal years ended December 31, 2007 and 2006, the four months ended December 31, 2005 and the fiscal year ended August 27, 2005, respectively.

Estimated amortization expense for the fiscal years 2008 to 2012, and thereafter, is \$16.9 million, \$14.4 million, \$9.1 million, \$5.5 million, \$4.7 million, and \$25.8 million, respectively.

**(8) ACCRUED LIABILITIES**

Accrued liabilities at December 31, 2007 and 2006 consist of the following:

<i>(In thousands)</i>	2007	2006
Payroll and related benefits	\$ 29,915	\$ 34,063
Employee benefits	4,664	6,150
Taxes, other than income taxes	3,135	1,005
Royalties	1,568	582
Interest	1,692	25
Warranty and related	1,306	1,824
Other	15,379	12,830
	\$ 57,659	\$ 56,479





**(9) 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 the fiscal years ended December 31, 2007 and 2006, the four months ended December 31, 2005, and the fiscal year ended August 27, 2005:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Beginning of period	\$ 1,824	\$ 1,795	\$ 2,072	\$ 1,829
Accrual for warranties issued during the period	1,742	2,042	831	1,834
Adjustment of previously recorded accruals	(1,170)	(21)		(730)
Assumption of liability in connection with acquisition				694
Settlements during the period	(1,090)	(1,992)	(1,108)	(1,555)
End of period	\$ 1,306	\$ 1,824	\$ 1,795	\$ 2,072

**(10) FINANCING ARRANGEMENTS**

Short-term borrowings at December 31, 2007 and 2006 consist of the following:

<i>(In thousands)</i>	2007	2006
Bank borrowings, denominated in Japanese yen with an average interest rate of 1.28%	\$ 17,802	\$
Total short-term borrowings	\$ 17,802	\$

Long-term debt at December 31, 2007 and 2006 consists of the following:

<i>(In thousands)</i>	2007	2006
Bank loan denominated in Japanese yen with interest of 1.43% through 2010	\$ 26,702	\$
Stock redemption notes payable with interest of 8% through December 2010	1,223	1,609
Small Business Administration loans with interest ranging from 5.5% to 7.35% and various maturities through July 2010	1,758	1,787
Total long-term debt	29,683	3,396
Less current maturities of long-term debt	9,310	401
Long-term debt less current maturities	\$ 20,373	\$ 2,995

Annual maturities of long-term debt as of December 31, 2007, are as follows:

Fiscal year ending	<i>(In thousands)</i>
2008	\$ 9,310
2009	9,327
2010	11,046
2011	

2012

Thereafter

\$ 29,683

F-24

During the second quarter of 2007, the Company executed an unsecured domestic credit agreement, which expires in June 2010 and allows for aggregate borrowings of up to \$85 million with interest at LIBOR rates plus an incremental factor ranging from 0.75% to 1.25% based on the current funded debt to EBITDA ratio (as defined therein). Under the credit agreement, which includes a \$60 million revolver and a \$25 million one-year term note, the Company is prohibited from paying cash dividends. The Company is also subject to, and is in compliance with, certain financial covenants including a leverage ratio of funded debt to EBITDA (as defined therein) of not more than 3.00 to 1.00. In addition, the Company must maintain consolidated aggregate amounts of cash and cash equivalents (which under the agreement may also include auction rate securities classified as short-term investments) of not less than \$50 million. The Company pays a 0.15% commitment fee on the unused portion of the \$60 million revolver. In June 2007, the Company drew down the \$25 million term note facility and subsequently paid the note down completely in December 2007. Under the terms of the agreement, the \$25 million term note facility is no longer available. As of December 31, 2007, the remaining revolver facility of \$60 million under the credit agreement was available with no borrowings outstanding. There were no borrowings at December 31, 2006 under the Company's previous unsecured revolving credit agreement.

As described in Note 21, the Company executed a new domestic credit agreement in February 2008, which expires in February 2013, with a total borrowing capacity of \$230 million.

During the fourth quarter of 2007, the Company executed a 3.0 billion yen (\$26.7 million) unsecured term note agreement with a Japanese bank. Under the note agreement, the Company will make semi-annual payments in May and November each year of 500 million yen (\$4.7 million) through November 2010, along with interest at a rate of 1.43%.

The Company has entered into unsecured line of credit agreements, which expire at various dates, with three international commercial banks, which provide for aggregate borrowings of 10.5 million Malaysia ringgits and 2 billion Japanese yen for its foreign subsidiaries, which is equivalent to \$21.0 million as of December 31, 2007. Interest rates for these facilities are based on a factor of the banks' reference rates. Borrowings outstanding under international line of credit agreements at December 31, 2007 and December 31, 2006, were \$17.8 million and none, respectively.

#### (11) LEASE COMMITMENTS

As of December 31, 2007, the Company was obligated under noncancellable operating lease agreements for certain sales offices and manufacturing facilities, manufacturing equipment, vehicles, information technology equipment and warehouse space. Future minimum lease payments for noncancellable operating leases with initial or remaining terms in excess of one year are as follows:

Fiscal year ending December 31	<i>(In thousands)</i>
2008	\$ 9,576
2009	6,353
2010	5,517
2011	2,873
2012	2,598
Thereafter	3,241
<b>Total minimum lease payments</b>	<b>\$ 30,158</b>

Total rental expense for all equipment and building operating leases for the fiscal years ended December 31, 2007 and 2006, the four months ended December 31, 2005 and the fiscal year ended August 27, 2005 were \$14.0 million, \$13.7 million, \$3.7 million, and \$5.5 million, respectively.

**(12) RESTRUCTURING COSTS***Gilroy Cleaning Service Facility*

In November 2007, the Company announced that during 2007 it would close its cleaning service facility in Gilroy, California and relocate certain equipment to other existing manufacturing plants located in Asia, Europe, and the United States. In connection with this action, the Company recorded estimated charges of \$3.8 million for employee severance and retention costs (generally over the employees' required remaining term of service) and asset impairment and accelerated depreciation.

Severance and retention costs, mainly classified as selling, general and administrative expense, totaled \$0.7 million for the year ended December 31, 2007. Other costs of \$3.1 million related to fixed asset write-offs and accelerated depreciation, classified in cost of sales, were also recorded for the year ended December 31, 2007.

For the year ended December 31, 2007, the accrued liabilities, provisions and payments associated with the employee severance and retention costs of the Gilroy restructuring activity were as follows:

<i>(In thousands)</i>	<b>Year ended December 31, 2007</b>
Accrued liabilities at beginning of period	\$
Provision	709
Payments	
Accrued liabilities at end of period	\$ 709

*Singapore Regional Service Center*

In August 2007, the Company announced that during 2007 it would close its regional service center located in Singapore and relocate certain equipment to other existing manufacturing plants located in Asia. In connection with this action, the Company recorded estimated charges of \$0.3 million for employee severance and retention costs that were primarily classified as selling, general and administrative expense for the year ended December 31, 2007.

For the year ended December 31, 2007, the accrued liabilities, provisions and payments associated with the employee severance and retention costs of the Singapore restructuring activity were as follows:

<i>(In thousands)</i>	<b>Year ended December 31, 2007</b>
Accrued liabilities at beginning of period	\$
Provision	343
Payments	(148)
Accrued liabilities at end of period	\$ 195

*Bad Rappenau Facility*

In November 2005, the Company announced that during 2006 it would close its manufacturing plant located in Bad Rappenau, Germany and relocate the production of products made in that facility to other existing manufacturing plants located in the United States and Asia. In addition, the Company moved its Bad Rappenau administrative center to Dresden, Germany. In connection with these actions, the Company incurred charges of \$7.5 million for employee severance and retention costs (generally over the employees' required remaining term of service) and asset impairment and accelerated depreciation.

Severance and retention costs, mainly classified as selling, general and administrative expense, totaled \$(0.2) million, \$4.4 million and \$0.6 million for the years ended December 31, 2007 and 2006 and four months ended



Edgar Filing: ENTEGRIS INC - Form 10-K

December 31, 2005, respectively. Other costs of \$0.4 million, \$1.2 million and \$1.1 million, related to fixed asset write-offs and accelerated depreciation classified in cost of sales, were also recorded for the years ended December 31, 2007 and 2006 and four months ended December 31, 2005, respectively.

The Company's facility in Bad Rappenau became available for sale during the third quarter of 2006 and was classified in assets held for sale as of December 31, 2006 at a carrying value of \$2.2 million. During the second quarter of 2007, the Company sold the facility for \$1.9 million.

For the years ended December 31, 2007 and 2006 and four months ended December 31, 2005, the accrued liabilities, provisions and payments associated with the employee severance and retention costs of the Bad Rappenau restructuring activity were as follows:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005
Accrued liabilities at beginning of period	\$ 641	\$ 568	\$
Provision (reversal)	(145)	4,368	576
Payments	(496)	(4,295)	(8)
Accrued liabilities at end of period	\$	\$ 641	\$ 568

**(13) INTEREST INCOME, NET**

Interest income, net consists of the following:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Interest income	\$ 7,815	\$ 9,668	\$ 2,753	\$ 3,404
Interest expense	(2,570)	(463)	(313)	(866)
Interest income, net	\$ 5,245	\$ 9,205	\$ 2,440	\$ 2,538

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

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

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Gain (loss) on foreign currency remeasurement	\$ 1,196	\$ 794	\$ 401	\$ (884)
Gain on sale of equity investments	6,068			2,914
Other, net	392	864	(463)	85
Other income (expense), net	\$ 7,656	\$ 1,658	\$ (62)	\$ 2,115

**(15) INCOME TAXES**

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

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Domestic	\$ 2,563	\$ 46,864	\$ (24,842)	\$ 3,370
Foreign	54,056	42,692	6,270	10,937
	\$ 56,619	\$ 89,556	\$ (18,572)	\$ 14,307

Income tax (benefit) expense is summarized as follows:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Current:				
Federal	6,612	\$ 923	\$	\$ 2,678
State	3,122	1,115		402
Foreign	21,056	13,474	2,690	2,852
	30,790	15,512	2,690	5,932
Deferred:				
Federal	(18,974)	13,038	(8,495)	(4,602)
State	(72)	610	(2,023)	(166)
Foreign	(1,388)	(2,224)	(885)	(10)
	(20,434)	11,424	(11,403)	(4,778)
	\$ 10,356	\$ 26,936	\$ (8,713)	\$ 1,154

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

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Expected federal income tax at statutory rate	19,817	\$ 31,344	(6,500)	\$ 5,007
State income taxes, net of federal tax effect	1,983	1,131	(1,683)	33
Effect of foreign source income	(2,637)	(4,671)	2	(986)
Tax benefits on exempt earnings from export sales		(850)	(250)	(900)
Equity compensation	542	418		
Non-deductible executive compensation	461			
Research tax credit	(300)	(325)	(100)	(300)
Tax-exempt interest	(135)	(905)	(295)	(676)
Tax effect of foreign dividend	(11,175)			
Tax contingencies	974			(1,375)
Other items, net	826	794	113	351
Income tax expense (benefit)	\$ 10,356	\$ 26,936	\$ (8,713)	\$ 1,154

Edgar Filing: ENTEGRIS INC - Form 10-K

In the year ended August 27, 2005, income tax expense was reduced by \$1.4 million due to the favorable resolution of U.S Federal income tax matters made by the Company.

F-28



As a result of commitments made by the Company related to investment in tangible property and equipment (approximately \$43 million by December 31, 2010), the establishment of a research and development center in 2006 and certain employment commitments through 2010, income from certain manufacturing activities in Malaysia is exempt from tax for years up through 2015. The income tax benefits attributable to the tax status of these subsidiaries are estimated to be \$2.1 million (2 cents per diluted share), \$2.8 million (2 cents per diluted share), \$0.2 million (zero cents per diluted share), and \$1.0 million (1 cent per diluted share), for the years ended December 31, 2007 and 2006, four months ended December 31, 2005 and year ended August 27, 2005.

\$0.2 million, \$2.8 million, \$0.1 million, and \$0.8 million was added to additional paid-in capital in accordance with FAS No. 123(R) or APB No. 25 reflecting tax differences relating to employee stock option and restricted stock award transactions for the years ended December 31, 2007 and 2006, four months ended December 31, 2005 and year ended August 27, 2005, respectively.

Goodwill was reduced by approximately \$7.0 million in 2007 largely due to the determination that tax contingencies established in connection with the Mykrolis acquisition were no longer necessary.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 2007 and December 31, 2006 are as follows:

<i>(In thousands)</i>	2007	2006
Deferred tax assets attributable to:		
Accounts receivable	837	\$ 873
Inventory	3,535	5,351
Intercompany profit	6,188	9,505
Accruals not currently deductible for tax purposes	12,206	10,443
Net operating loss carryforwards	684	16,526
Tax credit carryforwards	30,822	6,038
Depreciation	5,308	3,451
Equity compensation	5,764	6,876
Capital loss carryforward		711
Other, net	2,819	1,231
Gross deferred tax assets	68,163	61,005
Valuation allowance		(711)
Total deferred tax assets	68,163	60,294
Deferred tax liabilities attributable to:		
Purchased intangible assets	19,045	25,625
Total deferred tax liabilities	19,045	25,625
Net deferred tax assets	49,118	\$ 34,669

On October 22, 2007, the Company's Japanese subsidiary, Nihon Entegris KK (NEKK), acted to declare a dividend of 6.8 billion yen (approximately U.S. \$60 million) and to lend 4.6 billion yen (approximately U.S. \$40 million) to the Company. These transactions were completed in early November of 2007. The dividend and loan were funded from available cash and lines of credit established with Japanese banks. Prior to the declaration of the dividend, the accumulated undistributed earnings of NEKK were considered to be reinvested indefinitely as allowed by the provisions of Accounting Principles Board (APB) Opinion No. 23, *Accounting for Income Taxes - Special Areas*, as amended by SFAS No. 109, such that no U.S. tax effect had been provided with respect to such accumulated undistributed NEKK earnings. The dividend and loan transactions resulted in a recharacterization of \$100 million of NEKK's accumulated undistributed earnings as no longer being indefinitely reinvested. This recharacterization of the NEKK accumulated undistributed earnings resulted in a fourth quarter U.S. tax benefit of approximately \$9.4 million after reduction for state taxes of \$1.9 million.

At December 31, 2007, there were approximately \$95.7 million of accumulated undistributed earnings of subsidiaries outside the United States that are considered to be reinvested indefinitely. Management has considered its future cash needs and affirms its intention to indefinitely invest such earnings overseas to be utilized for working capital purposes, expansion of existing operations, and possible acquisitions. No U.S. tax 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.

At December 31, 2007, the Company had state operating loss carryforwards of approximately \$0.4 million, which begin to expire in 2011, foreign tax credit carryforwards of approximately \$28.4 million which expire in 2018, alternative minimum tax credit carryforwards of approximately \$0.1 million and research tax credit carryforwards of approximately \$2.3 million which begin to expire in 2021, and foreign operating loss carryforwards of \$0.3 million which do not expire under current law.

The Company established a valuation allowance of \$2.2 million during the four months ended December 31, 2005 with respect to capital loss carryovers, of which \$0.7 million and \$1.6 million reversed in 2007 and 2006, respectively.

No valuation allowance has been recorded in the year ending December 31, 2007 against the deferred tax assets because management believes that it is more likely than not that the assets will be realized. This determination is based largely upon management's belief that sufficient earnings, both in the United States and offshore, will be earned to realize the deferred tax assets. Included in the Company's gross deferred tax assets is \$28.4 million of foreign tax credits which will expire within ten years and which require both foreign source and U.S. taxable income to use the credits. Management believes that over the next ten years, the Company will be able to generate \$155 million and \$125 million of U.S. taxable income and foreign source income, respectively, the amounts necessary to recover those deferred tax assets.

The Company adopted the provisions of FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes, an Interpretation of FASB Statement 109, effective January 1, 2007. Interpretation 48 prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Benefits from tax positions should be recognized in the financial statements only when it is more likely than not that the tax positions will be sustained upon examination by the appropriate taxing authority that would have full knowledge of all relevant information. A tax position that meets the more-likely-than-not recognition threshold is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. Tax positions that previously failed to meet the more-likely-than-not recognition threshold should be recognized in the first subsequent financial reporting period in which that threshold is met. Previously recognized tax positions that no longer meet the more-likely-than-not recognition threshold should be derecognized in the first subsequent financial reporting period in which that threshold is no longer met. Interpretation 48 also provides guidance on the accounting for and disclosure of unrecognized tax benefits, interest and penalties.

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

Gross unrecognized tax benefits at January 1, 2007	\$ 11,679
Increases in tax positions for prior years	8,775
Decreases in tax positions for prior years	(4,919)
Increases in tax positions for current year	1,485
Settlements	(193)
Lapse in statute of limitations	(194)
<b>Gross unrecognized tax benefits at December 31, 2007</b>	<b>\$ 16,633</b>

The total amount of net unrecognized tax benefits that, if recognized, would affect the effective tax rate was \$3.3 million at December 31, 2007.

The Company's policy for recording interest and penalties associated with audits is to record such items as a component of income before taxes. Penalties are recorded in Other (gains) losses, and interest paid or received is recorded in interest expense or interest income, respectively, in the statement of income. For the year ended December 31, 2007, the Company has accrued interest and penalties related to unrecognized tax benefits of \$3.1 million. \$0.5 million of interest and penalties were recognized in the statement of operations for the year ended December 31, 2007.

The Company files income tax returns in the U.S. and in various state, local and foreign jurisdictions. The statute of limitations related to the consolidated Federal income tax return is closed for all years up to and including fiscal 2003. With respect to foreign jurisdictions, the statute of limitations varies from country to country with the earliest open year for the Company's major foreign subsidiaries being 2001. During 2007, German tax authorities were auditing the Company's German subsidiary. It is likely that a settlement will be reached with the German authorities within twelve months.

Due to the potential for resolution of foreign examinations, the expiration of various statutes of limitation, the filings for change in accounting methods and amended return filings, it is reasonably possible that the company's gross unrecognized tax benefits balance may change within the next twelve months by a range of zero to \$2.7 million.

## **(16) SHAREHOLDERS' EQUITY**

### **Share Repurchase Program**

On August 21, 2006, the Company's Board of Directors authorized a share repurchase program of up to \$150 million over the succeeding 12 to 18 months. In connection with the share repurchase program the Company entered into an Accelerated Share Repurchase Agreement (ASRA) and a Collared Accelerated Share Repurchase Agreement (CASRA) with Goldman, Sachs & Co. (GS) on August 30, 2006. Under the ASRA, which was effective as of August 30, 2006, the Company acquired 4.7 million shares of common stock on September 5, 2006 from GS for \$50.0 million, which was paid on September 5, 2006. The transaction was accounted for as a share retirement with common stock, paid-in capital and retained earnings reduced by \$47 thousand, \$28.2 million, and \$21.7 million, respectively.

Under the CASRA, the Company paid \$50.0 million for a prepaid forward contract, which was effective August 30, 2006, to repurchase the Company's common stock. The Company received deliveries of common stock of 3.0 million shares and 1.2 million shares on September 5, 2006 and October 6, 2006, respectively. The transaction was accounted for as a share retirement with common stock, paid-in capital and retained earnings reduced by \$42 thousand, \$25.2 million, and \$19.8 million, respectively. \$5.0 million of the \$50.0 million payment was reflected as a prepaid forward contract for share repurchase in shareholders' equity, which was credited when the Company received additional shares under the CASRA.

The Company financed the ASRA and CASRA with its available cash equivalents and short-term investments. Under the terms of the ASRA and the CASRA, GS repurchased an equivalent number of shares in the open market from September 2006 through August 2007. Upon GS's completion of trading in August 2007, the Company's price under the ASRA was adjusted up based on the volume-weighted average price of the stock repurchased by GS, resulting in a cash payment to GS of \$0.6 million in 2007, leaving \$49.4 million remaining available for repurchases pursuant to the August 2006 authorization. Also in 2007, the Company received 0.4 million additional shares of common stock pursuant to the CASRA, based on the volume-weighted average price of the stock repurchased by GS.

In May 2007, the Company's Board of Directors authorized a self-tender offer program to acquire up to \$250 million of the Company's common stock. A modified Dutch Auction tender offer began on May 11, 2007 and

expired on June 8, 2007, and was subject to the terms and conditions described in the offering materials mailed to the Company's shareholders and filed with the Securities and Exchange Commission. The tender offer was completed on June 14, 2007 with the Company purchasing 21.1 million shares of its common stock at a price of \$11.80 per share. The Company incurred \$2.3 million in costs associated with the tender offer for a total cost of approximately \$251.4 million.

In November 2007, the Company's Board of Directors authorized a Rule 10b-5-1 trading plan to acquire up to \$49.4 million of the Company's common stock. The share buyback program, which commenced on December 1, 2007, was established in accordance with the provisions of Rule 10b5-1 and Rule 10b-18 under the Securities Exchange Act of 1934. Under the trading plan, the Company purchased 0.5 million shares of its common stock at an average price of \$8.96 per share in 2007. The total cost of the purchases was \$4.1 million.

### Share-based Compensation Expense

Effective August 28, 2005, the Company adopted Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment*, (SFAS 123(R)) which requires the measurement and recognition of compensation expense for all share-based payment awards made to employees and directors including employee stock options and employee stock purchases related to the Employee Stock Purchase Plan (employee stock purchases) to be based on estimated fair values. SFAS 123(R) supersedes the Company's previous accounting under Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25). In March 2005, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 107 (SAB 107) relating to SFAS 123(R). The Company has applied the provisions of SAB 107 in its adoption of SFAS 123(R).

The Company adopted SFAS 123(R) using the modified prospective transition method, which required the application of the accounting standard as of August 28, 2005. In accordance with the modified prospective transition method, the Company's Consolidated Financial Statements for prior periods were not restated to reflect, and did not include, the impact of SFAS 123(R). Share-based compensation expense recorded under SFAS 123(R) for the years ended December 31, 2007 and 2006 and four months ended December 31, 2005 was \$10.5 million, \$14.8 million and \$11.1 million, respectively. Share-based compensation expense of \$5.5 million for the year ended August 27, 2005 was mainly related to restricted stock grants that the Company had been recognizing under previous accounting standards.

SFAS 123(R) requires companies to estimate the fair value of share-based payment awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods in the Company's Consolidated Statement of Operations. Prior to the adoption of SFAS 123(R), the Company accounted for share-based awards to employees and directors using the intrinsic value method in accordance with APB 25 as allowed under Statement of Financial Accounting Standards No. 123, *Accounting for Stock-Based Compensation* (SFAS 123). Under the intrinsic value method, no share-based compensation expense had been recognized in the Company's Consolidated Statement of Operations, other than as related to restricted stock grants, because the exercise price of the Company's stock options granted to employees and directors equaled the fair market value of the underlying stock at the date of grant.

Share-based compensation expense recognized for periods after the adoption of SFAS 123(R) is based on the value of the portion of share-based payment awards that is ultimately expected to vest during the period. Share-based compensation expense recognized in the Company's Consolidated Statement of Operations for the years ended December 31, 2007 and 2006 and four months ended December 31, 2005 includes compensation expense for share-based payment awards granted prior to, but not yet vested as of August 27, 2005 based on the grant date fair value estimated in accordance with the pro forma provisions of SFAS 123.

Share-based payment awards in the form of restricted stock awards for 0.9 million shares and 1.1 million shares were granted to employees during the years ended December 31, 2007 and 2006, respectively, with no shares granted during the four months ended December 31, 2005. Share-based payment awards in the form of stock

awards subject to performance conditions for up to 0.9 million shares and 0.9 million shares were also granted to certain employees during the years ended December 31, 2007 and 2006, respectively, with no performance shares granted during the four months ended December 31, 2005. Compensation expense is based on the grant date fair value estimated in accordance with the provisions of SFAS 123(R).

In conjunction with the adoption of SFAS 123(R), the Company changed its method of attributing the value of share-based compensation to expense from the accelerated multiple-option approach to the straight-line single option method. Compensation expense for all share-based payment awards granted on or prior to August 27, 2005 will continue to be recognized using the accelerated multiple-option approach, while compensation expense for all share-based payment awards granted subsequent to August 27, 2005 will be recognized using the straight-line single-option method. Because share-based compensation expense recognized in the Consolidated Statement of Operations for the years ended December 31, 2007 and 2006 and four months ended December 31, 2005 is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. SFAS 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. In the Company's pro forma information required under SFAS 123 for the periods through August 27, 2005, the Company accounted for forfeitures as they occurred.

There were stock option awards of 1.1 million shares in the year ended August 27, 2005. Restricted stock awards of 1.9 million shares were made to employees in the year ended August 27, 2005. Prior to August 28, 2005, the Company used the Black-Scholes option-pricing model (Black-Scholes model) for the Company's pro forma information required under SFAS 123. The Company's determination of fair value of share-based payment awards on the date of grant using an option-pricing model is affected by the Company's stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, the Company's expected stock price volatility over the term of the awards and actual and projected employee stock option exercise behaviors and forfeitures.

On November 10, 2005, the Financial Accounting Standards Board (FASB) issued FASB Staff Position No. FAS 123(R)-3, *Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards* (FSP 123(R)-3). An entity could take up to one year from the effective date of FSP 123(R)-3 to evaluate its available transition alternatives and make its one-time election. The Company adopted the alternative transition method provided in the FASB Staff Position for calculating the tax effects of share-based compensation pursuant to SFAS 123(R). The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool (APIC pool) related to the tax effects of employee share-based compensation and to determine the subsequent impact on the APIC pool and consolidated statements of cash flows of the tax effects of employee share-based compensation awards that are outstanding upon adoption of SFAS 123(R).

#### **Employee Stock Purchase Plan**

The Company has the Entegris, Inc. Employee Stock Purchase Plan (ESPP). A total of 4.0 million common shares are 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. The Company treats the ESPP as a compensatory plan under SFAS 123(R). As of December 31, 2007, 1.3 million shares had been issued under the ESPP. At December 31, 2007, 2.7 million shares remained available for issuance under the ESPP. Employees purchased 0.2 million shares, 0.2 million shares, none, and 0.2 million shares, at a weighted-average price of \$8.63, \$8.06, none, and \$8.34 during the years ended December 31, 2007 and 2006, four months ended December 31, 2005 and year ended August 27, 2005, respectively.

#### **Employee Stock Option Plans**

As of December 31, 2007, the Company had five stock incentive plans: the Entegris, Inc. 1999 Long-Term Incentive and Stock Option Plan (the 1999 Plan), the Entegris, Inc. Outside Directors' Option Plan (the

Directors Plan) and three former Mykrolis stock option plans assumed by the Company on August 10, 2005: The 2001 Equity Incentive Plan (the 2001 Plan), the 2003 Employment Inducement and Acquisition Stock Option Plan (the Employment Inducement Plan) and the 2001 Non-Employee Director Stock Option Plan (the 2001 Directors Plan). At present, the Company intends to issue new common shares upon the exercise of stock options under each of these plans. The plans are described in more detail below.

*1999 Plan:* The 1999 Plan provides for the issuance of share-based awards to selected employees, directors, and other persons (including both individuals and entities) who provide services to the Company or its affiliates. Under the 1999 Plan, the Board of Directors determines the number of shares for which each option is granted, the rate at which each option is exercisable and whether restrictions will be imposed on the shares subject to the awards. The term of options issued under the 1999 Plan has been ten years, generally exercisable ratably in 25% increments over the 48 months following grant, with exercise prices equal to 100% of the fair market value of the Company's common stock on the date of grant.

*The Directors Plan and the 2001 Directors Plan:* The Directors Plan provides for the grant to each outside director of an option to purchase 15,000 shares on the date the individual becomes a director and for the annual grant to each outside director, at the choice of the Directors Plan administrator (defined as the Board of Directors or a committee of the Board), of either an option to purchase 9,000 shares, or a restricted stock award of up to 3,000 shares. Options are exercisable six months subsequent to the date of grant. Under 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. The 2001 Directors Plan provides for the grant to each newly elected eligible director of options to purchase 15,000 shares of common stock on the date of his or her first election and for the annual grant of options to purchase 10,000 shares of common stock for each subsequent year of service as a director. The exercise price of the stock options may not be less than the fair market value of the stock at the date of grant. On August 10, 2005 the Company's Board of Directors determined that the equity compensation paid to non-employee directors would be an aggregate of 10,000 shares of restricted stock per annum, inclusive of the amounts specified in the above described plans.

*2001 Plan:* The 2001 Plan provides for the issuance of share-based awards to selected employees, directors, and other persons (including both individuals and entities) who provide services to the Company or its affiliates. The 2001 Plan has a term of ten years. Under the 2001 Plan, the Board of Directors determines the term of each option, option price, number of shares for which each option is granted, whether restrictions will be imposed on the shares subject to options, and the rate at which each option is exercisable. The exercise price for incentive stock options may not be less than the fair market value per share of the underlying common stock on the date granted (110% of fair market value in the case of holders of more than 10% of the voting stock of the Company). The 2001 Plan contains an evergreen provision, which increases the number of shares in the pool of options available for grant annually by 1% of the number of shares of common stock outstanding on the date of the Annual Meeting of Stockholders or such lesser amount determined by the Board of Directors. Under NASDAQ rules new grants and awards under the 2001 Plan may only be made to employees and directors of the Company who were employees or directors of Mykrolis prior to the merger or who were hired by the Company subsequent to the merger.

*Employment Inducement Plan:* The Employment Inducement Plan is a non-shareholder approved plan that provides for the issuance of stock options and other share-based awards to newly-hired employees and to employees of companies acquired by the Company. The Employment Inducement Plan has a term of ten years. Options granted under the Employment Inducement Plan have a maximum term of ten years and an exercise price equal to the fair market value of the Company's common stock on the date of grant. The Board of Directors determines other terms of option grants including, number of shares, restrictions and the vesting period. The number of reserved shares under the Employment Inducement Plan automatically increases annually by 0.25% of the number of shares of common stock outstanding on the date of the Annual Meeting of Stockholders unless otherwise determined by the Board of Directors.

*Millipore Plan*

In addition to the Company's plans, certain employees of the Company who were employees of Mykrolis were granted stock options under a predecessor's share-based compensation plan. The Millipore 1999 Stock Incentive Plan (the Millipore Plan) provided for the issuance of stock options and restricted stock to key employees as incentive compensation. The exercise price of a stock option was equal to the fair market value of Millipore's common stock on the date the option was granted and its term was generally ten years and vested over four years. Options granted to the Company's employees under the Millipore Plan in the past were converted into options to acquire Mykrolis common stock pursuant to the spin-off of Mykrolis by Millipore, and then were converted into options to acquire the Company's common stock pursuant to the merger with Mykrolis.

**General Option Information**

Option activity for the 1999 Plan and the Directors' Plan for the years ended December 31, 2007 and 2006, four months ended December 31, 2005 and year ended August 27, 2005 is summarized as follows:

<i>(Shares in thousands)</i>	Year ended December 31, 2007		Year ended December 31, 2006		Four months ended December 31, 2005		Year ended August 27, 2005	
	Number of shares	Weighted average exercise price	Number of shares	Weighted average exercise price	Number of shares	Weighted average exercise price	Number of shares	Weighted average exercise price
Options outstanding, beginning of period	6,383	\$ 7.76	8,501	\$ 7.35	8,826	\$ 7.30	8,268	\$ 7.05
Granted							1,125	8.39
Exercised	(2,627)	6.01	(1,925)	5.56	(231)	4.23	(415)	4.49
Canceled	(251)	12.10	(193)	11.35	(94)	10.43	(152)	9.23
Options outstanding, end of period	3,505	\$ 8.77	6,383	\$ 7.76	8,501	\$ 7.35	8,826	\$ 7.30
Options exercisable, end of period	3,505	\$ 8.77	6,379	\$ 7.76	7,109	\$ 7.33	7,109	\$ 7.29

Options outstanding for the 1999 Plan and the Directors' Plan at December 31, 2007 are summarized as follows:

<i>(Shares in thousands)</i>	Options outstanding			Options exercisable	
	Number outstanding	Weighted average remaining life in years	Weighted- average exercise price	Number exercisable	Weighted average exercise price
Range of exercise prices					
\$3.15	190	0.1 years	\$ 3.15	190	\$ 3.15
\$4.22	68	1.7 years	4.22	68	4.22
\$5.90	481	4.8 years	5.90	481	5.90
\$6.86 to \$7.49	83	3.3 years	7.47	83	7.47
\$8.04	588	3.8 years	8.04	588	8.04
\$8.36 to \$10.00	1,058	4.8 years	8.78	1,058	8.78
\$10.35 to \$11.99	859	4.6 years	11.59	859	11.59
\$12.01 to \$15.38	178	5.7 years	13.61	178	13.61
	3,505			3,505	

Edgar Filing: ENTEGRIS INC - Form 10-K

The weighted average remaining contractual term for options outstanding and exercisable for the 1999 Plan and the Directors' Plan at December 31, 2007 was 4.3 years and 4.3 years, respectively.

F-35



Edgar Filing: ENTEGRIS INC - Form 10-K

Option activity for the 2001 Plan, the Employment Inducement Plan, the 2001 Directors Plan and the Millipore plan for the years ended December 31, 2007 and 2006, four months ended December 31, 2005, and year ended August 27, 2005 are summarized as follows:

	Year ended December 31, 2007		Year ended December 31, 2006		Four months ended December 31, 2005		Year ended August 27, 2005	
	Number of shares	Weighted average exercise price	Number of shares	Weighted average exercise price	Number of Shares	Weighted average exercise price	Number of shares	Weighted Average Exercise Price
<i>(Shares in thousands)</i>								
Options outstanding, beginning of period	6,422	\$ 8.62	7,998	\$ 8.53	8,599	\$ 8.38		
Options assumed in Mykrolis acquisition							8,790	\$ 8.33
Options exercised	(1,345)	8.24	(1,102)	7.09	(508)	5.64	(177)	5.37
Options expired	(186)	10.23	(474)	10.74	(93)	10.39	(14)	10.74
Options outstanding, end of period	4,891	\$ 8.67	6,422	\$ 8.62	7,998	\$ 8.53	8,599	\$ 8.38
Options exercisable	4,723	\$ 8.67	6,080	\$ 8.63	7,553	\$ 8.61	7,638	\$ 8.47

Options outstanding for the 2001 Plan, Employment Inducement Plan, 2001 Directors Plan and Millipore Plan at December 31, 2007 are summarized as follows:

<i>(Shares in thousands)</i>	Options outstanding			Options exercisable	
	Number outstanding	Weighted average remaining life in years	Weighted average exercise price	Number exercisable	Weighted- average exercise price
Range of exercise prices					
\$3.83-\$4.89	555	1.8	\$ 4.77	555	\$ 4.77
\$5.01-\$8.09	953	1.8	6.19	953	6.19
\$8.35-\$9.94	1,290	2.5	8.49	1,122	8.50
\$10.09-\$10.91	1,095	1.1	10.77	1,095	10.77
\$11.12-\$11.76	998	3.1	11.13	998	11.13
	4,891	2.1	\$ 8.67	4,723	\$ 8.67

The weighted average remaining contractual term for options outstanding and exercisable for the 2000 Plan, the Employment Inducement Plan, the 2001 Directors Plan and the Millipore Plan at December 31, 2007 was 2.1 years and 2.0 years, respectively.

For all plans, the Company had shares available for future grants of 8.9 million shares, 8.1 million shares, 7.2 million shares and 4.9 million shares at December 31, 2007, December 31, 2006, December 31, 2005 and August 27, 2005, respectively.

For all plans, the total pretax intrinsic value of stock options exercised during the years ended December 31, 2007 and 2006 was \$18.0 million and \$14.2 million, respectively. The aggregate intrinsic value, which represents the total pretax intrinsic value based on the Company's closing stock price of \$8.63 at December 31, 2007, which theoretically could have been received by the option holders had all option holders exercised their options as of that date, was \$8.1 million for both options outstanding and options exercisable. The total number of in-the-money options exercisable as of December 31, 2007 was 4.6 million.

During the years ended December 31, 2007 and 2006, and August 27, 2005, certain existing stock option grants and restricted stock awards were modified in connection with the execution of various severance and separation agreements. Under the agreements, the terms of unvested and vested stock option grants were modified with no future service required by the affected individuals. Accordingly, under the measurement principles of SFAS No. 123(R) and APB No. 25, incremental share-based compensation expense of \$0.1 million, \$0.4 million and \$1.0 million, respectively, was recognized for the value of the modified stock option grants at the date of the agreements' execution.

During the years ended December 31, 2007 and 2006, four months ended December 31, 2005 and year ended August 27, 2005, the Company received cash from the exercise of stock options totaling \$28.1 million, \$18.5 million, \$3.8 million, and \$3.4 million, respectively. During the years ended December 31, 2007 and 2006, four months ended December 31, 2005 and years ended August 27, 2005, the Company received cash of \$1.8 million, \$1.5 million, none, and \$1.5 million, respectively, in employee contributions to the Entegris, Inc. Employee Stock Purchase Plan.

### Restricted Stock Awards

Restricted stock awards are awards of common stock that are subject to restrictions on transfer and to a risk of forfeiture if the awardee terminates employment with the Company prior to the lapse of the restrictions. The value of such stock is determined using the market price on the grant date. Compensation expense is recorded over the applicable restricted stock vesting periods. In conjunction with the adoption of SFAS 123(R), the Company changed its method of attributing the value of share-based compensation to expense from the accelerated multiple-option approach to the straight-line single option method. Accordingly, compensation expense for restricted stock awards granted on or prior to August 27, 2005 are recorded using the accelerated multiple-option approach, while compensation expense for restricted stock awards granted subsequent to August 27, 2005 are recognized using the straight-line single-option method. A summary of the Company's restricted stock activity for the years ended December 31, 2007 and 2006, four months ended December 31, 2005 and year ended August 27, 2005 is presented in the following table:

<i>(Shares in thousands)</i>	Year ended December 31, 2007		Year ended December 31, 2006		Four months ended December 31, 2005		Year ended August 27, 2005	
	Number of shares	Weighted average grant date fair value	Number of shares	Weighted average grant date fair value	Number of shares	Weighted average grant date fair value	Number of shares	Weighted average grant date fair value
Unvested, beginning of period	1,950	\$ 10.71	1,526	\$ 11.03	2,374	\$ 11.05	236	\$ 12.29
Granted	897	11.09	1,131	10.46			1,900	10.84
Unvested shares assumed in acquisition							365	11.32
Vested	(801)	10.74	(631)	11.04	(843)	11.09	(103)	11.18
Forfeited	(173)	10.60	(76)	10.69	(5)	10.28	(24)	9.23
Unvested, end of period	1,873	\$ 10.89	1,950	\$ 10.71	1,526	\$ 11.03	2,374	\$ 11.05

The weighted average remaining contractual term for unvested restricted shares at December 31, 2007 and 2006 was 2.4 years and 2.5 years, respectively.

As of December 31, 2007, the total compensation cost related to nonvested stock options and restricted stock awards not yet recognized was \$0.3 million and \$11.5 million, respectively, that is expected to be recognized over the next 15.8 months on a weighted-average basis. These amounts exclude restricted stock awards for which performance criteria have yet to be determined and, accordingly, grant dates for those awards have not been established.

During the years ended December 31, 2007 and 2006, Entegris, Inc. awarded performance stock for up to 0.9 million shares for each year to be issued upon the achievement of performance conditions (Performance Shares) under the Company's stock incentive plans to certain officers and other key employees. The Performance Shares will be earned if, and to the extent that, various financial performance criteria for fiscal years 2006 through 2009 are achieved. The number of performance shares earned in a given year may vary based on the level of achievement of financial performance objectives for that year or multi-year period. If the Company's performance fails to achieve the specified performance threshold, then the Performance Shares allocated to that financial performance criteria are forfeited. Each annual tranche will have its own service period beginning at the date (the grant date) at which the Board of Directors establishes the annual performance targets for the applicable year. Compensation expense to be recorded in connection with the Performance Shares will be based on the grant date fair value of the Company's common stock. Awards of Performance Shares are expensed over the service period based on an evaluation of the probability of achieving the performance objectives.

For Performance Share awards granted in 2006, 25% of the shares are available to be awarded each year through 2009, if and to the extent the financial performance criteria for fiscal years 2006 through 2009 are achieved. The number of Performance Shares earned in a given year may vary based on the level of achievement of financial performance objectives for that year. If the Company's performance for a year fails to achieve the specified performance threshold, then the Performance Shares allocated to that year are forfeited. Each annual tranche will have its own service period beginning at the date (the grant date) at which the Board of Directors establishes the annual performance targets for the applicable year, or January 1 of that year, whichever occurs later. Compensation expense to be recorded in connection with the Performance Shares is based on the grant date fair value of the Company's common stock on the date the financial performance criteria are established for each annual tranche. Once earned, Performance Shares are fully vested with no restrictions. Awards of Performance Shares are expensed over the service period based on an evaluation of the probability of achieving the performance objectives.

For Performance Share awards granted in 2007, 50% of the shares are available to be awarded, if and to the extent that two financial performance criteria for fiscal year 2007 are achieved, while the remaining 50% of the shares are available to be awarded if and to the extent that a third financial performance criteria for the three-year period including fiscal years 2007 through 2009 is achieved. The number of performance shares earned may vary based on the level of achievement of financial performance criteria indicated. If the Company's performance fails to achieve the specified performance threshold, then the performance shares are forfeited. Compensation expense to be recorded in connection with the 2007 Performance Shares is based on the grant date fair value of the Company's common stock on the date the financial performance criteria were established. All shares earned in connection with the 2007 Performance Share awards are also subject to service conditions. Shares available upon attainment of the financial performance criteria for fiscal year 2007 vest annually over a four-year period, while shares available upon attainment of the financial performance criteria for the three-year period from fiscal years 2007 through 2009 will cliff-vest at the end of 2009, with the final 25% vesting in 2010.

Certain unvested restricted shares of Mykrolis common stock issued in connection with restricted stock awards made prior to the merger with the Company were exchanged for unvested restricted shares of the Company's common stock, with the number of shares adjusted for the exchange ratio of 1.39. Accordingly, 0.3 million restricted Mykrolis shares were exchanged for 0.4 million restricted shares of the Company's common stock. The intrinsic value of \$2.5 million associated with the unvested restricted stock was recorded as deferred compensation as part of the purchase price allocation for the Mykrolis acquisition. This balance is being charged to earnings over the remaining vesting periods that extend to 2009.

**Valuation and Expense Information under SFAS 123(R)**

The following table summarizes share-based compensation expense related to employee stock options, restricted stock awards and grants under the employee stock purchase plan under SFAS 123(R) for the years ended December 31, 2007 and 2006 and four months ended December 31, 2005 that was allocated as follows:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005
Cost of sales	\$ 1,800	\$ 3,000	\$ 882
Engineering, research and development	180	230	95
Selling, general and administrative	8,520	11,546	10,076
Share-based compensation expense	10,500	14,776	11,053
Tax benefit	3,948	5,556	4,156
Share-based compensation expense, net of tax	\$ 6,552	\$ 9,220	\$ 6,897

No stock option grants have been made to employees since the adoption of SFAS 123(R). Prior to the adoption of SFAS 123(R), the value of each employee stock option was estimated on the date of grant using the Black-Scholes model for the purpose of the pro forma financial information in accordance with SFAS 123.

**Pro Forma Information Under SFAS 123 for Periods Prior to Adoption of SFAS 123(R)**

The following table illustrates the effect on net income and earnings per common share for the year ended August 27, 2005 if the Company had applied the fair value recognition provisions of SFAS 123, *Accounting for Stock-Based Compensation*, to share-based employee compensation.

<i>(In thousands, except share data)</i>	Year ended August 27, 2005
Net income	\$ 9,393
Add: Stock-based compensation included in net income, net of tax of \$2,077	3,388
Deduct: Total stock-based compensation expense determined under fair value based method for all awards, net of tax benefits of \$6,727	(11,159)
Pro forma net income	\$ 1,622
<b>Earnings per share:</b>	
Basic as reported	\$ 0.12
Diluted as reported	0.12
Basic pro forma	0.02
Diluted pro forma	0.02

During September 2004, the Compensation and Stock Option Committee (the Committee) of the Company's Board of Directors reviewed the Company's stock-based compensation plans in light of evolving compensation practices and the anticipated issuance by the Financial Accounting Standards Board (FASB) of its revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation* (SFAS No. 123R) (subsequently issued in December 2004) which upon adoption required all share-based payments to employees, including grants of employee stock options, to be recognized in the Company's consolidated statement of operations based on their fair values. After consideration of various alternatives, the Committee approved the accelerated and full vesting of all unvested outstanding employee stock options with exercise prices above \$9.21 issued prior to October 1, 2004. The effect of the vesting acceleration was the recognition of incremental share-based employee compensation of approximately \$4.8 million in the first quarter of the year ended August 28, 2005 in the Company's pro forma disclosure above. This previously deferred stock-based employee compensation expense amount would otherwise in part have been recognized in the Company's consolidated statements of operations in future periods after the adoption of SFAS No. 123R on August 28, 2005.



The fair values of options granted and the option component of the employee stock purchase plan shares were estimated at the date of grant using the Black-Scholes option pricing model and the following assumptions:

<b>Option plans</b>	<b>Year ended August 27, 2005</b>
Expected dividend yield	0%
Expected stock price volatility	75%
Risk-free interest rate	3.5%
Expected life	6.0 years

<b>Employee stock purchase plan</b>	<b>Year ended August 27, 2005</b>
Expected dividend yield	0%
Expected stock price volatility	75%
Risk-free interest rate	2.0%
Expected life	0.5 years

The expected stock price volatility was based on computations of historical volatility of the Company's common stock.

The weighted average fair value of options granted during years ended August 27, 2005 with exercise prices equal to the market price at the date of grant was \$5.69.

**Shareholder Rights Plan** On July 27, 2005, the Company's Board of Directors adopted a shareholder rights plan (the Rights Plan) pursuant to which Entegris declared a dividend on August 8, 2005 to its shareholders of record on that date of one preferred share purchase right (a Right) for each share of Entegris common stock owned on August 8, 2005. Each Right entitles the holder to purchase one-hundredth of a share of a series of preferred stock at an exercise price of \$50, subject to adjustment as provided in the Rights Plan. The Rights Plan is designed to protect Entegris' shareholders from attempts by others to acquire Entegris on terms or by using tactics that could deny all shareholders the opportunity to realize the full value of their investment. The Rights are attached to the shares of the Company's common stock until certain triggering events specified in the Rights Agreement occur, including, unless approved by the Company's Board of Directors, an acquisition by a person or group of specified levels of beneficial ownership of Entegris common stock or a tender offer for Entegris common stock. Upon the occurrence of any of these triggering events, the Rights authorize the holders to purchase at the then-current exercise price for the Rights, that number of shares of the Company's common stock having a value equal to twice the exercise price. The Rights are redeemable by the Company for \$0.01 and will expire on August 8, 2015. One of the events which will trigger the Rights is the acquisition, or commencement of a tender offer, by a person (an Acquiring Person, as defined in the shareholder rights plan), other than Entegris or any of its subsidiaries or employee benefit plans, of 15% or more of the outstanding shares of the Company's common stock. An Acquiring Person may not exercise a Right.

#### (17) BENEFIT PLANS

**401(k) 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 as a percentage of eligible wages based on the company's worldwide operating results. The employer profit sharing and matching contribution expense under the Plans was \$5.9 million, \$5.8 million, \$0.7 million and \$4.6 million in the fiscal years ended December 31, 2007 and 2006, the four months ended December 31, 2005, and the fiscal year ended August 27, 2005, respectively.

**Supplemental Savings and Retirement Plan** The Company also maintains the Supplemental Savings and Retirement Plan (the Supplemental Plan ). Under the Supplemental Plan, certain senior executives are allowed certain salary deferral benefits that would otherwise be lost by reason of restrictions imposed by the Internal Revenue Code limiting the amount of compensation which may be deferred under tax-qualified plans. Liabilities of \$3.2 million and \$3.2 million at December 31, 2007 and 2006, respectively, related to the Supplemental Plan are included in the consolidated balance sheets under the caption Pension benefit obligations and other liabilities . The Company recorded expense of \$0.3 million, \$0.5 million and \$0.3 million in the years ended December 31, 2007 and 2006 and the four months ended December 31, 2005, respectively. The Company recorded no expense in connection with the Supplemental Plan in the year ended August 27, 2005.

**Defined Benefit Plans.** The Company assumed the obligations under defined benefit pension plans in its merger with Myrkolis on August 6, 2005. The employees of the Company s subsidiaries in Japan and Taiwan are covered in defined benefit pension plans. The Company uses a December 31 measurement date for its pension plans.

Effective December 31, 2006, the Company adopted SFAS No. 158, *Employers Accounting for Defined Benefit Pension and Other Postretirement Plans*. Under SFAS No. 158, the Company is required to recognize the overfunded or underfunded status of its defined benefit pension plans as an asset or liability in its consolidated balance sheets and to recognize changes in that funded status in the year in which the changes occur through comprehensive income. SFAS No. 158 also requires the measurement of the funded status of a plan as of the date of its year-end consolidated balance sheet. The Company s existing policy was to measure the funded status of its plans as of the balance sheet date; accordingly, the new measurement date requirements of SFAS No. 158 had no impact.

Edgar Filing: ENTEGRIS INC - Form 10-K

The tables below set forth the Company's estimated funded status as of December 31, 2007 and 2006:

<i>(In thousands)</i>	2007	2006
<b>Change in benefit obligation:</b>		
Benefit obligation at beginning of period	\$ 14,297	\$ 14,084
Plan Amendments	530	
Service cost	1,165	1,248
Interest cost	307	264
Actuarial (gains) losses	1,183	(745)
Benefits paid	(1,007)	(425)
Foreign exchange impact	892	(129)
<b>Benefit obligation at end of period</b>	<b>17,367</b>	<b>14,297</b>
<b>Change in plan assets:</b>		
Fair value of plan assets at beginning of period	3,824	3,321
Plan Amendments	(510)	
Return on plan assets	349	148
Employer contributions	675	440
Benefits paid	(129)	(44)
Foreign exchange impact	233	(41)
<b>Fair value of plan assets at end of period</b>	<b>4,442</b>	<b>3,824</b>
<b>Funded status:</b>		
Plan assets in excess of/(less than) benefit obligation	(12,925)	(10,473)
<b>Net amount recognized</b>	<b>\$ (12,925)</b>	<b>\$ (10,473)</b>
<b>Amounts recognized in the consolidated balance sheet consist of:</b>		
Noncurrent liability	\$ (12,925)	\$ (10,473)
Accumulated other comprehensive loss, net of taxes	951	228
<b>Amounts recognized in accumulated other comprehensive loss, net of tax consist of:</b>		
Net actuarial loss	\$ 417	\$ 175
Prior service cost	209	166
Unrecognized transition obligation	960	
<b>Gross amount recognized</b>	<b>\$ 1,586</b>	<b>\$ 341</b>
Deferred Income taxes	(635)	(113)
<b>Net amount recognized</b>	<b>951</b>	<b>228</b>

Information for pension plans with an accumulated benefit obligation in excess of plan assets as of December 31, 2007 and 2006:

<i>(In thousands)</i>	2007	2006
Projected benefit obligation	\$ 17,367	\$ 14,297
Accumulated benefit obligation	15,495	12,288
Fair value of plan assets	4,422	3,824



Edgar Filing: ENTEGRIS INC - Form 10-K

The components of the net periodic benefit cost for the years ended December 31, 2007 and 2006, four months ended December 31, 2005 and year ended August 27, 2005 are as follows:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
<b>Pension benefits:</b>				
Service cost	\$ 1,165	\$ 1,248	\$ 471	\$ 63
Interest cost	307	264	88	16
Expected return on plan assets	(30)	(33)	(194)	(1)
Amortization of prior service cost	10	10	4	
Amortization of net transition obligation	(1)			
Recognized actuarial net loss	114	75	1	
<b>Net periodic pension benefit cost</b>	<b>\$ 1,565</b>	<b>\$ 1,564</b>	<b>\$ 370</b>	<b>\$ 78</b>

The estimated amount that will be amortized from accumulated other comprehensive income into net periodic benefit cost in 2008 is as follows:

<i>(In thousands)</i>	
Transition obligation	\$ (114)
Prior service cost	10
	<b>\$ (104)</b>

Assumptions used in determining the benefit obligation and net periodic benefit cost for the Company's pension plans are presented in the following table as weighted-averages:

	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
<b>Benefit obligations:</b>				
Discount rate	1.78%	2.06%	1.79%	1.79%
Rate of compensation increase	6.53%	2.26%	2.14%	2.14%
<b>Net periodic benefit cost:</b>				
Discount rate	2.05%	1.84%	2.15%	2.15%
Rate of compensation increase	2.26%	2.26%	2.53%	2.53%
Expected return on plan assets	0.90%	0.90%	1.48%	1.48%

The discount rate used by the Company is based on rates of long-term government bonds.

*Plan Assets*

At December 31, 2007, the majority of the Company's pension plan assets are invested in a Japanese insurance company's guaranteed-return fixed income securities. There is interest rate risk associated with the valuation of these investments. The long-term rate of return on Japanese pension plan assets was developed through an analysis of historical returns and the fund's current guaranteed return rate. Estimates of future returns are based on a continuation of the existing guaranteed rate of return. The remaining portion of the Company's plan assets is deposited in Central Trust of China in the form of cash, where Central Trust of China is the assigned funding vehicle for the statutory retirement benefit.



*Cash Flows*

The Company expects to contribute \$1.0 million to its defined benefit pension plans during fiscal 2008. The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

<i>(In thousands)</i>	
2008	\$ 570
2009	456
2010	491
2011	711
2012	458
Years 2013-2017	2,737

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

Basic EPS is computed by dividing net income (loss) 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:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Basic earnings per share Weighted common shares outstanding	122,557	135,116	135,437	77,137
Weighted common shares assumed upon exercise of options	1,617	2,377		1,844
Weighted common shares assumed upon vesting of restricted common stock	766	999		347
Diluted earnings per share Weighted common shares outstanding	124,940	138,492	135,437	79,328

Approximately 3.6 million, 4.5 million, and 2.9 million of the Company's stock options were excluded from the calculation of diluted earnings per share in the fiscal years ended December 31, 2007 and 2006, and the fiscal year ended August 27, 2005, respectively, because the exercise prices of the stock options were greater than the average price of the Company's common stock, and therefore their inclusion would have been antidilutive. The effect of the inclusion of stock options and unvested restricted common stock for the four-month period ended December 31, 2005 would have been anti-dilutive.

**(19) SEGMENT INFORMATION**

Entegris operates in one segment for the design, development, manufacture, marketing and sale of material integrity management products and services predominantly within the semiconductor industry. All products are sold on a worldwide basis. In accordance with SFAS No. 131, *Disclosures About Segments of an Enterprise and Related Information*, the Company's chief operating decision-maker has been identified as the President and Chief Executive Officer, who reviews operating results to make decisions about allocating resources and assessing performance for the entire company. Since Entegris operates in one reportable segment, all financial information required by SFAS 131 can be found in the consolidated financial statements.

Edgar Filing: ENTEGRIS INC - Form 10-K

The following table summarizes total net sales by markets served:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Net sales:				
Semiconductor	\$ 482,083	\$ 526,243	\$ 153,664	\$ 258,835
Data storage	37,334	44,461	13,527	42,363
Other	106,821	102,178	32,453	46,147
	\$ 626,238	\$ 672,882	\$ 199,644	\$ 347,345

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:

<i>(In thousands)</i>	Year ended December 31, 2007	Year ended December 31, 2006	Four months ended December 31, 2005	Year ended August 27, 2005
Net sales:				
United States	\$ 163,146	\$ 193,887	\$ 61,641	\$ 118,128
Japan	144,231	153,454	44,276	57,101
Germany	30,508	25,635	7,104	16,815
Taiwan	89,012	82,039	26,260	33,694
Singapore	34,168	30,648	9,611	25,842
Korea	51,477	55,901	15,388	24,737
Malaysia	21,230	24,945	6,529	13,776
China	18,504	15,507	5,498	7,337
Other	73,962	90,866	23,337	49,915
	\$ 626,238	\$ 672,882	\$ 199,644	\$ 347,345

<i>(In thousands)</i>	December 31, 2007	December 31, 2006	December 31, 2005	August 27, 2005
Property, plant and equipment:				
United States	\$ 63,774	\$ 69,463	\$ 73,131	\$ 74,079
Japan	22,481	21,114	19,740	20,499
Germany	238	290	3,953	6,090
Malaysia	27,270	22,874	16,168	15,890
Other	7,394	7,246	7,137	6,798
	\$ 121,157	\$ 120,987	\$ 120,129	\$ 123,356

In the fiscal years ended December 31, 2007 and 2006, four months ended December 31, 2005 and fiscal year ended August 27, 2005, no single nonaffiliated customer accounted for 10% or more of net sales. In the fiscal years ended December 31, 2007 and 2006, the four months ended December 31, 2005, and the fiscal year ended August 27, 2005, net sales to the Company's top ten customers accounted for approximately 28%, 27%, 33% and 35%, respectively, of the Company's net sales.

---

**(20) COMMITMENTS AND CONTINGENT LIABILITIES**

The following discussion provides information regarding certain litigation to which the Company was a party that were pending as of December 31, 2007.

As previously disclosed, on March 3, 2003 the Company's predecessor, Mykrolis Corporation, filed a lawsuit against Pall Corporation in the United States District Court for the District of Massachusetts alleging infringement of two of the Company's U.S. patents by certain fluid separation systems and related assemblies used in photolithography applications manufactured and sold by the defendant. The Company's lawsuit also sought a preliminary injunction preventing the defendant from the manufacture, use, sale, offer for sale or importation into the U.S. of any infringing product. On April 30, 2004, the Court issued a preliminary injunction against Pall Corporation and ordered Pall to immediately stop making, using, selling, or offering to sell within the U.S., or importing into the U.S., its PhotoKleen EZD-2 Filter Assembly products or any colorable imitation of those products. On January 18, 2005, the Court issued an order holding Pall Corporation in contempt of court for the violation of the preliminary injunction and ordering Pall to disgorge all profits earned from the sale of its PhotoKleen EZD-2 Filter Assembly products and colorable imitations thereof from the date the preliminary injunction was issued through January 12, 2005. In addition, Pall was also ordered to reimburse Mykrolis for certain of its attorney's fees associated with the contempt and related proceedings. The Court's order also dissolved the preliminary injunction, effective January 12, 2005, based on certain prior art cited by Pall which it alleged raised questions as to the validity of the patents in suit. On February 17, 2005, the Company filed notice of appeal to the U.S. Circuit Court of Appeals for the Federal Circuit appealing the portion of the Court's order that dissolved the preliminary injunction and Pall filed a notice of appeal to that court with respect to the finding of contempt and the award of attorneys' fees. On June 13, 2007 the Court of Appeals issued an opinion dismissing Pall's appeal for lack of jurisdiction and affirming the District Court's order dissolving the preliminary injunction.

On April 6, 2006 the Company filed a lawsuit against Pall Corporation in the United States District Court for the District of Massachusetts alleging infringement of the Company's newly issued U.S. patent No. 7,021,667 by certain filter assembly products used in photolithography applications that are manufactured and sold by the defendant. The Company's lawsuit also seeks a preliminary injunction preventing the defendant from the manufacture, use, sale, offer for sale or importation into the U.S. of the infringing products. On October 23, 2006 the Company's motion for preliminary injunction was argued before the court; a decision on this motion is pending.

On August 23, 2006 the Company filed a lawsuit against Pall Corporation in the United States District Court for the District of Massachusetts alleging infringement of the Company's newly issued U.S. patent No. 7,037,424 by certain fluid separation modules and related separation apparatus, including the product known as the EZD-3 Filter Assembly, used in photolithography applications that are manufactured and sold by the defendant. It is believed that the EZD-3 Filter Assembly was introduced into the market by the defendant in response to the action brought by the Company in March of 2003 as described above. This case is currently in the preliminary stages.

As previously disclosed, on December 16, 2005 Pall Corporation filed suit against the Company in U.S. District Court for the Eastern District of New York alleging patent infringement. Specifically, the suit alleges infringement of two of plaintiff's patents by one of the Company's gas filtration products and by the packaging for certain of the Company's liquid filtration products. Both products and their predecessor products have been on the market for a number of years. The Company intends to vigorously defend this suit and believes that it will ultimately prevail. This case is currently in the discovery stage.

On May, 4, 2007 Pall Corporation filed a lawsuit against the Company in the U.S. District Court for the Eastern District of New York alleging patent infringement. Specifically, the suit alleges that certain of the Company's point-of-use filtration products infringe a newly issued Pall patent, as well as three older Pall patents. Pall's

action, which relates only to the U.S., asserts that on information and belief the Company's Impact 2 and Impact Plus point-of-use photoresist filters infringe a patent issued to Pall on March 27, 2007, as well as three older patents. The Company intends to vigorously defend this suit and believes that it will ultimately prevail. This case is currently in the preliminary stage.

**(21) SUBSEQUENT EVENT**

On February 15, 2008, the Company entered into an unsecured domestic credit agreement with Wells Fargo Bank, National Association, as agent, and certain other banks. The agreement provides for a \$230 million revolving credit facility (the Facility) for a period of five years with an uncommitted option to expand the Facility by up to \$20 million provided that no default or event of default has occurred or is continuing at such time. The Facility replaces the Company's credit agreement, executed in June 2007 between the Company and Wells Fargo Bank, National Association, as agent, and certain other banks. The Company generally may elect that the loans comprising each borrowing bear interest at a rate per annum equal to (a) the Base Rate equal to the higher of the Prime Rate then in effect and the Federal Funds Rate then in effect, plus 0.50% or (b) a LIBOR rate plus a LIBOR Margin ranging from 1.00% to 1.50% depending on leverage.

The Facility is guaranteed by the Company's material direct and indirect subsidiaries which are treated as domestic for tax purposes. In addition, the Facility is secured by a pledge of 65% of the stock owned by the domestic subsidiaries of each material subsidiary which is treated as foreign for tax purposes. The Facility requires that the Company comply on a quarterly basis with certain financial covenants, including leverage and interest coverage ratio covenants. In addition, the Facility includes negative covenants, subject to exceptions, restricting or limiting our ability and the ability of our subsidiaries to, among other things, sell assets, engage in mergers, acquisitions and other business combinations, and declare dividends or redeem or repurchase capital stock. The Facility also contains customary representations, warranties, covenants and events of default.

**(22) QUARTERLY INFORMATION-UNAUDITED**

<i>(In thousands, except per share data)</i>	Fiscal quarter ended			
	March 31, 2007	June 30, 2007	September 29, 2007	December 31, 2007
Net sales	\$ 159,571	\$ 153,508	\$ 151,811	\$ 161,348
Gross profit	68,508	65,494	65,510	66,725
Net income from continuing operations	10,494	15,750	8,953	11,159
Net loss from discontinued operations	(111)	(973)	(536)	(377)
Net income	10,383	14,777	8,417	10,782
Basic earnings (loss) per share				
Continuing operations	0.08	0.12	0.08	0.10
Discontinued operations	0.00	(0.01)	(0.00)	(0.00)
Net income	0.08	0.11	0.07	0.09
Diluted earnings (loss) per share				
Continuing operations	0.08	0.12	0.08	0.10
Discontinued operations	0.00	(0.01)	(0.00)	(0.00)
Net income	0.08	0.11	0.07	0.09

<i>(In thousands, except per share data)</i>	Fiscal quarter ended			
	April 1, 2006	July 1, 2006	September 30, 2006	December 31, 2006
Net sales	\$ 156,406	\$ 179,296	\$ 169,880	\$ 167,300
Gross profit	72,827	86,981	75,838	69,432
Net income from continuing operations	10,006	18,782	18,018	16,345
Net income (loss) from discontinued operations	1,347	(589)	(197)	(246)
Net income	11,353	18,193	17,821	16,099
Basic earnings per share				
Continuing operations	0.07	0.14	0.13	0.12
Discontinued operations	0.01			
Net income	0.08	0.13	0.13	0.12
Diluted earnings per share				
Continuing operations	0.07	0.13	0.13	0.12
Discontinued operations	0.01			
Net income	0.08	0.13	0.13	0.12