AMTECH SYSTEMS INC
Form 10-K
December 21, 2006

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

FORM 10-K

(Mark One)

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

For the fiscal year ended: September 30, 2006

OR

o **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: 0-11412

AMTECH SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Arizona	**86-0411215**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
131 South Clark Drive, Tempe, Arizona	**85281**
(Address of principal executive offices)	**(Zip Code)**

Registrant s telephone number, including area code: 480-967-5146

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

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

Common Stock, $0.01 Par Value

(Title of Class)

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

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

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

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

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

Large accelerated filer o Accelerated filer o Non- accelerated filer x

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

As of March 31, 2006, the aggregate market value of the voting stock held by non-affiliates of the registrant was approximately $23,244,000, based upon the closing sales price reported by the NASDAQ Global Market on that date.

As of December 8, 2006, the registrant had outstanding 3,476,042 shares of Common Stock, $0.01 par value.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Definitive Proxy Statement related to the registrant s 2006 Annual Meeting of Shareholders, which Proxy Statement will be filed under the Securities Exchange Act of 1934, as amended, within 120 days of the end of the registrant s fiscal year ended September 30, 2006, are incorporated by reference into Item 14 of Part III of this Form 10-K.

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
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FORWARD-LOOKING STATEMENTS

Certain information contained or incorporated by reference in this Annual Report on Form 10-K is forward-looking in nature. All statements included or incorporated by reference in this Annual Report on Form 10-K, or made by management of Amtech Systems, Inc. and its subsidiaries (Amtech), other than statements of historical fact, are hereby identified as forward-looking statements (as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended). Examples of forward-looking statements include statements regarding Amtech s future financial results, operating results, business strategies, projected costs, products under development, competitive positions and plans and objectives of the Company and its management for future operations. In some cases, forward-looking statements can be identified by terminology such as may, will, should, would, expects, plans, anticipates, inte believes, estimates, predicts, potential, continue, or the negative of these terms or other comparable terminology. Any expectations based or these forward-looking statements are subject to risks and uncertainties and other important factors, including those discussed in the section entitled Item 1A. Risk Factors. These and many other factors could affect Amtech s future operating results and financial condition, and could cause actual results to differ materially from expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf.

All references to we, our, us, or Amtech refer to Amtech Systems, Inc. and its subsidiaries.

PART I

ITEM 1. BUSINESS

Amtech was incorporated in Arizona in October 1981, under the name Quartz Engineering & Materials, Inc. We changed to our present name in 1987. We conduct operations through three wholly-owned subsidiaries: Tempress Systems, Inc., a Texas corporation with all of its operations in the Netherlands, acquired in 1994 (Tempress Systems or Tempress); P.R. Hoffman Machine Products, Inc., an Arizona corporation based in Carlisle, Pennsylvania, acquired in July 1997 (P.R. Hoffman); and Bruce Technologies, Inc., a Massachusetts corporation based in Billerica, Massachusetts, acquired in July 2004 (Bruce Technologies). See Exhibit 21 Subsidiaries for a complete list of our subsidiaries.

We are a leading supplier of horizontal diffusion furnace systems used for semiconductor and solar (photovoltaic) cell manufacturing and recognized in the markets that we serve for our technology and our brands. We operate in two business segments: semiconductor equipment and polishing supplies. Our semiconductor equipment is sold under the well-known and respected brand names of Tempress Systems and Bruce Technologies. Our semiconductor segment has customers in both the semiconductor industry and the solar industry. Within the semiconductor industry, we serve a market focused on manufacturers of analog, power, automotive and microcontroller chips with geometries greater than 0.3 microns, denoted as µ, which we believe minimizes direct competition with significantly larger suppliers of semiconductor equipment. Within the solar industry, we provide diffusion and automation equipment to solar cell manufacturers. Under the P.R. Hoffman brand, we are also a leading supplier of insert carriers to manufacturers of silicon wafers, and provide lapping and polishing consumable products as well as equipment used in various industries.

We have been providing manufacturing solutions to the semiconductor industry for over 30 years and are leveraging our technology and industry presence in an effort to expand our penetration into the solar industry. Our customers use our furnaces to manufacture semiconductors, solar cells, silicon wafers and microelectromechanical systems, or MEMS, which are used in end markets such as telecommunications, consumer electronics, computers, automotive, hand-held devices and solar industry products. To complement our research and development efforts, we also sell our furnaces to research institutes and universities.

Driven by internal and external growth, our net revenue increased 45% year over year in both fiscal 2005 and 2006 to $27.9 million and $40.4 million, respectively. During the fourth quarter of fiscal 2004, we acquired the Bruce Technologies horizontal furnace product line, significantly contributing to the increase in net revenue for fiscal 2005. During fiscal 2006, net revenue increased primarily because of higher capital investment by our semiconductor customers driven by the growth in worldwide demand for electronic products and integrated circuits, as well as the increased demand for solar industry products. Our fiscal 2006 net revenue included a multi-furnace order of approximately $5.2 million from one customer. While we expect follow-on orders from this customer, we do not anticipate receiving an order of this magnitude in fiscal 2007 and, therefore, expect our sales to the semiconductor industry over the near term to be flat or slightly decrease.

We expect, however, our sales to solar cell manufacturers to increase in fiscal 2007. As of September 30, 2006, our backlog from solar industry orders, which we expect to ship in fiscal 2007, was $7.6 million generated from $8.0 million in orders in fiscal 2006. Orders generated in fiscal 2005 were $3.8 million. Because our orders are typically subject to cancellation or delay by the customer, our backlog at any particular point in time is not necessarily representative of actual sales for succeeding periods, nor is backlog any assurance that we will realize profit from completing these orders. Net revenue from solar industry sales were $2.8 million and $1.4 million in fiscal 2006 and 2005, respectively. We expect the solar industry to continue to grow as a result of greater interest in environmentally friendly energy alternatives, increased costs of fossil fuels, increased global demand for electricity, solar industry efforts to reduce manufacturing costs and concern over the United States dependence on foreign oil. We plan to continue capitalizing on this trend by improving our existing products and processes for the solar industry, by increasing our solar sales and marketing activities and by acquiring or developing additional products for that industry.

For information regarding net revenue, operating income or loss and identifiable assets attributable to each of our two business segments, see Note 10 of the Notes to Consolidated Financial Statements included herein and Item 7 of this Annual Report. For information on the products of each segment, see Semiconductor Equipment Segment Products and Polishing Supplies Segment Products within Item 1. Business.

COMPETITIVE STRENGTHS

We believe that we are a leader in the markets we serve as a result of the following competitive strengths:

Leading Market Share and Recognized Brand Names. The Tempress, Bruce Technologies and P.R. Hoffman brands have long been recognized in our industry and identified with high-quality products, innovative solutions and dependable service. We believe that we hold the number one or number two market share with respect to the markets that we serve. Additionally, we believe that our brand recognition and experience will allow us to capitalize on the market opportunities that exist in the solar industry and realize greater demand for our products than most of our competitors.

We have been providing horizontal diffusion furnaces and polishing supplies and equipment to our customers for over 30 years. We have sold and installed over 900 horizontal furnaces worldwide and benefit from the largest installed customer base in the semiconductor industry, which leads to significant replacement and expansion demand. Customers that have purchased our furnaces can leverage their investment in training, spare parts inventory and other costs by acquiring additional equipment from us. We also have an extensive retrofit, parts and service business, which typically generates higher margins than our equipment business.

Experienced Management Team. We are led by a highly experienced management team. Our CEO has over 33 years of industry experience, including 25 years with our company. Our three general managers have an average of over 19 years of semiconductor industry experience and an average of 17 years with our company (including predecessor companies).

Established, Diversified Customer Base. We have long-standing relationships with many of our top customers, which we believe remain strong. We maintain a broad base of customers, including leading semiconductor and wafer manufacturing companies, as well as solar cell manufacturers. In fiscal 2006, our largest customer accounted for approximately 17% of our net revenue, and our top 10 customers collectively represented approximately 58% of our net revenue. In fiscal 2005, no single customer accounted for more than 10% of our net revenue. In fiscal 2004, our largest customer accounted for approximately 10% of our net revenue. Our largest customer has been different in each of the last three fiscal years.

Proven Acquisition Track Record. Over the last twelve years we have developed a successful acquisition program and have completed the acquisition and integration of three significant businesses. In 1994, we acquired certain assets of Tempress and hired Tempress s engineers to develop our first models of the Tempress horizontal diffusion furnaces for production in The Netherlands. In July 1997, we acquired substantially all of the assets of P.R. Hoffman. This acquisition enabled us to offer new products, including lapping and polishing carriers, polishing templates, lapping and polishing machines and related consumable and spare parts, to our existing customer base as well as to target new customers. In July 2004, we acquired the Bruce Technologies line of semiconductor horizontal furnace operations, product lines and other assets from Kokusai Semiconductor Equipment Corporation (Kokusai), a wholly owned subsidiary of Hitachi, and its affiliate, Kokusai Electric Europe, GmbH. Each of the above acquisitions has contributed to our growth in net revenue and profitability.

Technical Expertise. We have highly trained and experienced mechanical, chemical, environmental, electronic, hardware and software engineers and support personnel. Our engineering group possesses core competencies in product applications and support systems, sophisticated controls, chemical vapor deposition, diffusion and pyrogenic processes, robotics, vacuum systems, ultra clean applications and software driven control packages. We believe this expertise enables us to design, develop and deliver high-quality, technically-advanced integrated product solutions for semiconductor and solar cell manufacturing customers.

Leading Technology Solutions and New Product Development. We pursue a partnering-based approach, in which our engineering and development teams work closely with our customers to ensure our products are tailored to meet our customers specific requirements. We believe this approach enables us to more closely align ourselves with our customers and provide superior systems.

We believe our line of horizontal diffusion furnaces, which allow high wafer-per-hour throughput, is more technologically advanced than most of our competitors equipment. The design of our furnace allows high wafer-per-hour throughput and increases reliability. In addition, the processing and temperature control systems within the furnace provide diverse proven process capabilities, enabling the application of high-quality films onto silicon wafers.

We recently developed a small batch vertical furnace jointly with a major European customer and are currently developing five different thin film processes for use with this furnace. We retain full ownership of this technology. We shipped two of these systems in fiscal 2005 and one in fiscal 2006. We anticipate that this system will have much of the same process capability as other vertical furnaces in the marketplace, but with a lower cost than that of our competitors. In addition, in 2006, we internally developed a machine to produce precision thickness wafer carriers, which we intend to sell as a premium product and which we expect will increase our sales to the carrier market.

Geographically Diverse Customer Base. We believe that our geographically diverse revenue stream helps to minimize our exposure to fluctuations in any one market and maximize our access to potential customers relative to our competitors with geographically concentrated operations. The geographic distribution of our net revenues from fiscal 2004 through 2006 were as follows:

	2006	2005	2004
Asia	41%	36%	33%
North America	35%	40%	36%
Europe	24%	24%	31%

GROWTH STRATEGY

We intend to leverage our competitive strengths through a combination of internal and external growth strategies.

Internal Growth

Our strategy for internal growth includes: expanding on growth opportunities in the solar industry and the Asia-Pacific market; accelerating new product and technology development; enhancing our sales and marketing capabilities; and leveraging our installed base.

Expanding on Growth Opportunities in the Solar Industry. We have had recent success in increasing our sales to the solar industry, which resulted in $10 million in solar orders between September 1, 2005 and September 30, 2006. The increase in orders from solar cell manufacturers is due to our focused product development and marketing efforts, as well as to growth in the solar industry. We believe the growth in the solar industry is primarily attributable to: greater interest in environmentally friendly energy alternatives; increased costs of fossil fuels; increased global demand for electricity; solar industry efforts to reduce manufacturing costs; and global concern over dependence on politically unstable countries for oil.

Global demand for electricity is expected to increase from 14.8 trillion kilowatt hours in 2003 to 27.1 trillion kilowatt hours in 2025, according to the U.S. Department of Energy. However, the ability of conventional sources of electricity to meet the rapidly expanding global demand could be limited by supply constraints, rising prices, dependence on politically volatile countries for oil and environmental concerns. Worldwide, annual installations by the photovoltaic industry grew from 0.3 gigawatts of power, or GWP, in 2001 to 1.5 GWP in 2005, representing a compound average annual growth rate, or CAGR, of 50%. Looking forward, according to *Photon International*, total solar cell production is expected to increase from 1,700 megawatts of power, or MWp, in 2005 to 10,400 MWp in 2010 for a CAGR of 44%**.** We believe this growth will drive significant demand for our products in the future.

Expanding on Growth Opportunities in the Asia-Pacific Market. With our extensive global knowledge and experience, we intend to further leverage our established sales channels in the Asia-Pacific market. Asia continues to be an important and expanding market for us, particularly because of the continued migration of semiconductor and solar cell manufacturing to countries in that region. According to *Solar Plaza*, total solar cell production in China is expected to grow from 600 MWp in 2005 to 2,200 MWp in 2010 for a CAGR of 30%. Our sales into Asia increased over 60% in fiscal 2006 compared to fiscal 2005 and we expect continued growth in this market.

Accelerating New Product and Technology Development. We are focused on developing new products across our business in response to customer needs in various markets.

Small Batch Vertical Furnace. At $1.5 billion annually, the vertical furnace market is much larger than the horizontal furnace market that we have served historically. Our entry product into the vertical furnace market is a two-tube small batch vertical furnace for wafer sizes of up to 200mm, with each tube having a small flat zone capable of processing 25-50 wafers per run. We anticipate that this system will have much of the same process capability as other vertical furnaces in the marketplace, but with a lower cost than most of our competitors. We are targeting small batch niche applications in the vertical furnace market first, since the competition in the large batch vertical furnace market is intense and our competitors are much larger and have substantially greater financial resources, processing knowledge and advanced technology. We believe our large installed customer base increases the market to which we can sell these small batch vertical furnaces and other new products.

Precision Thickness Wafer Carrier. Wafer carriers are work holders into which silicon wafers or other materials are inserted for the purpose of holding them securely in place during the lapping and polishing processes. Many customers thin their wafer carriers to precise tolerances to meet their various applications. In 2006, we developed a machine to produce precision thickness wafer carriers, which we expect will increase our sales to the carrier market.

Enhancing our Sales and Marketing Capabilities. In order to increase sales and improve customer service globally, we intend to integrate our Bruce Technologies and Tempress sales and marketing teams and transition them from being product oriented to being regionally focused. We also intend to hire additional senior management to expand our existing solar sales and marketing efforts.

Leveraging our Installed Base. We intend to continue to leverage our relationships with our customers to maximize parts, system, service and retrofit revenue from the large installed base of Bruce Technologies and Tempress brand horizontal diffusion furnaces. We intend to accomplish this by meeting these customers needs for replacement systems and additional capacity, including equipment and services in connection with a customer s relocation to or expansion in Asia.

External Growth

We intend to selectively seek strategic growth opportunities through acquisitions, joint ventures, geographic expansion and the development of additional manufacturing capacity.

Pursuing Strategic Acquisitions that Complement our Strong Platform. Over the last twelve years, we have developed a successful acquisition program and have completed the acquisition and integration of three significant businesses.

In 1994, we acquired certain assets of Tempress and hired Tempress s engineers to develop our first models of the Tempress horizontal diffusion furnaces for production in The Netherlands.

In 1997, we acquired substantially all of the assets of P.R. Hoffman Machine Products Corporation. This acquisition enabled us to offer new consumable products, including lapping and polishing carriers, polishing templates, lapping and polishing machines and related consumable and spare parts to our existing customer base as well as to target new customers.

During the period between 1999 and 2003, we evaluated and negotiated numerous acquisition opportunities that we ultimately declined to consummate because of what we believed to be inflated market prices.

In 2004, we acquired certain semiconductor horizontal diffusion furnace operations, product lines and other assets from Kokusai, a wholly owned subsidiary of Hitachi, and its affiliate, Kokusai Electric Europe, GmbH. We continue to market the horizontal furnace product line under the name, Bruce Technologies. Bruce Technologies has a large installed base, including several large semiconductor manufacturers.

Each of the above acquisitions has contributed to our growth in net revenue and profitability. Based on a disciplined acquisition strategy, we continue to evaluate potential technology, product and business acquisitions or joint ventures that will increase our existing market share in the solar industry and expand the number of front-end semiconductor processes addressed by our products. In evaluating these opportunities, our objectives include: enhancing our earnings and cash flows, adding complementary product offerings, expanding our geographic footprint, improving production efficiency and growing our customer base.

SEMICONDUCTOR AND SOLAR INDUSTRIES

Our company provides products and services primarily to two industries: the semiconductor industry and the solar industry.

Semiconductor Industry

Semiconductors control and amplify electrical signals and are used in a broad range of electronic products, including consumer electronic products, computers, wireless telecommunication devices, communications equipment, automotive electronic products, major home appliances, industrial automation and control systems, robotics, aircraft, space vehicles, automatic controls and high-speed switches for broadband fiber optic telecommunication networks. Semiconductors, or semiconductor chips, solar cells and optical components are manufactured primarily on a silicon wafer and are part of the circuitry or electronic components of many of the products referred to above.

The semiconductor industry has experienced significant growth since the early 1990s. This growth is primarily attributable to increased demand for personal computers, growth of the Internet, the expansion of the telecommunications industry, especially wireless communications, and the emergence of new applications in consumer electronics. Further fueling this growth is the rapidly expanding end-user demand for smaller, less-expensive and better-performing electronic products as well as traditional products with more intelligence. This demand has led to an increased number of semiconductor devices in electronic and other consumer products, including automobiles.

Although the semiconductor market has experienced significant growth over the past fifteen years, it remains cyclical by nature. The market is characterized by short-term periods of under or over supply for most semiconductors, including microprocessors, memory, power management chips, and other logic devices. When demand decreases, semiconductor manufacturers typically slow their purchasing of capital equipment. Conversely, when demand increases, so does capital spending. After the historical peak in 2000, the semiconductor industry experienced one of its most severe downturns in 2001 through the first half of 2003, resulting in a decline in revenue for most manufacturers of semiconductor chips and semiconductor equipment. During the latter part of 2003, the industry began to improve and continued to improve through 2006.

Solar Industry

Solar electricity is generated using either photovoltaic or solar thermal technology to extract energy from the sun. Photovoltaic electricity generating systems directly convert the sun s energy into electricity. Since 1985, the global market for solar power, as defined by shipments of solar power systems, has grown at a CAGR of over 20%, according to Strategies Unlimited. The global solar power market, as defined by installations of solar power systems, is expected to grow from $6.5 billion in revenue in 2004 to $18.5 billion by 2010 and, in terms of capacity, at an annual rate of 23% from 927 megawatts to 3.2 gigawatts during that same time-period, according to *SolarBuzz*.

Solar power systems are used for residential, commercial and industrial applications and for customers who either have access to or are remote from the electric utility grid. The market for on-grid applications, where solar power is used to supplement a customer s electricity purchased from the utility network, represents the largest and fastest growing segment of the market. Off-grid markets, where access to utility networks is not economical or physically feasible, and consumer markets both offer additional opportunities for solar technology. Off-grid industrial applications include road signs, highway call boxes and communications support along remote pipelines and telecommunications equipment, as well as rural residential applications. Consumer applications include outdoor lighting and handheld devices such as calculators.

Industry Manufacturing Processes

Semiconductor Front End Manufacturing Process Flow Chart

(*) Manufacturing process steps which involve the use of our products.

Most semiconductor chips are built on a base of silicon, called a wafer, and include multiple layers of circuitry that connect a variety of circuit components, such as transistors, capacitors and other components. To build a chip, the transistors, capacitors and other circuit components are first created on the surface of the wafer by performing a series of processes to deposit and remove selected film layers, including insulators. Similar processes are then used to build the layers of wiring structures on the wafer. These are all referred to as front-end processes. A simplified sequence of front-end processes for fabricating typical chips involves:

(1) forming an ingot by pulling molten silicon;

(2) slicing the silicon ingot into wafers of uniform thickness with a wire saw;

(3) lapping and polishing the silicon wafer to a mirror-like finish;

(4) cleaning the wafer;

(5) forming a thin film layer of silicon dioxide on the wafer in a diffusion furnace where oxygen, hydrogen or a combination of the two is introduced to cause a chemical reaction (oxidation) with the silicon wafer s surface;

(6) diffusing impurities (doping) in order to change the wafer s electrical properties.

(7) depositing insulating or conducting layers on the wafer surface, which sometimes is accomplished in a diffusion furnace via a chemical reaction called chemical vapor deposition;

(8) coating and baking a photosensitive material, called photoresist, on the wafer;

(9) creating circuit patterns by exposing the wafer to light directed through a mask with circuit patterns;

(10) removing the soluble portion of the photoresist by placing the wafer in a chemical solution, leaving only the desired pattern;

(11) etching away the exposed areas to create a dimensional pattern on the wafer surface;

(12) creating electrically charged conductive regions by driving ions into the exposed areas of the patterned wafer; and

(13) annealing the wafer through a high temperature process to relieve stress and drive the implanted ions deeper into the wafer.

The silicon wafer may be cycled ten to twenty-five times through these wafer-processing steps, starting each time at step (5) or (7) to form a number of chips on the wafer. The front-end process steps are followed by a number of back-end steps in which the wafers are sliced into individual chips that are then packaged to add connectors that are compatible with the end product in which the chip will be used.

Depending on the device, our polishing supplies segment s products may be used in lapping and polishing (step 3) and our semiconductor equipment segment s products may be used in forming silicon dioxide films (step 5), doping (step 6), depositing insulating and conducting layers (step 7) and the annealing processes (step 13).

Solar Cell Manufacturing Process Flow Chart

(*) Manufacturing process step which involves the use of our products.

The solar industry uses many of the same process steps used in semiconductor manufacturing in the high-volume production of solar cells:

(1) inspecting for resistivity and mechanical integrity and splitting wafers;

(2) etching away saw damage with sodium hydroxide and rinsing the wafer with water and concentrated sulphuric acid;

(3) diffusing oxygen and nitrogen to form a thin-film layer of phosphorous oxychloride on the wafer;

(4) etching the wafer with fluoric acid to remove the undiffused, phosphorus-silica-glass layer;

(5) coating through a chemical vapor deposition (CVD) or plasma enhanced CVD process;

(6) printing rear side contacts;

(7) drying to prevent condensation in the wafer area;

(8) printing aluminum and silver paste on the back surface field to prevent recombination of generated electrons and holes;

(9) drying;

(10) printing front side contacts;

(11) drying and then sintering the contact to form electrical conductive contacts; and

(12) testing and sorting the solar cells into electrical efficiency categories.

Most solar cell manufacturers sell their products to manufacturers of solar modules or solar panels. Others are vertically integrated and use their cells in the production of solar modules and panels. Solar cells are the critical component of solar modules and solar panels, which are sold to the end user and used in residential homes, industrial applications, remote pumping, lighting and heating uses and central power stations.

A part of our growth strategy involves evaluating opportunities to increase the number of process steps we serve in both the semiconductor and solar cell manufacturing processes by acquiring additional product lines.

SEMICONDUCTOR EQUIPMENT SEGMENT PRODUCTS

Our furnace and automation equipment is manufactured in our facilities in Massachusetts and The Netherlands. The following paragraphs describe the products that comprise our semiconductor equipment segment:

Horizontal Diffusion Furnaces. Through our subsidiaries, Tempress and Bruce Technologies, we produce and sell horizontal diffusion furnaces. Our horizontal furnaces currently address several steps in the semiconductor manufacturing process, including diffusion (step 5 in the semiconductor manufacturing process previously described, phosphorus tetrachloride doping ($POCl_3$) (step 6), low-pressure chemical vapor deposition (LPCVD) (step 7), and annealing (step 13).

Our horizontal furnaces generally consist of three large modules: the load station where the loading of the wafers occurs; the furnace section, which is comprised of one to four reactor chambers; and the gas distribution cabinet where the flow of gases into the reactor chambers is controlled, and often customized to meet the requirements of a customer s particular processes. The horizontal furnaces utilize existing industry technology and are sold primarily to customers who do not require the advanced automation of, or cannot justify the higher expense of, vertical furnaces for some or all of their diffusion processes. Our models are capable of processing all currently existing wafer sizes.

Small Batch Vertical Furnace. Our small batch, two-tube vertical furnace was developed internally with the active support from a large semiconductor manufacturer and long-term customer. The specifications for this furnace include a two-tube vertical furnace for wafer sizes of up to 200mm, with each tube having a small flat zone capable of processing 25-50 wafers per run. We anticipate that this system will have much of the same process capability as other vertical furnaces in the marketplace, but with a lower sales price than many of our competitors. The market for vertical furnaces is much larger than the total of all the other markets we currently serve. We are initially targeting niche applications, including research and development, while we continue to develop additional processes, since the competition in the large batch vertical furnace market is intense and our competitors are much larger and have substantially greater financial resources, processing knowledge and advanced technology. We shipped our first two vertical furnaces in fiscal 2005 and shipped another vertical furnace in fiscal 2006.

Conveyor Furnace. We produce conveyor furnaces used to manufacture thick films for the electronics industry. Conveyor furnaces provide for precision thermal processing of electronic parts for thick film applications, including annealing, sealing, soldering, silvering, curling, brazing, alloying, glass-metal sealing and component packaging.

Etch Systems. We manufacture and sell two models of etch systems. Our P2000 series is a fully automated single wafer plasma etch and deposition production system for front- and back-end processing of wafers up to 200mm. The system is used for semiconductor production applications. Etching of silicon, nitrides, oxides, polymers and metals is accomplished safely and reliably in this cost efficient, high performance system. Our PM2000 is a manually loaded small laboratory model that provides fast etch rates using solid state 600 watt generators and a unique chamber design. We acquired this product and process technology in 2004 for a nominal amount. We sold our first two etch systems in 2006.

Automation Products. Use of our automation products reduces human handling and, therefore, reduces exposure of wafers to particle sources during the loading and unloading of the process tubes and protects operators from heat and chemical fumes. Since the top reactor chamber of a horizontal furnace is as much as eight feet from the floor on which the operator stands when manually loading wafer boats, and typical boats of 150mm to 300mm wafers weigh three to six pounds, automating the wafer loading and unloading of a diffusion furnace improves employee safety and ergonomics in silicon wafer, semiconductor and solar cell manufacturing facilities.

E-300. Our most cost effective automation product is the E-300. This product is most suitable for the lower cost semiconductor devices, such as diodes and power management chips. The E-300 operates like an elevator and generally is used to raise wafer boats loaded with up to 300 wafers to one or both of the upper two reactor chambers of a diffusion furnace.

S-300. Our patented S-300 model provides a very efficient method of automatically transporting a full batch of up to 300 wafers to the designated tube level and automatically placing them directly onto the cantilever loader of a diffusion furnace at one time. This product is suitable for the production of nearly all semiconductors manufactured using a horizontal furnace. The S-300 can be used in conjunction with all current wafer sizes and is particularly well suited for manufacturers of 300mm wafers.

Atmoscan and Other Cantilevered Processing Systems. Our Atmoscan product is a controlled environment wafer processing system that includes a cantilever tube used to load silicon wafers into a horizontal diffusion furnace and through which a purging inert gas flows during the process of loading and unloading the reactor chamber. Among the major advantages afforded by the Atmoscan product is increased control of the environment surrounding the wafers during the gaseous and heating/cooling process, resulting in increased yields, decreased manufacturing costs and other economies in the manufacturing process.

POLISHING SUPPLIES SEGMENT PRODUCTS

The products of our polishing supplies segment are used primarily for lapping and polishing raw silicon wafers to a mirror-like finish. Depending on the cycle of the semiconductor industry, approximately two-thirds of this segment s products are sold to either semiconductor wafer manufacturers or specialty semiconductor fabricators. The products of our polishing supplies segment are also sold to fabricators of optics, quartz, ceramics and metal parts, and to manufacturers of medical equipment components and computer disks. We manufacture the products described below in Pennsylvania and sell them under our P.R. Hoffman brand name.

Wafer Carriers. Carriers are work holders into which silicon wafers or other materials are inserted for the purpose of holding them securely in place during the lapping and polishing processes. We produce carriers for our line of lapping and polishing machines, as well as for those machines sold by our competitors. Substantially all of the carriers we produce are customized for specific applications. Insert carriers, our most significant category of carriers, contain plastic inserts molded onto the inside edge of the work-holes of the carrier, which hold the wafers in place during processing. Although our standard steel carriers are preferred in many applications because of their durability, rigidity and precise dimensions, they are typically not suited for applications involving softer materials or when metal contamination is an issue. Insert carriers, however, are well suited for processing large semiconductor wafers, up to 300mm in diameter, and other fragile materials or where contamination is an issue, because they provide the advantages of steel carriers while reducing the potential for damage to the edges of such sensitive materials. Our insert carriers are used for double-sided lapping or polishing of semiconductor wafers up to 300mm in diameter. In 2007, we plan to begin selling precision-thickness insert carriers to further expand our offerings in this important market.

Semiconductor Polishing Templates. Our polishing templates are used to securely hold silicon wafers in place during single-sided polishing processes. Polishing templates are customized for specific applications and are manufactured to exacting tolerances. We manufacture polishing templates for most brands of tools and various processes. In addition to silicon wafers, these products are used in polishing silicon carbide wafers and sapphire crystals used in LEDs.

Double-Sided Planetary Lapping and Polishing Machines. Double-sided lapping and polishing machines are designed to process thin and fragile materials, such as semiconductor silicon wafers, precision optics, computer disk media and ceramic components for wireless communication devices, to exact tolerances of thickness, flatness, parallelism and surface finish. On average, our surface processing systems are priced lower than competing systems offered by our competitors and target the semiconductor, optics, quartz, ceramics, medical, computer disk and metal working markets. During fiscal 2004, we introduced and delivered our first Model 5400 lapping and polishing machine, capable of processing parts up to 19.5 inches in diameter, including 300mm wafers and higher capacities of smaller parts. This new machine is our largest and is superior to our previous model, because it uses servo motors rather than hydraulics and is equipped with a Windows Touch-screen interface, for better control of speeds and pressure, optional thickness control, and crash protection. We believe our 5400 model is especially well suited for thin and fragile materials. We also produce and sell a wide assortment of plates, gears, parts and wear items for our own machines and those sold by many of our competitors.

MANUFACTURING, RAW MATERIALS AND SUPPLIES

Our semiconductor equipment manufacturing activities consist primarily of engineering design, procurement and assembly of various commercial and proprietary components into finished diffusion furnace systems in Heerde, The Netherlands, and Billerica, Massachusetts. In 2006, we transferred the production of processing and automation systems to Billerica, Massachusetts from our Tempe, Arizona location to improve efficiencies. Nearly all of our fabricated parts for the semiconductor equipment segment are purchased from local suppliers. Our manufacturing activities in the polishing supplies and equipment segment include laser-cutting and other fabrication steps in producing lapping and polishing consumables, including carriers, templates, gears, wear items and spare parts in Carlisle, Pennsylvania, from raw materials manufactured to our specifications by our suppliers. Many items, such as proprietary components for our semiconductor equipment and lapping plates, are also purchased from suppliers who manufacture these items to our specifications. All final assembly and tests of our equipment and machines are performed within our manufacturing facilities. Quality control is maintained through inspection of incoming materials and components, in-process inspection during equipment assembly, testing of assemblies and final inspection and, when practical, operation of manufactured equipment prior to shipment. Since much of our polishing supplies segment s know-how relates to the manufacture of its products, this segment s facility is equipped to perform a significantly higher percentage of the fabrication steps required in the production of its products. However, injection molding for our insert carriers and the manufacture of raw cast iron plates are subcontracted out to various third parties. This segment relies on key suppliers for certain materials, including two steel mills in Germany and Japan, an injection molder, a single-sourced pad supplier from Japan and an adhesive manufacturer. In addition, with respect to sales to the solar industry, we rely upon a single vendor for certain automation components used in conjunction with our furnaces. Prior to the fourth quarter of fiscal 2004, we subcontracted the laser-cutting of carriers to third parties. Since then we have purchased an advanced laser-cutting tool which has increased our ability to compete based upon price, delivery lead-times and quality. To minimize the risk of production and service interruptions and/or shortages of key parts, we maintain appropriate inventories of key raw materials and parts. If for any reason we were unable obtain a sufficient quantity of parts in a timely and cost-effective manner to meet our production requirements, our results of operations would be materially and adversely affected.

BACKLOG

Our order backlogs as of September 30, 2006 and 2005 were $13.6 million and $14.4 million (including the $5.2 million multi-furnace order from a single customer previously discussed), respectively. Our backlog as of September 30, 2006 includes approximately $7.6 million of orders from our solar industry customers. The orders included in our backlog are generally credit approved customer purchase orders expected to ship within the next twelve months. Because our orders are typically subject to cancellation or delay by the customer, our backlog at any particular point in time is not necessarily representative of actual sales for succeeding periods, nor is backlog any assurance that we will realize profit from completing these orders. Our backlog also includes revenue deferred pursuant to our revenue recognition policy, derived from orders that have already been shipped, but which have not met the criteria for revenue recognition. The backlog as of September 30, 2006 and 2005 includes $0.9 million and $1.0 million of open orders or deferred revenue, respectively, on which we anticipate no gross margin.

RESEARCH, DEVELOPMENT AND ENGINEERING

The markets we serve are characterized by evolving industry standards and rapid technological change. To compete effectively in our markets, we must continually keep up with the pace of such change by improving our products and our process technologies and developing new technologies and products that compete effectively on the basis of price and performance and that adequately address current and future customer requirements. We continue to obtain as much customer cooperation and input as possible to increase the efficiency and effectiveness of our research and development efforts. While there can be no assurance that such relationships will continue or that others will be developed, such cooperative efforts are expected to remain a significant element in our future product and technology development projects.

During 2003, we received an order for a newly designed small batch vertical furnace. The specifications for this furnace include a two-tube vertical furnace for wafer sizes of up to 200mm, with each tube having a small flat zone capable of processing 25-50 wafers per run. We anticipate that this furnace will have much of the same process capability as other vertical furnaces in the marketplace, but with a lower cost than most of our competitors. Our first two small batch vertical furnaces were shipped in fiscal 2005 and a third in fiscal 2006. Two of these furnaces were accepted in fiscal 2006. We expect the other to be accepted in fiscal 2007; however, there can be no assurance that it will be accepted.

From time to time we add functionality to our products or develop new products during engineering and manufacturing to fulfill specifications in a customer s order, in which case the cost of development, along with other costs of the order, are charged to cost of sales. We periodically receive small research grants for research and development of products in The Netherlands, which are netted against our research and development costs. Our approach to such expenditures has allowed us to produce a number of new products while spending amounts that we believe are generally modest in relation to most semiconductor equipment manufacturers. Our expenditures that have been accounted for as research and development were $0.4 million (1.1% of net revenue) in fiscal 2006, $0.6 million (2.2% of net revenue) in 2005, and $0.5 million (2.6% of net revenue) in 2004. These amounts exclude those expenses incurred in connection with customer orders or supported by government grants.

PATENTS

The following table shows our material patents, the patents licensed by us, and the expiration date of each patent and license:

Product	Country	Expiration Date or Pending Approval
IBAL Model S-300	France, Germany, Italy, The Netherlands, United Kingdom	Pending
Atmospheric Pressure Control for Solar Furnace	Europe	Pending
Small Batch Furnace (SBVF)	Europe	Pending
Dual Cylinder Loadport for SBVF	Europe	Pending
Heating Element Wire Spacer	Europe	Pending
Photo CVD	United States	November 15, 2011
Potential Damage-free Asher	United States	September 8, 2018
IBAL Model S-300	United States	July 7, 2019
IBAL Model S-300	United States	July 26, 2019
IBAL Model E-300	United States	July 13, 2021
Boat Transfer and Queuing Furnace Elevator and Method	United States	June 16, 2007
Cross Flow Diffusion Furnace (**)	United States	November 2, 2007
Double Wall Fast Cool-Down Furnace (**)	United States	January 8, 2007
Fast, Safe, Pyrogenic External Torch Assembly (*)	United States	December 17, 2011
Movable Core Fast Cool-Down Furnace (**)	United States	January 8, 2007

(*) Patent is licensed from the patent holder or co-owner on a non-exclusive basis.
(**) Patent is licensed from the patent holder on an exclusive basis for horizontal furnaces.

To the best of our knowledge, there are no pending lawsuits against us regarding infringement of any existing patents or other intellectual property rights or any unresolved claims made by third parties that we are infringing the intellectual property rights of such third parties.

SALES AND MARKETING

Because of the highly technical nature of our products, we market our products primarily by direct customer contact through our sales personnel, and through a network of domestic and international independent sales representatives and distributors that specialize in semiconductor equipment and supplies. Our promotional activities include direct sales contacts, participation in trade shows, an internet website, advertising in trade magazines and the distribution of product brochures.

In order to increase sales and improve customer service globally, we intend to integrate our Bruce Technologies and Tempress sales and marketing teams and transition them from being product oriented to regionally focused. Additionally, we intend to hire additional senior management to expand our existing solar sales and marketing efforts.

Sales to distributors of both segments are generally on terms comparable to sales to end user customers, as our distributors generally quote their customers after first obtaining a quote from us and have an order from the end-user before placing an order with us. Our sales to distributors are not contingent on their future sales and do not include a general right of return. Historically, returns have been rare. Distributors of our semiconductor equipment segment products do not stock a significant amount of our products, as the inventory they do hold is primarily limited to parts needed to provide timely repairs to the customer.

Payment terms of our parts, service and retrofit sales, which usually comprise approximately 50-60% of consolidated net revenue, are generally net 30 days, F.O.B. shipping point or equivalent terms. The payment terms of equipment or systems sales vary depending on the size of the order and the size, reputation and creditworthiness of the customer. As a result, the financial terms of equipment sales can range from 80% due 30 days after shipment and 20% due 30 days after acceptance, to requiring a 30% customer deposit 30 days after order placement, 60% due 30 days after shipment and 10% net due 30 days after acceptance. Letters of credit are required of certain customers depending on the size of the order, creditworthiness of the customer and its country of domicile.

In fiscal 2006, net revenue was distributed among customers in different geographic regions as follows: North America 35% (including 34% in the United States), Asia 41% (including 13% in Malaysia) and Europe 24% (including 14% to Germany). One customer represented approximately 17% of net revenue in fiscal 2006. No customer represented greater than 10% of net revenue during fiscal 2005. One customer represented approximately 10% of net revenue during fiscal 2004. Our largest customer has been different in each of the last three fiscal years. For a more complete analysis of significant customers and sales to customers by geographic region, see Note 9 of the Notes to Consolidated Financial Statements included herein and Item 7 of this Annual Report. For information regarding revenue, operating profit or loss and identifiable assets attributable to each of our industry segments and financial information about foreign and domestic operations, see Note 10 of the Notes to Consolidated Financial Statements included herein and Item 7 of this Annual Report.

Our business is not seasonal in nature, but is cyclical based on the capital equipment investment patterns of semiconductor and solar cell manufacturers. These expenditure patterns are based on many factors, including anticipated demand for integrated circuits, the development of new technologies and global and regional economic conditions.

COMPETITION

We compete in several distinct markets including semiconductor devices, semiconductor wafer, solar cell, MEMS and the market for general industrial lapping and polishing machines and supplies. Each of these markets is highly competitive. Our ability to compete depends on our ability to continually improve our products, processes and services, as well as our ability to develop new products that meet constantly evolving customer requirements. Significant competitive factors for succeeding in the semiconductor manufacturing equipment market include the equipment s technical capability, productivity and cost-effectiveness, overall reliability, ease of use and maintenance, contamination and defect control and the level of technical service and support provided by the vendor. The importance of each of these factors varies depending on the specific customer s needs and criteria, including considerations such as the customer s process application, product requirements, timing of the purchase and particular circumstances of the purchasing decision.

The Semiconductor Devices, Semiconductor Wafer, Solar Cell and MEMS Markets. We believe our large installed base of horizontal diffusion furnaces provides a competitive advantage. We have sold and installed over 900 horizontal furnaces worldwide and, in our experience, our large installed customer base has led to significant replacement and expansion demand. Customers that have purchased our furnaces can leverage their investment in training, spare parts inventory and other costs by acquiring additional equipment from us. The Bruce Technologies product line had a 41% share of the horizontal diffusion furnace installed base in 1998 (the most recent year in which such information has been available) according to VSLI Research Data. We believe that we have maintained our market share and a relatively large installed base.

Our diffusion furnaces and automation processing equipment primarily compete with those produced by other domestic and foreign original equipment manufacturers, some of which are well-established firms that are much larger and have substantially greater financial resources than us. Some of our competitors have a diversified product line, making it difficult to quantify their sales of products that compete directly with our products. Competitors of our horizontal diffusion furnaces include Centrotherm GmbH, Koyo Systems Co. Ltd., MRL Industries, Inc., a subsidiary of Sandvik AB, CVD Equipment, Inc., Semco Engineering S.A., Expertech, Inc. and Tystar Corporation. Such competition could intensify in the future, if the industry trend to produce smaller chips on larger wafers accelerates, or the newer technology represented by vertical furnaces results in a material shift in the purchasing habits of our targeted customers. Our furnaces and lapping and polishing machines also face, to a limited, but increasing extent, competition from used equipment on the low-end of the price spectrum.

We intend to maintain or improve our competitive position for orders for our diffusion furnaces and automation products by leveraging our established brands. We also intend to expand our sales to the solar industry by focusing our sales and marketing efforts on the very large and stable middle semiconductor market, designing products to meet the customer s specific process requirements and providing competitive prices and product support service levels. With the addition of the Bruce Technologies product line we gained marketing synergies and believe we are more competitive at the upper end of our targeted market. We make purchases of our own brands of used diffusion furnaces at opportunistic prices, refurbish them, and then resell them with the original manufacturer s warranty, in an effort to better defend the lower end of our targeted market.

During fiscal 2005, we entered into a memorandum of understanding with a Chinese manufacturer of low cost horizontal furnaces in order to determine whether they can become a supplier and thereby help us to become more competitive in the lower-end market. While discussions with this manufacturer have been put on hold in order to pursue other higher priority activities, we still have an objective of securing a manufacturing source or capability in Asia. See Item 1A. Risk Factors for a discussion regarding the impact of the industry trend of producing smaller chips on larger wafers may have on our horizontal diffusion furnace sales.

We believe our automation products compete favorably with those of our primary competitors in semiconductor applications, which include Mactronics and Koyo Thermo Systems Co. Ltd. In that market, we believe that our S-300 and E-300 automation products require less of the expensive clean room floor space and are generally less expensive and easier to operate than those of our competitors. We believe that patents on the key features of our automation products provide us with a competitive advantage. We expect our automation product competitors to seek to continually improve the design and performance of their products and we can make no assurance that our automation competitors will not develop enhancements or acquire new technologies that will offer price or performance features superior to those that we offer. Our automation products are designed to target customers who want to improve employee safety and reduce scrap. The acquisition of the Bruce Technologies product line has provided increased sales opportunities and new customers for our automation products through introductions to the installed based of the users of the Bruce Technologies line of furnaces.

Despite competition from existing manufacturing products, we believe that our Atmoscan products provide better results in terms of more uniform wafer temperature and dispersion of heated gases in the semiconductor manufacturing process, less exposure of semiconductor wafers to contaminants and other technical advantages that afford to its users a higher yield. However, vertical furnaces provide the same benefits as our Atmoscan product to manufacturers that can justify the higher price.

General Industrial Lapping and Polishing Machines and Supplies Market. We experience price competition for wafer carriers produced by foreign manufacturers for which there is very little publicly available information. As a result, we are intensifying our efforts to reduce the cost of our carriers and will continue to compete with other manufacturers of carriers by continuing to update our product line to keep pace with the rapid changes in our customers requirements and by providing a high level of quality and customer service. During September 2004, we completed the installation and began producing steel carriers, including insert carriers, on a newly acquired advanced laser-cutting tool, which has reduced the costs and lead times of these products and increased our control over quality. Competitors of our lapping and polishing machines and carriers, other than insert carriers, include Speedfam-PW, a division of Novellus, among others. We have been able to capture a small share of the semiconductor polishing template market, which we believe to be dominated by Rodel, a division of Rohm and Haas. Our strategy to enhance our sales of wafer carriers includes developing additional niche markets for templates and providing a high level of customer support and products at a lower cost than our competitors.

EMPLOYEES

At September 30, 2006, we employed 153 people. Of these employees, 16 were based at our corporate offices in Tempe, Arizona; 28 were employed at our manufacturing plant in Carlisle, Pennsylvania; 31 at our manufacturing plant in Billerica, Massachusetts; 50 at our facilities in and near Heerde, The Netherlands; and 28 in our contract semiconductor manufacturing support services business located in Austin, Texas. Of the 28 people employed at our Carlisle, Pennsylvania facility, 17 were represented by the United Auto Workers Union Local 1443. We have never experienced a work stoppage or strike. We consider our employee relations to be good.

ITEM 1A. RISK FACTORS

Because of the following factors, as well as other variables affecting our operating results and financial condition, past performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods.

If demand declines for horizontal diffusion furnaces and related equipment, or for solar industry products, our financial position and results of operations could be materially adversely affected.

The revenue of our semiconductor equipment segment, which accounts for approximately 82% of our consolidated net revenue, is comprised primarily of sales of horizontal diffusion furnaces and our automation products. Our automation products are useable only with horizontal diffusion furnaces. There is a trend in the semiconductor industry, related to the trend to produce smaller chips on larger wafers, towards the use in semiconductor manufacturing facilities of newer technology, such as vertical diffusion furnaces. Vertical diffusion furnaces are more efficient than the horizontal diffusion furnaces in certain manufacturing processes for smaller chips on larger wafers. As early as 1994, we had expected that demand for our horizontal diffusion furnaces would decline as a result of this trend. We believe this trend has not yet adversely affected us to the extent originally expected. However, to the extent that the trend to use vertical diffusion furnaces over horizontal diffusion furnaces continues, our revenue may decline and our corresponding ability to generate income may be adversely affected.

Part of our growth strategy involves expanding our sales to the solar industry. The solar industry is subject to risks relating to industry shortages of polysilicon, the continuation of government incentives, the availability of specialized capital equipment, global energy prices and rapidly changing technologies offering alternative energy sources. If the demand for solar industry products declines, the demand by the solar industry for our products would also decline and our financial position and results of operations would be harmed.

The ongoing volatility of the semiconductor equipment industry may negatively impact our business and results of operations and our corresponding ability to efficiently budget our expenses.

The semiconductor equipment industry is highly cyclical. As such, demand for and the profitability of our products can change significantly from period to period as a result of numerous factors, including, but not limited to, changes in:

- global and regional economic conditions;
- changes in capacity utilization and production volume of manufacturers of semiconductors, silicon wafers, solar cells and MEMS;
- the shift of semiconductor production to Asia, where there often is increased price competition; and
- the profitability and capital resources of those manufacturers.

For these and other reasons, our results of operations for past periods may not necessarily be indicative of future operating results.

Since our business has historically been subject to cyclical industry conditions, we have experienced significant fluctuations in our quarterly new orders and net revenue, both within and across years. Demand for semiconductor and silicon wafer manufacturing equipment and related consumable products has also been volatile as a result of sudden changes in semiconductor supply and demand and other factors in both semiconductor devices and wafer fabrication processes. Our orders tend to be more volatile than our revenue, as any change in demand is reflected immediately in orders booked, which are net of cancellations, while revenue tends to be recognized over multiple quarters as a result of procurement and production lead times and the deferral of certain revenue under our revenue recognition policies. Customer delivery schedules on large system orders can also add to this volatility since we generally recognize revenue for new product sales on the date of customer acceptance or the date the contractual customer acceptance provisions lapse. As a result, the fiscal period in which we are able to recognize new products revenue is typically subject to the length of time that our customers require to evaluate the performance of our equipment after shipment and installation, which could cause our quarterly operating results to fluctuate.

The purchasing decisions of our customers are highly dependent on the economies of both their domestic markets and the worldwide semiconductor industry. The timing, length and severity of the up-and-down cycles in the semiconductor equipment industry are difficult to predict. The cyclical nature of our marketplace affects our ability to accurately budget our expense levels, which are based in part on our projections of future revenue.

When cyclical fluctuations result in lower than expected revenue levels, operating results may be adversely affected and cost reduction measures may be necessary in order for us to remain competitive and financially sound. During a down cycle, we must be able to make timely adjustments to our cost and expense structure to correspond to the prevailing market conditions. In addition, during periods of rapid growth, we must be able to increase manufacturing capacity and personnel to meet customer demand, which may require additional liquidity. We can provide no assurance that these objectives can be met in a timely manner in response to changes within the industry cycles. If we fail to respond to these cyclical changes, our business could be seriously harmed.

During the most recent down cycle, beginning in the first half of 2001, the semiconductor industry experienced excess production capacity that caused semiconductor manufacturers to decrease capital spending. We do not have long-term volume production contracts with our customers and we do not control the timing or volume of orders placed by our customers. Whether and to what extent our customers place orders for any specific products and the mix and quantities of products included in those orders are factors beyond our control. Insufficient orders would result in under-utilization of our manufacturing facilities and infrastructure and will negatively affect our financial position and results of operations.

The semiconductor equipment industry is competitive and we are relatively small in size and have fewer resources in comparison with our competitors.

Our industry includes large manufacturers with substantial resources to support customers worldwide. Our future performance depends, in part, upon our ability to continue to compete successfully worldwide. Some of our competitors are diversified companies having substantially greater financial resources and more extensive research, engineering, manufacturing, marketing and customer service and support capabilities than we can provide. We face competition from companies whose strategy is to provide a broad array of products, some of which compete with the products and services that we offer. These competitors may bundle their products in a manner that may discourage customers from purchasing our products. In addition, we face competition from smaller emerging semiconductor equipment companies whose strategy is to provide a portion of the products and services that we offer at often a lower price than ours, using innovative technology to sell products into specialized markets. Loss of competitive position could impair our prices, customer orders, revenue, gross margin and market share, any of which would negatively affect our financial position and results of operations. Our failure to compete successfully with these other companies would seriously harm our business. There is risk that larger, better-financed competitors will develop and market more advanced products than those that we currently offer, or that competitors with greater financial resources may decrease prices thereby putting us under financial pressure. The occurrence of any of these events could have a negative impact on our revenue.

We are dependent on key personnel for our business and product development and sales, and any loss of our key personnel to competitors or other industries could dramatically impact our ability to continue operations.

Historically, our product development has been accomplished through cooperative efforts with two key customers. Our relationship with one of these customers is substantially dependent on personal relations established by our President and Chief Executive Officer. Furthermore, our relationship with a major European customer that has been instrumental in the development of our small batch vertical furnace is substantially dependent upon our European General Manager. While there can be no assurance that such relationships will continue, such cooperation is expected to continue to be a significant element in our future development efforts thereby continuing our reliance on certain of our key personnel.

Amtech is the beneficiary of life insurance policies on the life of our President and Chief Executive Officer, Mr. J.S. Whang, in the amount of $2,000,000, but there is no assurance that such amount will be sufficient to cover the cost of finding and hiring a suitable replacement for Mr. Whang. It may not be feasible for any successor to maintain the same business relationships that Mr. Whang has established. If we were to lose the services of Mr. Whang for any reason, it could have a material adverse affect on our business.

We also depend on the management efforts of our officers and other key personnel and on our ability to attract and retain key personnel. We presently employ 3 engineers at our Tempe, Arizona location, including one with a Ph.D. We employ 10 engineers at our Billerica, Massachusetts plant. We employ 22 engineers, including two with Ph.D. s, at our operations in The Netherlands. These employees design and support the new small batch vertical furnace, horizontal diffusion furnace and conveyor furnace product lines manufactured in The Netherlands and the related automation products manufactured in Massachusetts. Two engineers are employed at our Carlisle, Pennsylvania operation. They design wafer lapping machines and carriers to meet customers processing requirements. During times of strong economic growth, competition is intense for highly skilled employees. There can be no assurance that we will be successful in attracting and retaining such personnel or that we can avoid increased costs in order to do so. There can be no assurance that employees will not leave Amtech or compete against us. Our failure to attract additional qualified employees, or to retain the services of key personnel, could negatively impact our financial position and results of operations.

We may not be able to keep pace with the rapid change in the technology we use in our products.

Success in the semiconductor equipment industry depends, in part, on continual improvement of existing technologies and rapid innovation of new solutions. For example, the semiconductor industry continues to shrink the size of semiconductor devices. These and other evolving customer needs require us to respond with continued development programs.

Technical innovations are inherently complex and require long development cycles and appropriate professional staffing. Our future business success depends on our ability to develop and introduce new products, or new uses for existing products, that successfully address changing customer needs, win market acceptance of these new products or uses and manufacture any new products in a timely and cost-effective manner. If we do not develop and introduce new products, technologies or uses for existing products in a timely manner and continually find ways of reducing the cost to produce them in response to changing market conditions or customer requirements, our business could be seriously harmed.

Acquisitions can result in an increase in our operating costs, divert management s attention away from other operational matters and expose us to other risks associated with acquisitions.

We continually evaluate potential acquisitions and consider acquisitions an important part of our future growth strategy. In the past, we have made acquisitions of, or significant investments in, other businesses with synergistic products, services and technologies and plan to continue to do so in the future. Acquisitions involve numerous risks, including, but not limited to:

- difficulties and increased costs in connection with integration of the personnel, operations, technologies and products of acquired companies;
- diversion of management s attention from other operational matters;
- the potential loss of key employees of acquired companies;
- lack of synergy, or inability to realize expected synergies, resulting from the acquisition;
- the risk that the issuance of our common stock, if any, in an acquisition or merger could be dilutive to our shareholders, if anticipated synergies are not realized; and
- acquired assets becoming impaired as a result of technological advancements or worse-than-expected performance of the acquired company.

Our financial position and results of operations may be materially harmed if we are unable to recoup our investment in research and development.

The rapid change in technology in our industry requires that we continue to make investments in research and development in order to enhance the performance and functionality of our products, to keep pace with competitive products and to satisfy customer demands for improved performance, features and functionality. There can be no assurance that revenue from future products or enhancements will be sufficient to recover the development costs associated with such products or enhancements, or that we will be able to secure the financial resources necessary to fund future development. Research and development costs are typically incurred before we confirm the technical feasibility and commercial viability of a product, and not all development activities result in commercially viable products. In addition, we cannot ensure that products or enhancements will receive market acceptance, or that we will be able to sell these products at prices that are favorable to us. Our business could be seriously harmed if we are unable to sell our products at favorable prices, or if our products are not accepted by the markets in which we operate.

If third parties violate our proprietary rights, in which we have made significant investments, or accuse us of infringing upon their proprietary rights, such events could result in a loss of value of some of our intellectual property or costly litigation.

Our success is dependent in part on our technology and other proprietary rights. We own various United States and international patents and have additional pending patent applications relating to some of our products and technologies. The process of seeking patent protection is lengthy and expensive, and we cannot be certain that pending or future applications will actually result in issued patents, or that, issued patents will be of sufficient scope or strength to provide meaningful protection or commercial advantage to us. Other companies and individuals, including our larger competitors, may develop technologies that are similar or superior to our technology or design around the patents we own or license. We also maintain trademarks on certain of our products and claim copyright

protection for certain proprietary software and documentation. However, we can give no assurance that our trademarks and copyrights will be upheld or successfully deter infringement by third parties. Recently, the patent covering technology that we license and use in our manufacture of insert carriers has expired, which may have the effect of diminishing or eliminating any competitive advantage we may have with respect to this manufacturing process.

While patent, copyright and trademark protection for our intellectual property is important, we believe our future success in highly dynamic markets is most dependent upon the technical competence and creative skills of our personnel. We attempt to protect our trade secrets and other proprietary information through confidentiality agreements with our customers, suppliers, employees and consultants and through other security measures. We also maintain exclusive and non-exclusive licenses with third parties for the technology used in certain products. However, these employees, consultants and third parties may breach these agreements, and we may not have adequate remedies for wrongdoing. In addition, the laws of certain territories in which we develop, manufacture or sell our products may not protect our intellectual property rights to the same extent as do the laws of the United States.

From time to time, we have received communications from other parties asserting the existence of patent rights or other intellectual property rights that they believe cover certain of our products, processes, technologies or information. In such cases, we evaluate our position and consider the available alternatives, which may include seeking licenses to use the technology in question on commercially reasonable terms or defending our position. Based on industry practice and prior experience, we believe that licenses or other rights, if necessary, will be available on commercially reasonable terms for existing or future claims. Nevertheless, we cannot ensure that licenses can be obtained, or if obtained will be on acceptable terms, or that litigation or other administrative proceedings will not occur. Defending our intellectual property rights through litigation could be very costly. If we are not able to negotiate the necessary licenses on commercially reasonable terms or successfully defend our position, our financial position and results of operations could be materially and adversely affected.

Our reliance on sales to a few major customers and granting credit to those customers places us at financial risk.

As of September 30, 2006, receivables from three customers comprised 19%, 13% and 12% of our accounts receivable, respectively. A concentration of our receivables from one or a small number of customers places us at risk. If any one or more of our major customers is unable to pay us it could adversely affect our financial position and results of operations. We attempt to manage this credit risk by performing credit checks, by requiring significant partial payments prior to shipment where appropriate and by actively monitoring collections. We also require letters of credit of certain customers depending on the size of the order, type of customer or its creditworthiness and its country of domicile.

If any of our customers cancel or fail to accept a large system order, our financial position and results of operations could be materially and adversely affected.

Our backlog includes orders for large systems, such as our diffusion furnaces, with system prices of up to $1.0 million depending on the system configuration, options included and any special requirements of the customer. Because our orders are typically subject to cancellation or delay by the customer, our backlog at any particular point in time is not necessarily representative of actual sales for succeeding periods, nor is backlog any assurance that we will realize profit from completing these orders. Our financial position and results of operations could be materially and adversely affected should any large systems order be cancelled prior to shipment, or not be accepted by the customer. We have experienced significant cancellations in the past, including $1.2 million in fiscal 1999, $3.5 million in fiscal 2001, and $1.2 million in 2002. We have not experienced any significant cancellations since 2002. Likewise, a significant change in the liquidity or financial position of any of our customers that purchase large systems could have a material impact on the collectibility of our accounts receivable and our future operating results. Our backlog does not provide any assurance that we will realize a profit from those orders or indicate in which period net revenue will be recognized.

Our business might be adversely affected by our dependence on foreign business.

During fiscal 2006, 65% of our net revenue came from customers outside of North America as follows:

Asia (including Korea, People s Republic of China, Taiwan, Japan, Singapore, Malaysia, Australia and India) 41% (includes 13% to Malaysia); and

Europe 24% (includes 14% to Germany).

Because of our significant dependence on revenue from international customers, our operating results could be negatively affected by a decline in the economies of any of the countries or regions in which we do business. Each region in the global semiconductor equipment market exhibits unique characteristics that can cause capital equipment investment patterns to vary significantly from period to period. Periodic local or international economic downturns, trade balance issues, political instability and fluctuations in interest and currency exchange rates could negatively affect our business and results of operations.

We recorded losses of $0.1 million in fiscal 2006, gains of $0.1 million in 2005 and losses of $0.1 million during 2004, as a result of foreign currency transactions. While our business has not been materially affected in the past by currency fluctuations, there is a risk that it may be materially adversely affected in the future. Such risk includes possible losses due to currency exchange rate fluctuations, possible future prohibitions against repatriation of earnings, or proceeds from disposition of investments, and from possible social and military instability in the case of India, South Korea, Taiwan and possibly elsewhere. Our wholly-owned subsidiary, Tempress Systems, has conducted its operations in the Netherlands since 1995 and during 2005 we established a subsidiary in Germany to conduct the European sales of our Bruce Technologies product line. As a result, such operations are subject to the taxation policies, employment and labor laws, transportation regulations, import and export regulations and tariffs, possible foreign exchange restrictions, international monetary fluctuations, and other political, economic and legal policies of that nation, the European Economic Union and the other European nations in which it conducts business. Consequently, we might encounter unforeseen or unfamiliar difficulties in conducting our European operations. Changes in such laws and regulations may have a material adverse effect on our revenue and costs.

If our critical suppliers fail to deliver sufficient quantities of quality product in a timely and cost-effective manner, it could negatively affect our business.

We use a wide range of materials and services in the production of our products including custom electronic and mechanical components, and we use numerous suppliers of materials. We generally do not have guaranteed supply arrangements with our suppliers. Because of the variability and uniqueness of customer orders, we try to avoid maintaining an extensive inventory of materials for manufacturing. Key suppliers include two steel mills capable of producing the types of steel to the tolerances needed for our carriers, an injection molder that molds plastic inserts into our steel carriers, an adhesive manufacturer that supplies the critical glue used in the production of the semiconductor polishing templates and a pad supplier that produces a unique material used to attach semiconductor wafers to the polishing template. We also rely on third parties for certain automation equipment used in the solar industry, machined parts, steel frames and metal panels and other components used particularly in the assembly of semiconductor production equipment.

Although we make reasonable efforts to ensure that parts are available from multiple suppliers, this is not always practical or even possible; accordingly, some key parts are being procured from a single supplier or a limited group of suppliers. During the semiconductor industry peak years, increases in demand for capital equipment resulted in longer lead-times for many important system components, which could cause delays in meeting shipments to our customers. Because the selling price of some of our systems exceeds $1.0 million, the delay in the shipment of even a single system could cause significant variations in our quarterly revenue, operating results and the market value of our common stock. We have sought, and will continue to seek, to minimize the risk of production and service interruptions and shortages of key parts by:

selecting and qualifying alternative suppliers for key parts;

monitoring the financial stability of key suppliers; and

maintaining appropriate inventories of key parts.

There can be no assurance that our financial position and results of operations will not be materially and adversely affected if, in the future, we do not receive in a timely and cost-effective manner a sufficient quantity and quality of parts to meet our production requirements.

We might require additional financing to expand our operations.

We believe that current cash balances, our existing line of credit, cash flows generated from our operations and additional available financing will provide adequate working capital for at least the next twelve months. However, we expect we will require additional financing for further implementation of our growth plans. There is no assurance that any additional financing will be available if and when required, or, even if available, that it would not materially dilute the ownership percentage of the then existing shareholders.

Cost of compliance with Section 404 of the Sarbanes Oxley Act could adversely affect future operating results, the trading price of our common stock and failure to comply could result in loss of our listing on NASDAQ, civil penalties and other liabilities.

Section 404 of the Sarbanes Oxley Act requires management to certify that it has tested and found the Company s internal controls to be effective. It is also required that the Company s independent auditors attest that such management representations are reasonably founded. The adequacy of internal controls generally takes into consideration that the anticipated benefits of a control should outweigh the cost of that control. Auditing standards related to the internal control requirements of Section 404 of the Sarbanes Oxley Act will significantly increase the cost and time needed to comply with the requirements of Section 404. Based upon the existing deadlines, we must fully comply with all requirements of Section 404, no later than September 30, 2008. Complying with these requirements may have a material impact on our operating results. Failure to comply could result in civil penalties, loss of our listing on NASDAQ, and the cost of possible litigation. Because of the complexities and limited time available, there can be no assurance of meeting the compliance deadline.

We are not currently in compliance with the Nasdaq Global Market s audit committee composition requirements.

NASDAQ rules require that our audit committee have a minimum of three members and be comprised only of independent directors. We currently have an audit committee of comprised of two independent board members and are relying on an exception which provides that since we fail to comply with the audit committee composition requirements due to one vacancy on our audit committee, we will have until the earlier of the next annual shareholders meeting or one year from the occurrence of the event that caused the failure to comply with this requirement. We intend to add a new member to our board and our audit committee at our next annual shareholders meeting. If we fail to regain compliance with the applicable NASDAQ rules in a timely manner, we could face delisting.

Terrorist attacks and threats or actual war may negatively impact all aspects of our operations, revenue, costs and stock price.

The 2001 terrorist attacks in the United States, as well as events occurring in response or connection to them, including future terrorist attacks against United States targets, rumors or threats of war, actual conflicts involving the United States or its allies or military or trade disruptions impacting our domestic or foreign suppliers of parts, components and subassemblies, may impact our operations, including, among other things, by causing delays or losses in the delivery of supplies or finished goods and decreased sales of our products. More generally, any of these events could cause consumer confidence and spending to decrease or result in increased volatility in the United States and worldwide financial markets and economy. They could also result in economic recession in the United States or abroad. Any of these occurrences could have a significant adverse impact on our financial position and results of operations.

We face the risk of product liability claims.

The manufacture and sale of our products, which in operation involve toxic materials, involve the risk of product liability claims. In addition, a failure of one of our products at a customer site could interrupt the business operations of our customer. Our existing insurance coverage limits may not be adequate to protect us from all liabilities that we might incur in connection with the manufacture and sale of our products if a successful product liability claim or series of product liability claims were brought against us.

We are subject to environmental regulations, and our inability or failure to comply with these regulations could adversely affect our business.

We are subject to environmental regulations in connection with our business operations, including regulations related to manufacturing and our customers use of our products. From time to time, we receive notices regarding these regulations. It is our policy to respond promptly to these notices and to take any necessary corrective action. Our failure or inability to comply with existing or future environmental regulations could result in significant remediation liabilities, the imposition of fines and/or the suspension or termination of development, manufacturing or use of certain of our products, each of which could damage our financial position and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We believe that our properties are adequate for our current needs. In addition, we believe that adequate space can be obtained to meet our foreseeable business needs. The following chart identifies the principal properties which we own or lease.

Location	Use	Size	Monthly Rent	Lease Expiration
Semiconductor Equipment Segment				
Tempe, AZ	Corporate	15,000 sf	$9,000	11/30/2007
Austin, TX	Mfg Support	(1)	(1)	(1)
Billerica, MA	Office, Warehouse & Mfg.	30,000 sf	$18,000	8/31/2011
Heerde, The Netherlands	Office & Mfg.	10,000 sf	Owned	N/A
Heerde, The Netherlands	Warehouse & Mfg.	10,000 sf	$9,000	7/31/2008
Polishing Supplies Segment				
Carlisle, PA	Office & Mfg.	22,000 sf	$12,000	6/30/2007 (2)

(1) Services are performed in customer s facilities.

(2) We have an option to renew for three additional terms of one year each. We intend to exercise our renewal options.

ITEM 3. LEGAL PROCEEDINGS

None.

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

None.

PART II

ITEM 5. MARKET FOR REGISTRANT S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

MARKET INFORMATION

Our common stock, par value $0.01 per share (Common Stock), began trading on the NASDAQ Global Market (formerly the NASDAQ National Market) under the symbol ASYS on April 18, 2001. From 1983 to 2001, our Common Stock was traded on the NASDAQ SmallCap Market. On December 8, 2006, the closing price of our Common Stock as reported on the NASDAQ Global Market was $6.90 per share. The following table sets forth the high and low bid price at which the shares of our Common Stock traded for each quarter of fiscal 2006 and 2005, as reported by the NASDAQ Global Market.

	Fiscal 2006		Fiscal 2005	
	High	Low	High	Low
First quarter	$ 9.05	$ 5.22	$ 4.99	$ 3.76
Second quarter	10.31	6.26	4.37	2.81
Third quarter	10.02	6.05	6.20	2.62
Fourth quarter	7.44	6.25	7.74	4.61

HOLDERS

As of December 8, 2006, there were 937 shareholders of record of our Common Stock. Based upon a recent survey of brokers, we estimate there were approximately an additional 1,782 beneficial shareholders who held shares in brokerage or other investment accounts as of that date.

DIVIDENDS

We have never paid dividends on our Common Stock. Our present policy is to apply cash to investment in product development, expansion or acquisition; consequently, we do not expect to pay dividends on Common Stock in the foreseeable future.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table sets forth certain information, as of September 30, 2006, concerning outstanding options and rights to purchase Common Stock granted to participants in all of the Company s equity compensation plans and the number of shares of Common Stock remaining available for issuance under such equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders (1)	308,384	5.95	255,837
Equity compensation plans not approved by security holders			
Total	308,384		255,837

(1) Represents the 1995 and 1998 Employee Stock Option Plans and the Non-Employee Director Stock Option Plan and any respective amendments thereto.

ITEM 6. SELECTED FINANCIAL DATA

This selected financial data should be read in conjunction with Item 7, Management s Discussion and Analysis of Financial Condition and Results of Operations, and our consolidated financial statements (including the related notes thereto) contained elsewhere in this Annual Report.

	Years Ended September 30,				
	2006	2005	2004[1]	2003	2002
	(In thousands, except percentages, per share amounts)				
Operating Data:					
Net revenues	$ 40,445	$ 27,899	$ 19,299	$ 19,434	$ 20,533
Gross profit	$ 10,575	$ 7,668	$ 3,949	$ 4,835	$ 4,997
Gross profit %	26.1%	27.5%	20.5%	24.9%	24.3%
Operating income (loss)	$ 1,635	$ (244)	$ (2,035)	$ (245)	$ 77
Net income (loss)	$ 1,318	$ (259)	$ (3,165)	$ (100)	$ 118
Dividends on convertible preferred stock	$ (81)	$ (76)	$	$	$
Net income (loss) attributable to common	$ 1,237	$ (335)	$ (3,165)	$ (100)	$ 118
Earnings (loss) per share:					
Basic earnings (loss) per share	$ 0.40	$ (0.12)	$ (1.17)	$ (0.04)	$ 0.04
Diluted earnings (loss) per share	$ 0.38	$ (0.12)	$ (1.17)	$ (0.04)	$ 0.04
Order backlog[2]	$ 13,600	$ 14,388	$ 7,300	$ 7,645	$ 6,499
Balance Sheet Data:					
Cash and cash equivalents	$ 6,433	$ 3,309	$ 1,674	$ 7,453	$ 8,046
Working capital	$ 11,883	$ 9,968	$ 7,735	$ 12,727	$ 12,166
Current ratio	2.6:1	3.7:1	2.7:1	4.9:1	5.5:1
Total assets	$ 23,563	$ 17,701	$ 16,660	$ 18,399	$ 17,393
Total current liabilities	$ 7,444	$ 3,752	$ 4,531	$ 3,259	$ 2,722
Long-term obligations	$ 617	$ 741	$ 474	$ 640	$ 459
Convertible preferred stock	$	$ 1,935	$	$	$
Total stockholders equity	$ 15,609	$ 13,208	$ 11,655	$ 14,499	$ 14,212

(1) On July 1, 2004, the Company acquired the Bruce Technologies horizontal furnace product line from Kokusai.

(2) The backlog as of September 30, 2006, 2005, 2004 and 2003 includes $0.9 million, $1.0 million, $0.7 million and $0.7 million, respectively, of open orders or deferred revenue on which we anticipate no gross margin.

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

The following discussion of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and the related notes included in Item 8, Financial Statements and Supplementary Data , in this Annual Report on Form 10-K. This discussion contains forward-looking statements, which involve risk and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of certain factors including, but not limited to, those discussed in Risk Factors and elsewhere in this Annual Report on Form 10-K.

Introduction

Management s Discussion and Analysis (MD&A) is intended to facilitate an understanding of our business and results of operations. MD&A consists of the following sections:

Overview: a summary of our business.

Results of Operations: a discussion of operating results.

Liquidity and Capital Resources: an analysis of cash flows, sources and uses of cash and financial position.

Contractual Obligations and Commercial Commitments

Critical Accounting Policies: a discussion of critical accounting policies that require the exercise of judgments and estimates.

Impact of Recently Issued Accounting Pronouncements: a discussion of how we are affected by recent pronouncements.

Overview

We operate in two segments: semiconductor equipment and polishing supplies. Our semiconductor equipment segment is a leading supplier of thermal processing systems, including related automation, parts and services, to the semiconductor, solar/photovoltaic, silicon wafer and MEMS industries.

Our polishing supplies and equipment segment is a leading supplier of wafer carriers to manufacturers of silicon wafers. The polishing segment also manufacturers polishing templates, steel carriers and double-sided polishing and lapping machines to fabricators of optics, quartz, ceramics and metal parts, and to manufacturers of medical equipment components.

Our customers are primarily manufacturers of integrated circuits and solar cells. The semiconductor and solar cell industries are cyclical and historically have experienced significant fluctuations. Our revenue is impacted by these broad industry trends.

In June 2006, we adopted a plan to consolidate the manufacturing of our automation product line into facilities already used to manufacture diffusion furnaces. Our automation products are often sold in conjunction with new diffusion furnaces. As a result of this decision, we recorded approximately $0.2 million of restructuring charges in fiscal 2006.

In July 2004, we completed the acquisition of the Bruce Technologies horizontal diffusion furnace product line from Kokusai Semiconductor Equipment Corporation , which we believe makes us a leading manufacturer of horizontal diffusion furnaces.

Results of Operations

The following table sets forth certain operational data as a percentage of net revenue for the periods indicated:

	Years Ended September 30,		
	2006	2005	2004
Net revenues	100.0%	100.0%	100.0%
Cost of sales	73.9%	72.5%	79.5%
Gross margin	26.1%	27.5%	20.5%
Selling, general and administrative	20.5%	26.2%	28.3%
Restructuring charge	0.5%		
Research and development	1.1%	2.2%	2.8%
Operating income (loss)	4.0%	(0.9)%	(10.6)%
Interest and other income (expense), net		0.3%	(0.3)%
Income (loss) before income taxes	4.0%	(0.6)%	(10.9)%
Income tax provision	0.7%	0.3%	5.5%
Net income (loss)	3.3%	(0.9)%	(16.4)%

Fiscal 2006 compared to Fiscal 2005

Net Revenue

Net revenue consists of revenue recognized upon shipment or installation of products using proven technology and upon acceptance of products using new technology. In addition, spare parts sales are recognized upon shipment. Service revenue is recognized upon completion of the service activity or ratably over the term of the service contract. The majority of our revenue is generated from large furnace systems sales which, depending on the timing of shipment and installation, can have a significant impact on our revenue and earnings in any given period. *See* Critical Accounting Policies Revenue Recognition.

	Years Ended September 30,			
Net Revenue	**2006**	**2005**	**Inc (Dec)**	**%**
	(dollars in thousands)			
Semiconductor Equipment Segment	$ 33,363	$ 20,668	$ 12,695	61%
Polishing Supplies Segment	7,082	7,231	(149)	(2)%
Net revenues	$ 40,445	$ 27,899	$ 12,546	45%

Overall growth in net revenue in fiscal 2006 was primarily due to a beginning backlog of $14.4 million, a robust semiconductor equipment market, and increasing penetration into the solar market. Net revenue in fiscal 2006 was positively impacted by the shipment of a $5.2 million multi-furnace order in the quarter ended March 31, 2006, for which there was no corresponding order of similar magnitude in fiscal 2005. In addition, net revenue in fiscal 2006 was positively impacted by revenue related to the solar industry of approximately $2.8 million versus $1.4 million in fiscal 2005.

The decrease in net revenue of the polishing supplies segment was due primarily to a decrease in sales of insert carriers.

The following table reflects new orders, shipments and net revenue for each quarter of fiscal 2006 and 2005, on a consolidated basis, as well as for each of our two business segments.

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	Fiscal Quarter						
	First	Second	Third	Fourth[2]	Fiscal Year[2]	Semi-conductor Equipment Segment [2]	Polishing Supplies Segment
	(dollars in thousands)						
2006:							
New orders [1]	$ 11,236	$ 6,505	$ 10,506	$ 11,410	$ 39,657	$ 32,577	$ 7,080
Shipments	$ 8,420	$ 11,378	$ 10,899	$ 10,636	$ 41,333	$ 34,251	$ 7,082
Net revenues	$ 7,915	$ 10,892	$ 10,351	$ 11,287	$ 40,445	$ 33,363	$ 7,082
Ending backlog	$ 17,709	$ 13,322	$ 13,477	$ 13,600	$ 13,600	$ 12,614	$ 986
Book-to-bill ratio	**1.3:1**	**0.6:1**	**1.0:1**	**1.1:1**	**1.0:1**	**1.0:1**	**1.0:1**
2005							
New orders [1]	$ 8,323	$ 5,079	$ 7,152	$ 14,433	$ 34,987	$ 27,884	$ 7,104
Shipments	$ 6,952	$ 8,928	$ 5,706	$ 6,888	$ 28,474	$ 21,235	$ 7,239
Net revenues	$ 7,172	$ 8,915	$ 5,507	$ 6,305	$ 27,899	$ 20,668	$ 7,231
Ending backlog	$ 8,451	$ 4,615	$ 6,260	$ 14,388	$ 14,388	$ 13,400	$ 988
Book-to-bill ratio	**1.2:1**	**0.6:1**	**1.3:1**	**2.1:1**	**1.2:1**	**1.3:1**	**1.0:1**

(1) Orders are net of cancellations and include the change in the U. S. dollar value of orders recorded in Euros by our semiconductor equipment segment.

(2) The backlog as of September 30, 2006 and 2005 includes $0.9 million and $1.0 million, respectively, of open orders or deferred revenue on which we anticipate no gross margin.

Gross Profit

Gross profit is the difference between net revenue and cost of goods sold. Cost of goods sold consists of purchased material, labor and overhead to manufacture equipment or spare parts and the cost of service and factory and field support to customers for warranty, as well as installation and paid service calls. In addition, the cost of outsourcing the assembly or manufacturing of certain systems and subsystems to third parties and supplemental contract field service is included in cost of goods sold. Gross margin is gross profit as a percentage of net revenue.

Gross Profit	Years Ended September 30, 2006	2005	Increase (Decrease)	%
	(dollars in thousands)			
Semiconductor Equipment Segment	$ 8,461	$ 5,509	$ 2,952	54%
Polishing Supplies Segment	2,114	2,159	(45)	(2)%
Total	$ 10,575	$ 7,668	$ 2,907	38%
Gross Margin	26%	27%		

Gross profit increased in fiscal 2006 by $2.9 million, or 38%, over fiscal 2005. The increase was driven by higher shipments during the year. Gross margin was 26% in fiscal 2006 compared to 27% in fiscal 2005. Major factors that contributed to the decrease in margin percentage were an increase in profit deferred in fiscal 2006 compared to 2005, the recognition of approximately $0.7 million of revenue and an equal amount of costs related to customer acceptance of our small batch vertical furnace and lower margins on the multi-furnace order shipped during fiscal 2006. The decrease in gross margin was also impacted by a change in product mix, as the polishing supplies segment (which has higher gross margins) declined as a percentage of consolidated revenue.

The timing of revenue recognition can have a particularly significant effect on gross margin when the equipment revenue of an order is recognized in one period and the remainder of the revenue attributed to holdbacks is recognized in a later period. The portion of revenue attributed to the holdbacks generally comprises 10-20% of an order and has a significantly higher gross margin percentage.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist of the cost of employees, consultants and contractors, as well as facility costs, sales commissions, legal and accounting fees and promotional marketing expenses.

	Years Ended September 30,			
Selling, general and administrative	**2006**	**2005**	**Increase (Decrease)**	**%**
	(dollars in thousands)			
Semiconductor Equipment Segment	$ 7,111	$ 5,918	$ 1,193	20%
Polishing Supplies Segment	1,202	1,367	(165)	(12)%
Total	$ 8,313	$ 7,285	$ 1,028	14%
Percent of net revenue	21%	26%		

Total selling, general and administrative expenses as a percentage of net revenue decreased to 21% in fiscal 2006 from 26% in fiscal 2005, as a result of higher sales. The $1.0 million increase over fiscal 2005 was due to approximately $0.2 million in increased personnel costs to support the increase in revenue and the increased regulatory obligations associated with being a public company, increased commissions of approximately $0.2 million resulting from the increased revenue, $0.2 million in increased non-cash stock-based compensation costs during fiscal 2006 related to the adoption of SFAS 123(R) and increased legal fees associated with the restructuring of our legal entities in Europe and consulting costs for the initial upgrade of the software used to operate and control our operations in Europe.

Restructuring Charges

	Years Ended September 30,			
Restructuring Charge	**2006**	**2005**	**Increase (Decrease)**	**%**
	(dollars in thousands)			
Semiconductor Equipment Segment	$ 190	$	$ 190	0%
Polishing Supplies Segment				0%
Total	$ 190	$	$ 190	0%

In June 2006, we adopted a plan to consolidate the manufacturing of our automation product line into facilities already used to manufacture diffusion furnaces. Our automation products are often sold in conjunction with the sale of new diffusion furnaces. As a result of this decision, we recorded $0.2 million of restructuring charges in fiscal 2006.

Research and Development

Research and development expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products; materials and supplies used in product prototyping, including wafers, chemicals and process gases; depreciation and amortization expense; charges for repairs to research equipment; and costs of outside services for facilities, process engineering support and wafer analytical services. We also include in research and development expenses the amortization of costs associated with the preparation and filing of patents and other intellectual property. Reimbursements of these costs in the form of governmental research and development grants amounted to $0.1 million in fiscal 2006 and 2005, and are netted against these expenses.

	Years Ended September 30,			
Research and Development	**2006**	**2005**	**Increase (Decrease)**	**%**
	(dollars in thousands)			
Semiconductor Equipment Segment	$ 437	$ 627	$ (190)	(30)%
Polishing Supplies Segment				0%

Total	$ 437	$ 627	$ (190)	(30)%
Percent of net revenue	1%	2%		

Development work on the small batch vertical furnace product line in fiscal 2005 was the primary factor in the $0.2 million decrease in research and development expenses from fiscal 2006 compared to the prior year.

Income Tax Provision

In fiscal 2004, we recorded a valuation allowance for the total of our deferred tax assets, including a net operating loss carryforward. As the deferred tax assets increase or decrease, we record an additional tax provision or recognize a benefit, respectively, so that the valuation allowance remains equal to the total of our deferred tax assets. During fiscal 2006, our deferred tax assets declined by $0.2 million, resulting in a decline in our valuation allowance and an equal amount of tax benefit. This resulted in an effective tax rate for fiscal 2006 of 17.5%. Our future effective income tax rate depends on various factors, such as tax legislation, the geographic composition of our pre-tax income, the level of expenses that are not deductible for tax purposes, changes in our deferred tax assets and the effectiveness of our tax planning strategies.

Fiscal 2005 compared to 2004

Net Revenue

The following table reflects the increase in net revenue during fiscal 2005 as compared to 2004:

	Years Ended September 30,			
	2005	2004	Inc (Dec)	%
	(dollars in thousands)			
Semiconductor Equipment Segment	$ 20,668	13,215	$ 7,453	56%
Polishing Supplies Segment	7,231	6,084	1,147	19%
Net revenues	$ 27,899	$ 19,299	$ 8,600	45%

Net revenue from Bruce Technologies products and services, acquired July 1, 2004, accounted for $5.3 million, or 71%, of the increase in net revenue of the semiconductor equipment segment during fiscal 2005, compared to 2004. The $1.1 million increase in the polishing supply segment was primarily due to increased penetration into foreign markets with insert carriers for polishing semiconductor wafers.

There were significant fluctuations in quarterly new orders, shipments and revenue, both within and across years as a result of cyclical industry conditions. The following table reflects trends in consolidated new orders, shipments and net revenue for each quarter during fiscal 2005, and the backlog as of the end of those periods. This table also includes these amounts for the full year in total and for each or our two business segments:

	Fiscal Quarter						
	First	Second	Third	Fourth[3]	Fiscal Year[3]	Semi-conductor Equipment Segment [3]	Polishing Supplies Segment
	(dollars in thousands)						
2005[1]							
New orders [2]	$ 8,323	$ 5,079	$ 7,152	$ 14,433	$ 34,987	$ 27,884	$ 7,104
Shipments	$ 6,952	$ 8,928	$ 5,706	$ 6,888	$ 28,474	$ 21,235	$ 7,239
Net revenues	$ 7,172	$ 8,915	$ 5,507	$ 6,305	$ 27,899	$ 20,668	$ 7,231
Ending backlog	$ 8,451	$ 4,615	$ 6,260	$ 14,388	$ 14,388	$ 13,400	$ 988
Book-to-bill ratio	**1.2:1**	**0.6:1**	**1.3:1**	**2.1:1**	**1.2:1**	**1.3:1**	**1.0:1**
2004 [1]							
New orders [2]	$ 3,684	$ 4,038	$ 4,129	$ 7,103	$ 18,954	$ 12,927	$ 6,027
Shipments	$ 3,744	$ 5,697	$ 5,232	$ 5,136	$ 19,809	$ 13,725	$ 6,084
Net revenues	$ 3,921	$ 5,631	$ 4,835	$ 4,912	$ 19,299	$ 13,215	$ 6,084
Ending backlog	$ 7,408	$ 5,815	$ 5,109	$ 7,300	$ 7,300	$ 6,185	$ 1,115
Book-to-bill ratio	**1.0:1**	**0.7:1**	**0.8:1**	**1.4:1**	**1.0:1**	**0.9:1**	**1.0:1**

(1) Amounts include the Bruce Technologies horizontal furnace product line of Kokusai (acquired July 1, 2004) for the periods subsequent to the acquisition.
(2) Orders are net of cancellations and include the change in the U. S. dollar value of orders recorded in Euros by our semiconductor equipment segment.
(3) The backlog as of September 30, 2005, includes $1.0 million of deferred revenue for which there is an equal amount of deferred costs, i.e. with no gross profit to be realized.

Net new orders in fiscal 2005 increased to $35.0 million, compared to $19.0 million in 2004. Bruce Technologies product lines acquired July 1, 2004 contributed $5.2 million to the increase. Most of the increase in new orders occurred in the fourth quarter of fiscal 2005, during which $14.4 million of new orders were booked.

Gross Profit

Our gross profit was $7.7 million in fiscal 2005, an increase of 94% compared to fiscal 2004. The semiconductor equipment segment contributed $3.0 million of the increase. The increase in both segments was driven primarily by the increased revenue discussed above. However, improved profitability of those sales, as measured by the margins as a percent of net revenue, also contributed to the increase in gross profit. Gross margin for fiscal 2005, as a percent of net revenue increased in the polishing segment, to 30% from 23% in 2004, and in the semiconductor equipment segment, to 27% from 19% in 2004, and on a consolidated basis, to 27%, from 20% in 2004. Performing the laser-cutting operation in-house, rather than incurring the higher cost of subcontracting the work to others, was the primary cause for the increase in the margin percentage in the polishing segment.

Approximately $0.9 million of the improvement in the fiscal 2005 gross margin resulted from the recognition in 2005 of profit deferred by the semiconductor equipment segment in prior years pursuant to our revenue recognition policy. The small increase in the amount of revenue deferred during fiscal 2005 compared to 2004 was more than offset by an increase in deferred cost. In contrast, a significant portion of the revenue deferred in fiscal 2005 to later years was from the first two small batch vertical furnaces delivered during the year for which we deferred $1.0 million of both revenue and costs. For information on the components of deferred profit as of the end of fiscal years 2005 and 2004, refer to Revenue Recognition in Note 1 to the consolidated financials statements. Another factor contributing to the improvement in the gross profit percentage of the semiconductor segment was a reduction in the amount of inventory write-downs to $0.3 million in fiscal 2005, as compared to $0.6 million in 2004, resulting from increased operating activities. Discontinuation of an automation product contributed to the inventory write-downs in fiscal 2005. The higher write-offs in fiscal 2004 are primarily due to approximately $0.3 million of excess inventory acquired from Kokusai written-down from the value at which it was included in the audited financial statements of the acquired business. Sales of inventory written down in prior periods were not significant.

The timing of revenue recognition has a particularly significant effect on gross margin when the equipment revenue of an order is recognized in one period and the remainder of the revenue attributed to installation, generally 10-20% of the order, is recognized in a later period, because the latter revenue has a significantly higher gross margin percentage.

Selling, General and Administrative Expenses

Total selling, general and administrative expenses increased $1.8 million in fiscal 2005, or 34%, compared to 2004. The increase was primarily due to the Bruce Technologies acquisition which added $1.2 million of expense. Additional increases include increased audit fees of $0.2 million and increased commissions and royalties of $0.3 million, resulting from higher sales representative commissions and the increased sales of insert carriers.

Research and Development Expenses

Development work on the small batch vertical furnace product line was the primary factor in the $0.1 million increase in research and development expenses during fiscal 2005 compared to the prior year.

Income Tax Provision

Our income tax provision was $1.0 million higher in fiscal 2004 than in 2005, because it was in 2004 that we provided an allowance for all of our deferred tax assets. Our future effective income tax rate depends on various factors, such as tax legislation, the geographic composition of our pre-tax income, the level of expenses that are not deductible for tax purposes and the effectiveness of our tax planning strategies.

As we recognize profits, we will offset the income tax expense by the reversal of the valuation allowance, up to the current tax expense, until fully reversed or until it has been determined the valuation allowance is no longer needed. Despite the book loss before income taxes, we incurred some alternative minimum tax and were taxable in certain states, which resulted in a provision for income taxes of $0.1 million.

Liquidity and Capital Resources

As of September 30, 2006, and 2005, cash and cash equivalents were $6.4 million, and $3.3 million, respectively. Our working capital increased $1.9 million to $11.9 million as of September 30, 2006, compared to $10.0 million as of September 30, 2005. The increase in working capital is primarily a result of $1.3 million of net income increased by certain non-cash charges, including $0.6 million of amortization and depreciation and $0.4 million of other non-cash expenses, plus $0.8 million of net cash raised from the exercise of warrants and stock options, less $1.0 million of capital expenditures and $0.2 million of payments of dividends and long-term debt. At September 30, 2006, our ratio of current assets to current liabilities declined to 2.6:1 compared to 3.7:1 at September 30, 2005.

Our revolving lines of credit contain certain financial and other covenants. We were in compliance with these covenants and had no outstanding borrowings under these lines as of September 30, 2006. Should we fail to meet these covenants the lender could put the loan into default, and demand repayment of any borrowings under the lines.

At September 30, 2006, our principal sources of liquidity consisted of $6.4 million of cash and cash equivalents, $3.3 million in credit facilities and cash from future operating activities.

The success of our growth strategy is dependent upon the availability of additional capital resources on terms satisfactory to management. Our sources of capital in the past have included capital leases, long-term debt and the sale of equity securities, which include common and preferred stock sold in private transactions and public offerings. The availability of such capital resources depends on the current condition of the relevant debt or equity markets and our long-term and recent operating performance and financial condition. There can be no assurance that we can raise such additional capital resources on satisfactory terms.

The table below provides selected consolidated cash flow information (in thousands) for the periods indicated:

	Fiscal Years Ended September 30,		
	2006	2005	2004
Net cash provided by (used in) operating activities	$ 3,335	$ (323)	$ (1,166)
Net cash used in investing activities	$ (956)	$ (279)	$ (4,678)
Net cash provided by financing activities	$ 782	$ 2,302	$ 15

Cash Flows from Operating Activities

Cash provided by our operating activities was $3.3 million in fiscal 2006, compared to $0.3 million of cash used in such activities during fiscal 2005. Cash provided by our fiscal 2006 operating activities consisted of $1.3 million of net income, $1.0 million of non-cash expense adjustments (including $0.6 million of depreciation and amortization, $0.2 million of stock-based compensation, $0.1 million of inventory write downs) and $1.0 million of cash provided from net changes in operating assets and liabilities. The cash provided by net changes in operating assets and liabilities was primarily provided by an increase of $2.4 million in accounts payable, the refund of $0.6 million of income taxes, an increase of $0.6 million of accrued liabilities and deferred profit, a $0.1 million provision of currently payable income taxes and a $0.3 million decrease in prepaid expenses and other assets. These changes were partially offset by increases of $2.3 million in accounts receivable and $0.7 million in inventory.

As of September 30, 2006, we had $5.7 million in purchase obligations compared to $2.7 million at the end of fiscal 2005. The increase in purchase obligations is a result of the significant portion of the year-end backlog that is scheduled for shipment during the first quarter of fiscal 2007, an increase in volume purchasing to reduce costs, and longer lead-times required by our suppliers. During fiscal 2006, we received $0.6 million of domestic and foreign federal income tax refunds as a result of the carryback of prior year net operating losses and our utilization of the remaining net operating losses to offset taxable income. In contrast, during 2007 we will be required to pay the year end tax liability of $0.3 million and taxes on any future income.

Cash Flows from Investing Activities

We used $1.0 million of cash in fiscal 2006 primarily to purchase equipment used to expand the polishing supplies segment product line and, within the semiconductor equipment segment, to upgrade information systems and to purchase research and development equipment. This compares to $0.3 million of cash used to purchase property, plant and equipment in fiscal 2005. Due to our anticipated growth in the semiconductor and solar markets, we expect to increase the manufacturing capacity of our European operations in fiscal 2007 through increased long-term lease commitments for facilities and improvements. Those commitments will increase our future outlays of cash for investing activities.

Cash Flows from Financing Activities

Cash provided by our financing activities was $0.8 million in fiscal 2006, consisting primarily of $0.8 million from the exercise of warrants and stock options, $0.1 million of net short-term bank borrowings on a line of credit and $0.1 million excess tax benefit of stock options. This was partially offset by $0.1 million of net payments on long-term obligations and $0.1 million in cash dividends paid on preferred stock. This compares to $2.3 million of cash provided by financing activities in fiscal 2006, primarily from the issuance of preferred stock and other borrowings.

We currently anticipate that our existing cash balances, the cash that we expect to generate from our operating activities and available borrowings under our lines of credit will be sufficient to meet our anticipated cash needs for current operations for at least the next 12 months. However, we will need to raise additional capital from the sale of debt or equity securities or from other sources in order to support the acquisition element of our growth strategy.

Off-Balance Sheet Arrangements

As of September 30, 2006, we did not have any off-balance sheet arrangements as defined by SEC regulations.

Contractual Obligations and Commercial Commitments

We had the following contractual obligations and commercial commitments as of September 30, 2006:

Contractual obligations	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
			(dollars in thousands)		
Long-term debt obligations	$ 764	$ 147	$ 210	$ 40	$ 367
Operating lease obligations:					
Buildings	1,369	468	477	424	
Office equipment	9	5	4		
Vehicles	203	107	96		
Total operating lease obligations	1,581	580	577	424	
Purchase obligations	5,735	5,735			
Total	$ 8,080	$ 6,462	$ 787	$ 464	$ 367
Other commerical obligations:					
Bank guarantees	$ 195	$ 185	$ 10	$	$

Since the end of fiscal 2006 we have increased our contractual obligations through $0.4 million of long-term debt borrowings secured by certain machinery and equipment purchased during fiscal 2006. See Note 15 Subsequent Event -to the consolidated financial statements included in Item 8 of this Annual Report on Form 10-K. The annual contractual repayment obligation under this financing is approximately $0.1 million per year for the five years ending in fiscal 2011.

Critical Accounting Policies

Management s Discussion and Analysis of Financial Condition and Results of Operations discusses our consolidated financial statements that have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the financial statements, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period.

On an on-going basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventory valuation, accounts receivable collectibility, warranty and impairment of long-lived assets. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances. The results of these estimates and judgments form the basis for making conclusions about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

A critical accounting policy is one that is both important to the presentation of our financial position and results of operations, and requires management s most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. These uncertainties are discussed in Item 1A. Risk Factors of this Annual Report on Form 10-K. We believe the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition. We review product and service sales contracts with multiple deliverables to determine if separate units of accounting are present in the arrangements. Where separate units of accounting exist, revenue is allocated to delivered items equal to the total sales price less the greater of the relative fair value of the undelivered items, and all contingent portions of the sales arrangement.

We recognize revenue when persuasive evidence of an arrangement exists; the product has been delivered and title has transferred, or services have been rendered; the seller s price to the buyer is fixed or determinable; and collectibility is reasonably assured. For us, this policy generally results in revenue recognition at the following points:

For the semiconductor equipment segment, transactions where legal title passes to the customer upon shipment, we recognize revenue upon shipment for those products where the customer s defined specifications have been met with at least two similarly configured systems and processes for a comparably situated customer. However, a portion of the revenue associated with certain installation-related tasks, equal to the greater of the relative fair value of those tasks or the portion of the contract price contingent upon their completion, generally 10%-20% of the system s selling price (the holdback), and directly related costs, if any, are deferred and recognized into income when the tasks are completed. Since we defer only those costs directly related to installation or other unit of accounting not yet delivered and the portion of the contract price is often considerably greater than the fair market value of those items, our policy at times will result in deferral of profit that is disproportionately greater than the deferred revenue. When this is the case, the gross profit recognized in one period will be lower and the gross profit reported in a subsequent period will improve.

For products where the customer s defined specifications have not been met with at least two similarly configured systems and processes, the revenue and directly related costs are deferred at the time of shipment and recognized into income at the time of customer acceptance or when this criterion has been met. We have, on occasion, experienced longer than expected delays in receiving cash from certain customers pending final installation or system acceptance. If some of our customers refuse to pay the final payment, or otherwise delay final acceptance or installation, the deferred revenue would not be recognized, adversely affecting our future operating results.

Equipment sold by the polishing supplies segment does not include process guarantees, acceptance criteria or holdbacks; therefore, the related revenue is recorded upon transfer of title which is generally at time of shipment. Our shipping terms for both segments are customarily FOB our shipping point or equivalent terms.

For all segments, sales of spare parts and consumables are recognized upon shipment, as there are no post shipment obligations other than standard warranties.

Service revenue is recognized upon performance of the services requested by the customer. Revenue related to service contracts is recognized ratably over the period of the contract or in accordance with the terms of the contract, which generally coincides with the performance of the services requested by the customer.

Deferred Tax Asset Valuation Allowance. We currently have significant deferred tax assets resulting from expenses not currently deductible for tax purposes, revenue recognized for tax purposes but deferred for financial statement purposes and net operating loss carryforwards that will reduce taxable income in future periods. During fiscal 2004, we recorded a valuation allowance for the total of our deferred tax assets. SFAS No. 109 requires a valuation allowance be established when it is more likely than not that all or a portion of deferred tax assets will not be realized. It also states that it is difficult to conclude that a valuation allowance is not needed when there is negative evidence such as cumulative losses in recent years. Therefore, the cumulative losses weigh heavily in the overall assessment.

Inventory Valuation. We value our inventory at the lower of cost (first-in, first-out method) or net realizable value. We regularly review inventory quantities and record a write-down for excess and obsolete inventory. The write-down is primarily based on historical inventory usage adjusted for expected changes in product demand and production requirements. However, our industry is characterized by customers in highly cyclical industries, rapid technological changes, frequent new product developments and rapid product obsolescence. While the inventories acquired in the Bruce Technologies transaction will require several years to consume in production and through spare parts sales, management believes the write-downs taken are sufficient to protect against future losses, as this product line is receiving greater attention under its current ownership. Changes in demand for our products and product mix could result in further write-downs.

Allowance for Doubtful Accounts. We maintain an allowance for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. This allowance is based on historical experience, credit evaluations, specific customer collection history and any customer-specific issues we have identified. Since a significant portion of our revenue is derived from the sale of high-value systems, our accounts receivable are often concentrated in a relatively few number of customers. A significant change in the liquidity or financial position of any one of these customers could have a material adverse impact on the collectibility of our accounts receivable and our future operating results.

Warranty. We provide a limited warranty, generally for 12 to 24 months, to our customers. A provision for the estimated cost of providing warranty coverage is recorded upon shipment of all systems. On occasion, we have been required and may be required in the future to provide additional warranty coverage to ensure that the systems are ultimately accepted or to maintain customer goodwill. While our warranty costs have historically been within our expectations and we believe that the amounts accrued for warranty expenditures are sufficient for all systems sold through September 30, 2006, we cannot guarantee that we will continue to experience a similar level of predictability with regard to warranty costs. In addition, technological changes or previously unknown defects in raw materials or components may result in more extensive and frequent warranty service than anticipated, which could result in an increase in our warranty expense.

Impairment of Long-lived Assets. We periodically evaluate whether events and circumstances have occurred that indicate the estimated useful lives of long-lived assets or intangible assets may warrant revision or that the remaining balance may not be recoverable. Goodwill is also tested for impairment at least annually. When factors indicate that an asset should be evaluated for possible impairment, we use an estimate of the related undiscounted net cash flows generated by the asset over the remaining estimated life of the asset in measuring whether the asset is recoverable. We make judgments and estimates used in establishing the carrying value of long-lived or intangible assets. Those judgments and estimates could be modified if adverse changes occurred in the future resulting in an inability to recover the carrying value of these assets. We have not experienced any impairment to long-lived assets during fiscal 2006 or 2005. Future adverse changes could be caused by, among other factors, a downturn in the semiconductor industry, a general economic slowdown, reduced demand for our products in the marketplace, poor operating results, the inability to protect intellectual property or changing technologies and product obsolescence.

Impact of Recently Issued Accounting Pronouncements

For discussion of the impact of recently issued accounting pronouncements, see Item 8: Financial Statements and Supplementary Data under Impact of Recently Issued Accounting Pronouncements .

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Risk

We are exposed to foreign currency exchange rates to the extent sales contracts, purchase contracts, assets or liabilities of our European operations are denominated in currencies other than their functional currency, Our operations in Europe, a component of the semiconductor equipment segment, conduct business primarily in their functional currency, the Euro, and the U.S. dollar. Nearly all of the transactions, assets and liabilities of all other operating units are denominated in the U.S. dollar, their functional currency. In 2006 the U.S. dollar strengthened relative to the Euro by 3.3% and weakened relative to the Euro by 4.6% in 2005. It is highly uncertain how currency exchange rates will fluctuate in the future. Actual changes in foreign exchange rates could adversely affect our operating results or financial condition.

As of September 30, 2006, we did not hold any stand-alone or separate derivative instruments. We incurred net foreign currency transaction losses of $0.1 million in fiscal 2006 and gains of $0.1 million in fiscal 2005. As of September 30, 2006, our foreign subsidiaries had $3.8 million of assets (cash and receivables) denominated in U.S. dollars, rather than Euros, which is their functional currency. A 10% change in the value of the functional currency relative to the non-functional currency would result in a gain or loss of $0.4 million. As of the end of fiscal 2006 we had $3.7 million of accounts payable, consisting primarily of amounts owed by foreign subsidiaries to our U.S. companies, denominated in U.S. dollars. Even though the intercompany accounts are eliminated in consolidation, a 10% change in the value of the Euro relative to the U.S. dollar would result in a gain or loss of $0.4 million. Our net investment in and long-term advances to our foreign operations totaled $2.5 million as of September 30, 2006. A 10% change in the value of the Euro relative to the U.S. dollar would cause an approximately $0.2 million foreign currency translation adjustment, a type of other comprehensive income (loss), which would be a direct adjustment to our stockholders equity.

During fiscal 2006 and 2005, U.S. dollar denominated sales of our European operations were $9.5 million and $4.1 million, respectively. As of September 30, 2006, sales commitments denominated in a currency other than the function currency of our transacting operation totaled $3.3 million. Our lead-times range between 13 and 20 weeks. A 10% change in the relevant exchange rates between the time the order was taken and the time of shipment would cause our gross profit on such orders to be approximately $0.3 million less than expected on the date the order was taken.

All operations become less competitive relative to foreign suppliers when their functional currency strengthens relative to that of the foreign supplier. Our European operations are particularly effected when selling to customers in Asia when such customers require a purchase price in U.S. dollars. If the value of the U.S. dollar has strengthened or weakened relative to the Euro our gross margin will be reduced or increased, respectively, relative to prior transactions unless we are able to make a commensurate increase or decrease, respectively, in our selling price.

Interest Rate Risk

Our exposure to changes in interest rates is limited to interest earned on money market accounts and interest expense on $0.6 million of long term obligations and intermittent short-term borrowings. This exposure is currently not significant. Significant increases in short-term borrowing to fund growth or investments combined with actual changes in interest rates could adversely affect our future results of operations.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following documents are filed as part of this Annual Report on Form 10-K:

Financial Statements

Reports of Independent Registered Public Accounting Firms	39
Consolidated Balance Sheets: September 30, 2006 and 2005	41
Consolidated Statements of Operations: Years ended September 30, 2006, 2005 and 2004	42
Consolidated Statements of Stockholders Equity and Comprehensive Income (Loss): Years ended September 30, 2006, 2005 and 2004	43
Consolidated Statements of Cash Flows: Years ended September 30, 2006, 2005 and 2004	44
Notes to Consolidated Financial Statements	45

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders
Amtech Systems, Inc.:

We have audited the accompanying consolidated balance sheets of Amtech Systems, Inc. and subsidiaries (the Company) as of September 30, 2006 and 2005 and the related consolidated statements of operations, stockholders equity and comprehensive income (loss) and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Amtech Systems, Inc. and subsidiaries as of September 30, 2006 and 2005, and the results of their operations and their cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ Mayer Hoffman McCann P.C.

Phoenix, Arizona
December 21, 2006

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors
Amtech Systems, Inc.:

We have audited the accompanying consolidated statements of operations, stockholders equity and comprehensive income (loss) and cash flows of Amtech Systems, Inc. and subsidiaries (the Company) for the year ended September 30, 2004. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the results of operations and cash flows of Amtech Systems, Inc. and subsidiaries for the year ended September 30, 2004, in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

Phoenix, Arizona
January 10, 2005

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Consolidated Balance Sheets
(in thousands except share data)

	September 30,	
	2006	**2005**
Assets		
Current Assets		
Cash and cash equivalents	$ 6,433	$ 3,309
Accounts receivable (less allowance for doubtful accounts of $223 at September 30, 2006 and 2005)	7,394	4,997
Inventories	4,979	4,308
Income taxes receivable		423
Other	414	683
Total current assets	19,220	13,720
Property, Plant and Equipment - Net	2,382	1,937
Intangible Assets - Net	1,144	1,227
Goodwill	817	817
Total Assets	$ 23,563	$ 17,701
Liabilities and Stockholders Equity		
Current Liabilities		
Accounts payable	$ 3,631	$ 1,166
Bank loans and current maturities of long-term debt	258	138
Accrued compensation and related taxes	1,390	933
Accrued warranty expense	289	248
Deferred profit	1,071	624
Customer deposits		217
Other accrued liabilities	379	426
Income taxes payable	319	
Total current liabilities	7,337	3,752
Long-Term Obligations	617	741
Total liabilities	7,954	4,493
Commitments, Contingencies and Subsequent Event		
Stockholders Equity		
Preferred stock; 100,000,000 shares authorized; Series A convertible preferred stock, $0.01 par value; liquidation value $2,236 at September 30, 2005; 540,000 shares issued and outstanding at September 30, 2005		1,935
Common stock; $0.01 par value; 100,000,000 shares authorized; shares issued and outstanding: 3,476,042 at September 30, 2006 and 2,705,221 at September 30, 2005	35	27
Additional paid-in capital	15,774	12,861
Accumulated other comprehensive income	501	404
Accumulated deficit	(701)	(2,019)
Total stockholders equity	15,609	13,208
Total Liabilities and Stockholders Equity	$ 23,563	$ 17,701

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Consolidated Statements of Operations
(in thousands, except per share data)

	Years Ended September 30,		
	2006	**2005**	**2004**
Revenues, net of returns and allowances	$ 40,445	$ 27,899	$ 19,299
Cost of sales	29,870	20,231	15,350
Gross profit	10,575	7,668	3,949
Selling, general and administrative	8,313	7,285	5,452
Restructuring charge	190		
Research and development	437	627	532
Operating income (loss)	1,635	(244)	(2,035)
Interest and other income (expense), net	(37)	70	(66)
Income (loss) before income taxes	1,598	(174)	(2,101)
Income tax provision	280	85	1,064
Net income (loss)	$ 1,318	$ (259)	$ (3,165)
Income (Loss) Per Share:			
Basic income (loss) per share	$ .40	$ (0.12)	$ (1.17)
Weighted average shares outstanding	3,126	2,705	2,702
Diluted income (loss) per share	$ .38	$ (0.12)	$ (1.17)
Weighted average shares outstanding	3,484	2,705	2,702

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Consolidated Statements Of Stockholders Equity
And Comprehensive Income (Loss)

(in thousands)	Common Stock		Preferred Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Accumulated Deficit)	Total Stockholders Equity
	Number of Shares	Amount	Number of Shares	Amount				
Balance at September 30, 2003	2,698	$ 27			$ 12,873	$ 194	$ 1,405	$ 14,499
Net loss							$ (3,165)	$ (3,165)
Translation adjustment						$ 186		186
Minimum pension liability adjustment						120		120
Comprehensive loss								(2,859)
Stock options exercised	7				$ 15			15
Balance at September 30, 2004	2,705	$ 27			$ 12,888	$ 500	$ (1,760)	$ 11,655
Net loss							$ (259)	$ (259)
Translation adjustment						$ (96)		(96)
Comprehensive loss								(355)
Issuance of preferred stock			540	$ 1,859	$ 49			1,908
Dividends on preferred stock				76	(76)			
Stock options exercised								
Balance at September 30, 2005	2,705	$ 27	540	$ 1,935	$ 12,861	$ 404	$ (2,019)	$ 13,208
Net income							$ 1,318	$ 1,318
Translation adjustment						$ 97		97
Comprehensive income								1,415
Conversion of preferred stock	540	$ 5	(540)	$ (1,859)	$ 1,854			
Dividends on preferred stock				81	(81)			
Preferred cash dividend paid				(83)				(83)
Preferred dividend paid in common stock	9			(74)	74			
Warrants exercised	60	1			252			253
Tax benefit of stock options					134			134
Stock options expense					176			176
Stock options exercised	162	2			504			506
Balance at September 30, 2006	3,476	$ 35		$ 0	$ 15,774	$ 501	$ (701)	$ 15,609

AMTECH SYSTEMS, INC. AND SUBSIDIARIES
Consolidated Statements Of Cash Flows
(in thousands)

	Years Ended September 30,		
	2006	**2005**	**2004**
Operating Activities			
Net income (loss)	$ 1,318	$ (259)	$ (3,165)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	642	675	510
Write-down of inventory	114	291	641
Provision for doubtful accounts	36	76	26
Deferred income taxes			1,130
Non-cash share based compensation expense	176		
Other		14	(55)
Changes in operating assets and liabilities:			
Accounts receivable	(2,281)	(1,437)	(541)
Inventories	(676)	1,498	(268)
Accrued income taxes	735	212	(142)
Prepaid expenses and other assets	281	(329)	(157)
Accounts payable	2,383	(312)	194
Accrued liabilities and customer deposits	181	(240)	196
Deferred profit	426	(512)	465
Net cash provided by (used in) operating activities	3,335	(323)	(1,166)
Investing Activities			
Investment in Bruce Technologies, Inc.			(3,599)
Purchases of property, plant and equipment	(956)	(279)	(1,079)
Net cash used in investing activities	(956)	(279)	(4,678)
Financing Activities			
Proceeds from issuance of common stock	759		15
Proceeds from issuance of preferred stock		1,908	
Preferred stock cash dividends paid	(84)		
Payments on long-term obligations	(138)	(106)	
Borrowings on long-term obligations		500	
Net short-term borrowings	111		
Excess tax benefit of stock options	134		
Net cash provided by financing activities	782	2,302	15
Effect of Exchange Rate Changes on Cash	(37)	(65)	50
Net Increase (Decrease) in Cash and Cash Equivalents	3,124	1,635	(5,779)
Cash and Cash Equivalents, Beginning of Year	3,309	1,674	7,453
Cash and Cash Equivalents, End of Year	$ 6,433	$ 3,309	$ 1,674
Supplemental Cash Flow Information:			
Interest paid	$ 131	$ 80	$ 28
Income tax refunds	$ 617		

Income tax payments	$ 24	$ 141	$ 85
Supplemental Non-cash Financing Activities:			
Stock issued for preferred stock dividend	$ 74		
Preferred stock dividend accrual	$ 81	$ 76	
Preferred stock converted to common stock	$ 1,859		
Warrant issued		$ 49	
Minimum pension liability adjustment			$ 120

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

Notes to Consolidated Financial Statements
For the Years Ended September 30, 2006, 2005 and 2004

1. Summary of Significant Accounting Policies

Nature of Operations and Basis of Presentation Amtech Systems, Inc. (the Company) designs, assembles, sells and installs capital equipment and related consumables used in the manufacture of wafers of various materials, primarily silicon wafers for the semiconductor and solar industries. The Company sells these products to manufacturers of silicon wafers, semiconductors and solar cells worldwide, particularly in the United States, Asia and northern Europe. In addition, the Company provides semiconductor manufacturing support services.

The Company serves niche markets in industries that are experiencing rapid technological advances, and which historically have been very cyclical. Therefore, future profitability and growth depend on the Company s ability to develop or acquire and market profitable new products, and on its ability to adapt to cyclical trends.

Principles of Consolidation The consolidated financial statements include the accounts of Amtech and its wholly owned subsidiaries. Beginning July 1, 2004, the consolidated financial statements include the accounts of Bruce Technologies. All material intercompany accounts and transactions have been eliminated in consolidation.

Reclassifications - Certain reclassifications have been made in the accompanying consolidated financial statements for fiscal 2005 and 2004 to conform to the 2006 presentation. These reclassifications did not have a material effect on the Company s results of operations.

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

Revenue Recognition Revenue is recognized upon shipment of the Company s proven technology equal to the sales price less the greater of (i) the fair value of undelivered services and (ii) the contingent portion of the sales price, which is generally 10-20% of the total contract price. The entire cost of the equipment relating to proven technology is recorded upon shipment. The remaining contractual revenue, deferred costs, and installation costs are recorded upon successful installation of the product.

For purposes of revenue recognition, proven technology means that the Company has a history of at least two successful installations. New technology systems are those systems with respect to which the Company cannot demonstrate that it can meet the provisions of customer acceptance at the time of shipment.

Revenue on new technology is deferred until installation and acceptance at the customer s premises is completed, as these sales do not meet the provisions of customer acceptance at the time of shipment. Cost of the equipment relating to new technology is recorded against deferred profit and then recorded in cost of sales upon customer acceptance.

Revenue from services is recognized as the services are performed. Revenue from prepaid service contracts is recognized ratably over the life of the contract. Revenue from spare parts is recorded upon shipment.

Deferred Profit Revenue deferred pursuant to our revenue policy, net of the related deferred costs, if any, is recorded as deferred profit in current liabilities. The components of deferred profit are as follows:

	September 30,		
	2006	2005	2004
	(dollars in thousands)		
Deferred revenues	$ 2,493	$ 1,662	$ 1,131
Deferred costs	1,422	1,038	100
Deferred profit	$ 1,071	$ 624	$ 1,031

Accounts receivable and allowance for doubtful accounts Accounts receivable are recorded at the gross sales price of products sold to customers on trade credit terms. Accounts receivable are considered past due when payment has not been received from the customer within the normal credit terms extended to that customer. Accounts are charged-off against the allowance when the probability of collection is remote.

The following is a summary of the activity in the Company s allowance for doubtful accounts:

	Years Ended September 30,		
	2006	2005	2004
	(dollars in thousands)		
Balance at beginning of year	$ 223	$ 188	$ 176
Charged to expense	43	76	26
Write-offs	(43)	(41)	(14)
Balance at end of year	$ 223	$ 223	$ 188

Concentrations of Credit Risk Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of trade accounts receivable. The Company s customers consist of manufacturers of semiconductors, semiconductor wafers, MEMS and solar cells located throughout the world. Credit risk is managed by performing ongoing credit evaluations of the customers financial condition, by requiring significant deposits where appropriate, and by actively monitoring collections. Letters of credit are required of certain customers depending on the size of the order, type of customer or its creditworthiness, and its country of domicile. Reserves for potentially uncollectible receivables are maintained based on an assessment of collectibility.

As of September 30, 2006, receivables from three customers amounted to 19%, 13%, and 12% of accounts receivable, respectively. As of September 30, 2005, receivables from two customers amounted to 14% and 10% of accounts receivable, respectively.

Refer to Note 10, Business Segment Information, for information regarding revenue and assets in other countries subject to foreign currency exchange rates.

Inventories Inventories are stated at the lower of cost (first-in, first-out method) or net realizable value. The components of inventories are as follows:

	September 30, 2006	September 30, 2005
	(dollars in thousands)	
Purchased parts and raw materials	$ 3,400	$ 3,346
Work-in-process	1,159	394
Finished goods	420	568
	$ 4,979	$ 4,308

Property, Plant and Equipment - Property plant, and equipment are recorded at cost. Maintenance and repairs are charged to expense as incurred. The cost of property retired or sold and the related accumulated depreciation are removed from the applicable accounts when disposition occurs and any gain or loss is recognized. Depreciation is computed using the straight-line method. Useful lives for equipment, machinery and leasehold improvements range from three to seven years; for furniture and fixtures from five to ten years; and for buildings twenty years.

The following is a summary of property, plant and equipment:

	September 30, 2006	September 30, 2005
	(dollars in thousands)	
Land, building and leasehold improvements	$ 1,094	$ 1,025
Equipment and machinery	2,676	1,929
Furniture and fixtures	2,514	2,255
	6,284	5,209
Accumulated depreciation and amortization	(3,902)	(3,272)
	$ 2,382	$ 1,937

Goodwill - Goodwill and intangible assets with indefinite lives are not subject to amortization, but are tested for impairment at least annually. The Company accounts for goodwill under the provisions of SFAS No. 142. Accordingly, goodwill is reviewed for impairment on an annual basis, or more frequently if circumstances dictate. Based on the Company s analysis, there was no impairment of goodwill for the years ended September 30, 2006, 2005 and 2004.

Intangibles - Intangible assets are capitalized and amortized over 6 months to 15 years if the life is determinable. If the life is not determinable, amortization is not recorded. The aggregate amortization expense for the intangible assets for each of the five succeeding fiscal years is estimated to be $80,000, $73,000, $53,000, $53,000 and $53,000 in 2007, 2008, 2009, 2010 and 2011, respectively.

The following is a summary of intangibles:

	Useful Life	September 30, 2006	September 30, 2005
		(dollars in thousands)	
Patents	7 yrs	$ 74	$ 74
Trademarks	Indefinite	592	592
Non-compete agreements	10 yrs	350	350
Customer lists	15 yrs	276	276
Backlog/acquired contracts	6 months		50
Technology	4 yrs	102	102
		1,394	1,444
Accumulated amortization		(250)	(217)
		$ 1,144	$ 1,227

Proprietary Product Rights - Through the acquisition of the net assets of P. R. Hoffman, the Company acquired the license for the design of its steel carriers with plastic inserts for abrasive machining of silicon wafers. In 1995, P. R. Hoffman licensed the patent rights from the patent holder, and pays a royalty to the patent holder for the use of such patent rights. Per the license agreement, royalties ceased to accrue on July 2, 2006. Royalty expense for all licenses is included in cost of sales and totaled $113,000, $149,000 and $108,000 in fiscal 2006, 2005 and 2004, respectively.

Warranty A limited warranty is provided free of charge, generally for periods of 12 to 24 months to all purchasers of the Company s new products and systems. Accruals are recorded for estimated warranty costs at the time revenue is recognized. The following is a summary of activity in accrued warranty expense:

	Years Ended September 30,		
	2006	2005	2004
	(dollars in thousands)		
Beginning balance	$ 248	$ 260	$ 321
Warranty expenditures	(54)	(52)	(76)
Assumed liability from acquisition			108
Reserve Adjustment	95	40	(93)
Ending balance	$ 289	$ 248	$ 260

Research and Development Expenses - Product development costs are expensed as incurred.

Foreign Currency Transactions and Translation Financial information relating to the Company s foreign subsidiaries is reported in accordance with SFAS No. 52, Foreign Currency Translation. The functional currency of the Company s European operations is the Euro. Net income (loss) includes pretax net gains (losses) from foreign currency transactions of ($62,000), $105,000 and ($70,000) in fiscal 2006, 2005 and 2004, respectively. The gains or losses resulting from the translation of Tempress financial statements have been included in other comprehensive income (loss).

Income Taxes The Company files consolidated federal income tax returns and computes deferred income tax assets and liabilities based upon cumulative temporary differences between financial reporting and taxable income, carryforwards available and enacted tax laws.

Statement of Financial Accounting Standards (SFAS) No. 109 Accounting for Income Taxes (SFAS 109) requires that a valuation allowance be established when it is more likely than not that all or a portion of deferred tax assets will not be realized. A review of all available positive and negative evidence needs to be considered, including the Company s performance, the market environment in which the Company operates and the length of carry back and carryforward periods. SFAS 109 further states that forming a conclusion that a valuation allowance is not needed is difficult when there is negative evidence such as cumulative losses in recent years. Therefore, cumulative losses weigh heavily in the overall assessment. As a result of the review undertaken at September 30, 2004, it was concluded that it was appropriate to establish a full valuation allowance for net deferred tax assets. Based on a review as of September 30, 2006, the Company determined that it is appropriate to continue to record a full valuation allowance for net deferred tax assets.

Stock-Based Compensation - On October 1, 2005, the Company adopted Statement of Financial Accounting Standards No. 123(R), Share-Based Payment (SFAS 123(R)) and Staff Accounting Bulletin 107, Share-Based Payment . SFAS 123(R) requires the recognition of compensation costs relating to share-based payment transactions in the financial statements. Prior to the adoption of SFAS 123(R) the Company elected to account for share-based compensation plans using the intrinsic value method under Accounting Principles Board (APB) Opinion No. 25, Accounting for Stock Issued to Employees, under which no compensation cost is recognized and the pro forma effects on earnings and earnings per share are disclosed as if the fair value approach had been adopted. Under the fair value method, the estimated fair value of awards is charged to income on a straight-line basis over the requisite service period, which is generally t he vesting period. The Company has elected the modified prospective application method of reporting; therefore, prior periods were not restated. Under the modified prospective method, this statement was applied to new awards granted after the time of adoption, as well as to the unvested portion of previously granted awards for which the requisite service had not been rendered as of October 1, 2005. SFAS 123(R) also requires the benefits of tax deductions in excess of recognized compensation cost to be reported as cash flow from financing activities rather than as cash flow from operating activities.

Stock-based compensation expense recognized under SFAS 123(R) for the fiscal year ended September 30, 2006 reduced the Company s results of operations as follows:

	Year Ended September 30, 2006
	(dollars in thousands, except per share amounts)
Income before income taxes	$ 176
Net income	$ 88
Basic income per share	$ 0.03
Diluted income per share	$ 0.03

The following table illustrates the pro-forma effect on net loss and net loss per share, as if the fair value recognition provisions of SFAS No. 123 had been applied:

	Years Ended September 30,	
	2005	2004
	(dollars in thousands, except per share amounts)	
Net loss, as reported	$ (259)	$ (3,165)
Add: Stock-based compensation included in net loss as reported		
Less: Stock-based compensation under the fair-value method, net of tax	279	211
Net loss, pro forma	$ (538)	$ (3,376)
Basic Loss Per Share:		
As reported	$ (.12)	$ (1.17)
Pro forma	(.23)	(1.25)
Diluted Loss per Share:		
As reported	$ (.12)	$ (1.17)
Pro forma	(.23)	(1.25)

Qualified stock options issued under the terms of the plans have, or will have, an exercise price equal to, or greater than, the fair market value of the common stock at the date of the option grant, and expire no later than ten years from the date of grant, with the most recent grant expiring in 2016. Options vest over 3 to 5 years The Company estimates the fair value of awards on the date of grant using the Black-Scholes option pricing model using the following assumptions. .

	Years Ended September 30,		
	2006	2005	2004
Risk free interest rate	4.38% to 5.06%	4.00% to 4.16%	3.71% to 4.74%
Expected life	4.4 to 7.5 years	5 years	4 to 6 years
Dividend rate	0%	0%	0%
Volatility	63% to 101%	39% to 40%	40% to 53%
Forfeiture rate	7.45%		

To estimate expected lives for this valuation, it was assumed that options will be exercised at varying schedules after becoming fully vested. In accordance with SFAS 123(R), forfeitures have been estimated at the time of grant and will be revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based upon historical experience. Fair value computations are highly sensitive to the volatility factor assumed; the greater the volatility, the higher the computed fair value of the options granted.

Fair Value of Financial Instruments The carrying values of the Company s current financial instruments approximate fair value due to the short term in which these instruments mature. The carrying values of the Company s line of credit (see Note 5) and long-term debt (see Note 6) approximate fair value because their variable interest rates approximate the prevailing interest rates for similar debt instruments.

Impact of Recently Issued Accounting Pronouncements

In June 2006, the FASB published FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes*, which clarifies the accounting for uncertainty in income taxes recognized in an enterprise s financial statements in accordance with FASB Statement No. 109, *Accounting for Income Taxes*. Statement 109 does not prescribe a recognition threshold or measurement attributable for the financial statement recognition and measurement of a tax position taken in a tax return. Diversity in practice exists in the accounting for income taxes. To address that diversity this Interpretation clarifies the application of Statement 109 by defining a criterion that an individual tax position must meet for any part of the benefit of that position to be recognized in an enterprise s financial statements. Additionally, this Interpretation provides guidance on measurement, derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition. This Interpretation is effective for our 2008 fiscal year. We have not yet determined the impact, if any, that the adoption of Interpretation No. 48 will have on our financial statements.

In September 2006, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 157, Fair Value Measurements (FAS 157). FAS 157 defines fair value, establishes a formal framework for measuring fair value and expands disclosures about fair value measurements. The Company is in the process of analyzing the impact of FAS 157, which is effective for fiscal years beginning after November 15, 2007.

2. Stock-Based Compensation

Stock Option Plans The 1998 Employee Stock Option Plan (the 1998 Plan), under which 50,000 shares could be granted, was adopted by the Board of Directors on January 31, 1998, and approved by shareholders on March 20, 1998. The number of shares available for options under the 1998 Plan has since been increased to 500,000 shares through authorization by the Board of Directors and approval of shareholders. The Non-Employee Directors Stock Option Plan was approved by the shareholders in 1996 for issuance of up to 100,000 shares of common stock to directors. On July 8, 2005, the Board of Directors authorized, and shareholders approved, an increase in the number of shares available for options under the Non-Employee Directors Stock Option Plan to 200,000 shares.

Qualified stock options issued under the terms of the plans have, or will have, an exercise price equal to, or greater than, the fair market value of the common stock at the date of the option grant, and expire no later than ten years from the date of grant, with the most recent grant expiring in 2016. Under the terms of the 1998 Plan, nonqualified stock options may also be issued. Options vest over 3 to 5 years.

Our employee stock-based compensation plans are summarized in the table below:

Name of Plan	Shares Authorized	Shares Available	Options Outstanding	Plan Expiration
1998 Employee Stock Option Plan	500,000	154,237	273,634	January 2008
Amended and Restated 1995 Stock Option Plan and 1995 Stock Bonus Plan	160,000		2,750	October 2005
Non-Employee Directors Stock Option Plan	200,000	101,600	32,000	July 2015
		255,837	308,384	

Stock options were valued using the Black-Scholes option pricing model. See Note 1 for further discussion. Stock option transactions and the options outstanding are summarized as follows:

	Years Ended September 30,					
	2006		2005		2004	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Outstanding at beginning of period	468,206	$ 4.78	439,017	$ 4.83	405,217	$ 4.70
Granted	37,522	7.16	30,789	3.99	65,000	5.70
Exercised	(161,446)	3.14	(100)	2.00	(6,700)	2.24
Forfeited/cancelled	(35,898)	4.58	(1,500)	4.36	(24,500)	5.62
Outstanding at end of period	308,384	$ 5.95	468,206	$ 4.78	439,017	$ 4.83
Exercisable at end of period	241,752	$ 5.91	348,684	$ 4.64	278,717	$ 4.39
Weighted average grant-date fair value of options granted during the period	$ 5.33		$ 1.64		$ 2.68	

Non-vested stock options activity is summarized as follows:

	Non-vested Options	Weighted Average Fair Value at Grant Date
As of September 30, 2005	119,522	$ 3.11
Granted	37,522	$ 5.33
Vested	(54,514)	$ 4.94

Forfietied / cancelled	(35,898)	$ 2.16
As of September 30, 2006	66,632	$ 3.98

As of September 30, 2006, total unrecognized estimated compensation expense related to non-vested stock options granted prior to that date was $0.2 million and will be amortized over the average period of 1.6 years.

The following tables summarize information for stock options outstanding and exercisable as of September 30, 2006:

	Options Outstanding			
Range of Exercise Prices	**Number Outstanding**	**Remaining Contractual Life**	**Weighted Average Exercise Price**	**Aggregate Intrinsic Value**
		(in years)		**(in thousands)**
$ 1.13 - 3.00	2,250	2.6	$ 1.79	$ 11
3.01 - 4.00	17,612	7.2	3.24	60
4.01 - 5.00	50,500	5.8	4.58	105
5.01 - 6.00	68,022	6.2	5.76	61
6.01 - 7.00	150,000	4.5	6.50	23
7.01 - 8.00				
8.01 - 9.05	20,000	9.5	8.78	
	308,384	5.5	$ 5.95	$ 260
Vested and expected to vest as of September 30, 2006	300,807	5.2	$ 5.94	$ 250

	Options Exercisable			
Range of Exercise Prices	**Number Exercisable**	**Remaining Contractual Life**	**Weighted Average Exercise Price**	**Aggregate Intrinsic Value**
		(in years)		**(in thousands)**
$ 1.13 - 3.00	2,250	2.6	$ 1.79	$ 11
3.01 - 4.00	8,501	5.8	3.25	$ 29
4.01 - 5.00	36,667	5.3	4.53	$ 78
5.01 - 6.00	44,334	5.2	5.80	$ 38
6.01 - 7.00	150,000	4.4	6.50	$ 23
	241,752	4.8	$ 5.91	$ 179

The aggregate intrinsic value in the tables above represents the total pretax intrinsic value, based on the Company s closing stock price of $6.65 per share as of September 30, 2006, which would have been received by the option holders had all option holders exercised their options as of that date. The total fair value of options vested using the Black-Scholes method during the fiscal years ended September 30, 2006, 2005 and 2004 was $0.2 million, $0.3 million and $0.3 million, respectively. The total intrinsic value of stock options exercised during the fiscal year ended September 30, 2006 was $0.8 million. The total intrinsic value of stock options exercised during the fiscal years ended September 30, 2005 and 2004 was less than $0.1 million.

3. Earnings Per Share

Basic earnings per share is computed by dividing net income (loss) available to common stockholders (net income less accrued preferred stock dividends) by the weighted average number of common shares outstanding for the period. Diluted earnings per share is computed similarly to basic earnings per share except that the denominator is increased to include the number of additional common shares that would have been outstanding if potentially dilutive common shares had been issued, and the numerator is based on net income. In the case of a net loss, diluted earnings per share is calculated in the same manner as basic earnings per share.

Common shares relating to stock options where the exercise prices exceeded the average market price of our common shares during the period were excluded from the diluted earnings per share computation as the related impact was anti-dilutive. Options of 10,219 shares are excluded from the fiscal 2006 earnings per share calculation as they have an exercise price greater than the average market price. Options and warrants of 528,206 shares and 498,317 shares are excluded from the earnings per share calculation as they are anti-dilutive due to the net loss for fiscal 2005 and 2004, respectively.

	2006	2005	2004
	(In thousands, except per share amounts)		
Basic Loss Per Share Computation			
Net Income (loss)	$ 1,318	$ (259)	$ (3,165)
Preferred stock dividends	(81)	(76)	
Net income (loss) available to common stockholders	$ 1,237	$ (335)	$ (3,165)
Weighted Average Shares Outstanding:			
Common stock	3,126	2,705	2,702
Basic income (loss) per share	$ .40	$ (.12)	$ (1.17)
Diluted Loss Per Share Computation			
Net income (loss)	$ 1,318	$ (259)	$ (3,165)
Weighted Average Shares Outstanding:			
Common stock	3,126	2,705	2,702
Common stock equivalents	358		
Diluted shares	3,484	2,705	2,702
Diluted income (loss) per share	$ .38	$ (.12)	$ (1.17)

4. Comprehensive Income (Loss)

	Years Ended September 30,		
	2006	2005	2004
	(dollars in thousands)		
Net income (loss), as reported	$ 1,318	$ (259)	$ (3,165)
Foreign currency translation adjustment	97	(96)	186
Minimum pension liability adjustment			120
Comprehensive income (loss)	$ 1,415	$ (355)	$ (2,859)

5. Line of Credit

On April 7, 2006, the Company entered into domestic and export revolver loan and security agreements (LSAs) with the Silicon Valley Bank and a Working Capital Guarantee Program Borrower Agreement with the Export-Import Bank of the United States, all of which expire April 7, 2008. The Company can borrow a maximum of $3.0 million, including $2.0 million under the domestic LSA and $1.0 million under the export LSA, subject to the availability of sufficient eligible receivables and inventory, as defined under the agreements, and certain other restrictions. The interest rate under the agreements is Silicon Valley Bank s prime rate plus 1% (9.25 % at September 30, 2006). The fee for the unused portion of the loans is equal to twenty-five hundredths percent (0.25%) per annum of the average unused portion of the $3.0 million revolving lines of credit. In the event of a default by the Company under the LSAs, Silicon Valley Bank may declare all amounts due under the LSAs to be immediately due and payable. In addition, the lines of credit are secured by substantially all of the assets of the Company s United States based operations. The Company secured the $3.0 million lines of credit to provide additional liquidity for future growth. The LSA includes a covenant requiring a minimum tangible net worth of $10.0 million. As of September 30, 2006, our tangible net worth as defined in the LSA was $13.5 million. There were no outstanding borrowings under the LSA s as of September 30, 2006.

The Company has a line of credit in the amount of Euro 250,000 (approximately $320,000) as of September 30, 2006. The line of credit accrues interest at a rate of 1.75% over a Netherlands bank s basic interest rate (4.0% and 2.75% at September 30, 2006 and 2005, respectively). The line of credit has no fixed expiration date. The line of credit is secured by a lien on the Company s land and buildings and on trade accounts receivable in The Netherlands. As of September 30, 2006 and 2005, there were no borrowings on the line of credit.

6. Long-Term Obligations

Long-term obligations include a mortgage, secured by a lien on the Company s land and buildings and on trade accounts receivable, in The Netherlands. The principal amount of the mortgage was $467,000 and $463,000 as of September 30, 2006 and 2005, respectively. The mortgage matures on July 31, 2029. Principal payments of $5,000 per quarter are due until the mortgage is retired. Interest is paid monthly at a fixed rate of 4.1% until August 1, 2007, at which time a new fixed rate will be set based on prevailing market conditions. There is no penalty for prepayment of the mortgage, as long as the prepayment is made at the end of a fixed rate period as defined in the mortgage agreement.

In December 2004, the Company financed a laser cutting tool purchased in the fourth quarter of fiscal 2004. The Company financed $500,000 at an interest rate of 6.55% with 48 equal monthly payments of $11,869, including principal and interest. The outstanding principal balance of this loan was $297,000 and $416,000 as of September 30, 2006 and 2005, respectively.

Total maturities of long term debt are $147,000 in 2007, $155,000 in 2008, $55,000 in 2009, $20,000 in 2010, $20,000 in 2011 and $367,000 thereafter.

7. Stockholders Equity

On April 22, 2005, the Company completed a private placement of 540,000 shares of Series A Convertible Preferred Stock, par value $0.01 per share (the Preferred Stock). The gross proceeds of this transaction were $2,160,000. The placement agent received commissions of 8% of the proceeds, totaling $172,800, and a non-accountable

expense allowance of 2% of the proceeds, totaling $43,200. The agent also received a warrant to purchase up to 60,000 shares of our Common Stock, $0.01 par value per share (Common Stock), at a price of $4.67 per share. The warrants were valued at $49,200 using the Black-Scholes pricing method.

The shares of Preferred Stock were convertible at any time at the option of the holders into shares of Common Stock based upon the liquidation value, as defined, at a fixed conversion rate of $4.00 per share. In addition, all outstanding shares of Preferred Stock were to be automatically converted into shares of Common Stock in the event that the Common Stock has an average thirty-day trading price of at least $5.50 per share. The Preferred Stock was automatically converted into 540,000 shares of the Company s common Stock on March 20, 2006.

Each holder of Preferred Stock was entitled to receive cumulative dividends at a rate of $0.32 per share per annum (or 8%) out of our legally available funds or other assets, payable semi-annually. The first dividend of $83,323 was paid in cash on October 15, 2006. As permitted under the terms of the Preferred Stock agreement, the Company elected to issue 9,375 shares of Common Stock on March 20, 2006, as payment for the final dividend of $73,854.

The Company s stockholder rights plan authorizes the distribution of one right for each outstanding common share. Each right entitles the holder to purchase one one-hundredth of a share of Series A Participating Preferred Stock, at a purchase price of $8.50, subject to certain anti-dilution adjustments. The rights will expire 10 years after issuance and will be exercisable if (a) a person or group becomes the beneficial owner of 15% or more of the Company s common stock or (b) a person or group commences a tender or exchange offer that would result in the offeror beneficially owning 15% or more of the Company s common stock (a Stock Acquisition Date). If a Stock Acquisition Date occurs, each right, unless redeemed by the Company at $0.01 per right, entitles the holder to purchase an amount of the Company s common stock, or in certain circumstances a combination of securities and/or assets or the common stock of the acquirer, having an equivalent market value of $17.00 per right at a purchase price of $8.50. Rights held by the acquiring person or group will become void and will not be exercisable. These rights are not exercisable as of September 30, 2006.

8. Commitments and Contingencies

Legal Proceedings The Company and its subsidiaries are defendants from time to time in actions for matters arising out of their business operations. The Company does not believe that any matters or proceedings presently pending will have a material adverse effect on its consolidated financial position, results of operations or liquidity.

Operating Leases - The Company leases buildings, vehicles and equipment under operating leases. Rental expense under such operating leases was $741,000, $611,000 and $497,000 in fiscal 2006, 2005 and 2004, respectively. As of September 30, 2006, future minimum rental commitments under non-cancelable operating leases with initial or remaining terms of one year or more totaled $1,581,000, of which $580,000, $343,000, $234,000, $221,000 and $203,000 is payable in fiscal 2007, 2008, 2009, 2010 and 2011 respectively.

9. Major Customers and Foreign Sales

One customer accounted for 17% of net revenue during fiscal 2006. No customer accounted for 10% or more of net revenue during fiscal 2005. One customer represented approximately 10% of net revenue during fiscal 2004.

Our net revenues for fiscal 2006, 2005 and 2004 were to customers in the following geographic regions:

	Years Ended September 30,		
	2006	2005	2004
North America (including 34%, 36% and 30% to the United States)	35%	40%	36%
Asia (including 9%, 16% and 9% to Taiwan and 13%, 1% and 0% to Malaysia)	41%	36%	33%
Europe (including 14%, 6% and 7% to Germany)	24%	24%	31%
	100%	100%	100%

10. Business Segment Information

The Company s products are classified into two core business segments. The semiconductor equipment segment designs, manufactures and markets semiconductor wafer processing and handling equipment used in the fabrication of integrated circuits, solar cells and MEMS. Also included in the semiconductor equipment segment are the manufacturing support service operations and corporate expenses, except for a small portion that is allocated to the polishing supplies segment. The polishing supplies segment designs, manufactures and markets carriers, templates and equipment used in the lapping and polishing of wafer-thin materials, including silicon wafers used in the production of semiconductors.

Information concerning our business segments is as follows:

	Years Ended September 30,		
	2006	2005	2004
	(dollars in thousands)		
Net revenues:			
Semiconductor equipment	$ 33,363	$ 20,668	$ 13,215
Polishing supplies	7,082	7,231	6,084
	$ 40,445	$ 27,899	$ 19,299
Operating income (loss):			
Semiconductor equipment	$ 722	$ (1,035)	$ (2,184)
Polishing supplies	913	791	149
	1,635	(244)	(2,035)
Interest income (expense), net	(37)	70	(66)
Income (loss) before income taxes	$ 1,598	$ (174)	$ (2,101)
Capital expenditures:			
Semiconductor equipment	$ 533	$ 250	$ 328
Polishing supplies	423	29	751
	$ 956	$ 279	$ 1,079
Depreciation and amortization expense:			
Semiconductor equipment	$ 466	$ 515	$ 422
Polishing supplies	176	160	88
	$ 642	$ 675	$ 510

	As of September 30,	
	2006	2005
Identifiable assets:		
Semiconductor equipment	$ 19,565	$ 13,678
Polishing supplies	3,999	4,023
	$ 23,563	$ 17,701

Goodwill:		
Semiconductor equipment	$ 89	$ 89
Polishing supplies	728	728
	$ 817	$ 817

The Company has manufacturing operations in the United States and The Netherlands. Revenues, operating income (loss) and identifiable assets by geographic region are as follows:

	Years Ended September 30,		
	2006	2005	2004
	(dollars in thousands)		
Net revenues:			
United States	$ 24,417	$ 16,691	$ 9,528
The Netherlands	16,027	11,208	9,771
	$ 40,445	$ 27,899	$ 19,299
Operating income (loss):			
United States	$ 1,786	$ (458)	$ (886)
The Netherlands	(151)	214	(1,149)
	$ 1,635	$ (244)	$ (2,035)

	As of September 30,	
	2006	2005
Net Long-lived Assets (excluding intangibles and goodwill)		
United States	$ 1,367	$ 1,195
The Netherlands	1,016	742
	$ 2,382	$ 1,937

11. Income Taxes

The components of the provision for income taxes are as follows:

	Year Ended September 30,		
	2006	2005	2004
	(dollars in thousands)		
Current:			
Domestic Federal	$ 411	$ (25)	$ (79)
Foreign	(245)		
Domestic state	114	110	13
	280	85	(66)
Deferred:			
Domestic Federal			875
Foreign			
Domestic state			255
			1,130
	$ 280	$ 85	$ 1,064

A reconciliation of actual income taxes to income taxes at the expected United States federal corporate income tax rate of 34 percent is as follows:

	Year Ended September 30,		
	2006	2005	2004
	(dollars in thousands)		
Tax provision (benefit) at the statutory federal rate	$ 543	$ (59)	$ (714)
Effect of permanent book-tax differences	(99)	30	13
State tax provision	75	44	2
Valuation allowance for net deferred tax assets	(222)	81	1,768
Other items	(17)	(11)	(5)
	$ 280	$ 85	$ 1,064

Deferred income taxes reflect the tax effects of temporary differences between the carrying value of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The tax effects of temporary book-tax differences that give rise to significant portions of the deferred tax asset and deferred tax liability are as follows:

	Year Ended September 30,		
	2006	2005	2004
	(dollars in thousands)		
Deferred tax assets - current:			
Capitalized inventory costs	$ 205	$ 121	$ 169
Inventory write-downs	412	586	651
Deferred profits	377	223	352
Accruals and reserves not currently deductible	467	319	270
	1,461	1,249	1,442
Deferred tax assets - non-current:			
Stock option espense	17		
Federal net operating losses		552	274
State net operating losses	172	136	120
	189	688	394
Deferred tax liabilities - non-current			
Book vs. tax depreciation and amortization	(17)	(82)	(68)
Total deferred tax assets - net	1,633	1,855	1,768
Valuation allowance	(1,633)	(1,855)	(1,768)
Deferred tax assets net of valuation allowance	$	$	$

Changes in the deferred tax valuation allowance are as follows:

	Year Ended September 30,		
	2006	2005	2004
	(dollars in thousands)		

Balance at the beginning of the year	$ 1,855	$ 1,768	$
Additions (subtractions) to valuation allowance	(222)	87	1,768
Balance at the end of the year	$ 1,633	$ 1,855	$ 1,768

The Company has approximately $2.5 million of Arizona state net operating loss carryforwards at September 30, 2006, which expire in varying amounts between 2007 and 2011. These net operating losses have been fully reserved.

Statement of Financial Accounting Standards (SFAS) No. 109 Accounting for Income Taxes (SFAS 109) requires that a valuation allowance be established when it is more likely than not that all or a portion of deferred tax assets will not be realized A review of all available positive and negative evidence needs to be considered, including a company s performance, the market environment in which the company operates and the length of carry back and carryforward periods. SFAS 109 further states that forming a conclusion that a valuation allowance is not needed is difficult when there is negative evidence such as cumulative losses in recent years. Therefore, cumulative losses weigh heavily in the overall assessment. As a result of the review undertaken at September 30, 2004, it was concluded that it was appropriate to establish a full valuation allowance for net deferred tax assets. Based on a review as of September 30, 2006, the Company determined that it is appropriate to continue to record a full valuation allowance for net deferred tax assets.

12. Selected Quarterly Data (Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In thousands, except per share amounts)			
Fiscal Year 2006:				
Revenue	$ 7,914	$ 10,892	$ 10,351	$ 11,288
Gross margin	$ 2,537	$ 2,737	$ 2,643	$ 2,658
Net income	$ 471	$ 182	$ 168	$ 497
Net income per share:				
Basic	$ 0.16	$ 0.05	$ 0.05	$ 0.14
Shares used in calculation	2,708	2,881	3,437	3,475
Diluted	$ 0.14	$ 0.05	$ 0.05	$ 0.14
Shares used in calculation	3,387	3,481	3,521	3,518
Fiscal Year 2005:				
Revenue	$ 7,172	$ 8,915	$ 5,507	$ 6,305
Gross margin	$ 2,134	$ 2,507	$ 1,732	$ 1,295
Net income (loss)	$ 68	$ 503	$ 132	$ (962)
Net income (loss) per share:				
Basic	$ 0.03	$ 0.19	$ 0.04	$ (0.37)
Shares used in calculation	2,705	2,705	2,705	2,705
Diluted	$ 0.02	$ 0.18	$ 0.04	$ (0.37)
Shares used in calculation	2,760	2,754	3,177	2,705

13. Acquisition

On July 1, 2004, the Company acquired, through its wholly owned subsidiaries, Bruce Technologies, Inc. and Tempress Systems, Inc., certain semiconductor horizontal diffusion furnace operations and assets in the United States and Europe from Kokusai Semiconductor Equipment Corporation and its affiliate Kokusai Electric Europe, GmbH. The cost of the acquisition was approximately $3.9 million, including $3.3 million paid at closing, $0.3 million of transaction costs, and the assumption of approximately $0.3 million of liabilities.

The assets acquired principally consist of intellectual property and technology, customer lists, customer contracts, trademarks, non-compete agreements, inventories and other tangible property used in connection with the acquired business. Liabilities assumed include obligations under certain contracts, leases, purchase orders and warranty claims for certain products and services under warranty as of the date of the acquisition.

The seller s cost of the domestic inventory was $3.2 million for which the Company paid $2.2 million. If, within 5 years from the acquisition date, the Company sells or consumes in operations domestic inventory received in the acquisition in excess of $2.2 million, it will make contingent payments for the quantities used based upon the seller s cost of the inventory, with such contingent payments capped at $1.0 million.

The valuation of intangible assets was determined with the assistance of an independent third-party consultant. The fair value of intangible assets was determined by a valuation approach that estimates the future economic benefit stream of the asset. This benefit stream was then discounted to present value with an appropriate risk-adjusted discount rate.

The allocation of the purchase price to the fair value of the assets acquired and liabilities assumed at the date of acquisition is as follows (dollars in thousands):

		Useful Life
Assets Acquired:		
Inventories	$ 2,346	
Intangible assets:		
Non-compete agreements	350	10 years
Customer relationships	276	15 years
Trademarks and trade names	592	Indefinite
Backlog/acquired contracts	50	6 months
Technology	102	4 years
Property, plant and equipment	54	
Goodwill	89	
Total assets acquired	3,859	
Liabilities Assumed:		
Accrued warranty expense	108	
Severance liability	152	
Total liabilities assumed	260	
Net assets acquired	$ 3,599	

The following condensed consolidated pro forma financial information was prepared assuming that the acquisition had occurred at the beginning of the year ended September 30, 2004. This pro forma information does not necessarily reflect the results of operations that would have occurred had the acquisition taken place at the beginning of the period and is not necessarily indicative of results that may be obtained in the future (unaudited) (dollars in thousands except per share amounts):

	For the Year Ended September 30, 2004
Revenues	$ 26,971
Net loss	$ (2,478)
Net loss per share:	
Basic	$ (.92)
Diluted	$ (.92)

14. Restructuring Charge

In June 2006, Amtech adopted a plan to consolidate the manufacturing of its automation product line into facilities already used to manufacture diffusion furnaces. Amtech s automation products are often sold in conjunction with the sale of new diffusion furnaces. As a result of this decision, the company notified certain personnel of the termination date and severance and recorded a restructuring charge of $190,000, of which $88,000 had been paid as of September 30, 2006. These charges are presented as a separate line item on the Consolidated Statements of Operations.

15. Subsequent Event

In October 2006, Amtech received $0.4 million of additional long-term financing secured by new equipment acquired prior to the end of fiscal 2006. This debt will be repaid in sixty (60) equal monthly payments of $7,000, which includes interest at 7.43% per annum.

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

On May 18, 2005, the Company received notification that the firm of KPMG LLP (KPMG) had declined to stand for reappointment as the Company s independent accountants and that the client-audit relationship between the Company and KPMG had ceased.

During the two years ended September 30, 2004 and the subsequent interim period ended May 18, 2005, there were no disagreements between the Company and KPMG on any matters of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which, if not resolved to the satisfaction of KPMG, would have been referred to in their reports. KPMG s report on the Company s financial statements for the two years ended September 30, 2004 did not contain an adverse opinion or a disclaimer of opinion and was not qualified or modified as to uncertainty, audit scope or accounting principles. In addition, during the two years ended September 30, 2004 and the subsequent interim period through May 18, 2005, there were no reportable events (as defined in Item 304(a)(1)(v) of Securities and Exchange Commission Regulation S-K).

On May 24, 2005, pursuant to the approval of its Audit Committee, the Company engaged Mayer Hoffman McCann P.C. (Mayer Hoffman) to serve as its new independent accountants. Anticipating future cost savings, the Audit Committee had undertaken an evaluation of a potential change in independent accountants prior to receiving notification that KPMG would not stand for reappointment. The Audit Committee selected Mayer Hoffman based on that firm s accounting expertise, the resources the firm has committed to assign to the Company s account and the fee estimates provided to the Audit Committee for the firm s services.

During the years ended September 30, 2004 and 2003 and the subsequent interim periods, the Company did not consult with Mayer Hoffman regarding either (i) the application of accounting principles to a specified transaction or the type of audit opinion that might be rendered on the Company s financial statements or (ii) any matter that was either the subject of a disagreement (as defined in Item 304(a)(l)(iv) of Regulation S-K) or a reportable event (as defined in Item 304(a)(l)(v) of Regulation S-K).

ITEM 9A. CONTROLS AND PROCEDURES

Our management, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), has carried out an evaluation of the effectiveness of our disclosure controls and procedures as of September 30, 2006, pursuant to Exchange Act Rules 13a-15(e) and 15(d)-15(e). Based upon that evaluation, our CEO and CFO have concluded that as of such date, our disclosure controls and procedures in place were effective as of the end of the period covered by this Annual Report.

There have been no changes in our internal controls over financial reporting during the fourth quarter of fiscal 2006 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth information regarding the executive officers and directors of the Company. The subsequent paragraphs contain biographical data for each director.

Name	Age	Position with the Company
Jong S. Whang	61	President, Chief Executive Officer and Director
Bradley C. Anderson	45	Vice President Finance, Chief Financial Officer, Treasurer and Secretary
Robert T. Hass	56	Chief Accounting Officer
Lawrence D. Firestone	48	Director
Robert F. King	73	Director

Jong S. Whang has been President, Chief Executive Officer and a Director of the Company since its inception in 1981, and was one of its founders. Mr. Whang s responsibilities include the sales effort for our semiconductor equipment business and the development of new products and business opportunities in that industry. He has 33 years of experience in the semiconductor industry, including time spent in both processing and manufacturing of equipment components and systems. From 1973 until 1979, he was employed by Siltronics, Inc., initially as a technician working with chemical vapor deposition, and later as manager of the quartz fabrication plant with responsibility of providing technical marketing support. From 1979 until 1981, he was employed by U.S. Quartz, Inc. as manufacturing manager. In 1981, he left U.S. Quartz to form the Company.

Bradley C. Anderson joined us as Vice President-Finance, Chief Financial Officer, Treasurer and Secretary in April 2006. Prior to that, Mr. Anderson spent several years in a consulting role implementing the internal control requirements of the Sarbanes-Oxley Act for a broad range of publicly held companies. From 1996 to 2002, Mr. Anderson served as Vice President-Finance and then as Chief Financial Officer of Zila, Inc., an international provider of healthcare technology and products. Mr. Anderson began his career with Deloitte (formerly Deloitte & Touche) where he worked for over 11 years. He graduated from Brigham Young University with a Bachelor of Science in Accounting. Mr. Anderson is Certified Public Accountant.

Robert T. Hass has been the Chief Accounting Officer and Assistant Secretary of the Company since April 2006. Prior to that, he served as our Vice President Finance, Chief Financial Officer, Treasurer and Secretary from June 1992 to April 2006, and as Director from February 1996 to March 2006. From 1991 until May, 1992, he operated a financial consulting practice. From 1985 to 1991, Mr. Hass was Director of Accounting Services and then Controller for Lifeshares Group, Inc., and from 1988 to 1991 was Controller and Chief Accounting Officer of some of Lifeshares subsidiaries. From 1984 to 1985, he was Vice President Finance and Treasurer of The Victorio Company. From 1977 to 1984, he served in various capacities including Vice President, Chief Financial Officer and Treasurer of Altamil Corporation, then a public diversified manufacturing company. From 1972 to 1977, he was an auditor with Ernst & Ernst, now known as Ernst & Young. Mr. Hass has a Bachelor of Science degree in accounting from Indiana University.

Lawrence D. Firestone is the Executive Vice President, Chief Financial Officer of Advanced Energy Industries, Inc., a supplier of power supplies and mass flow controllers to the semiconductor, solar, flat panel display, data storage and other industries. From 1999 to 2006, Mr. Firestone served as the Chief Financial Officer, Secretary and Treasurer of Applied Films Corporation, a supplier of thin film deposition equipment to several industries, including the solar cell industry, with global operations, and the Senior Vice President of Applied Films from 2003 to 2006. From 1996 until 1999, Mr. Firestone served as Vice President and Chief Operating Officer of Avalanche Industries, Inc., a contract manufacturer of custom cables and harnesses. From 1993 to 1996, Mr. Firestone served as Director of Finance and Operations for the Woolson Spice and Coffee Company, a gourmet coffee roasting and distribution company, and from 1988 to 1993, as Vice President and Chief Financial Officer for TechniStar Corporation, a manufacturer of robotic automation equipment. From 1981 to 1988, Mr. Firestone served in various capacities and finally as Vice President and Chief Financial Officer at Colorado Manufacturing Technology, a contract manufacturer that specialized in printed circuit board and cable assembly. Additionally, until July 2005, Mr. Firestone served on the board of directors of HyperSpace Communications, Inc. (AMEX: HCO), and he served as chairman of their audit and governance committees. Mr. Firestone has a Bachelor of Science degree in business administration with a concentration in accounting from Slippery Rock State College.

Robert F. King has been a Director of the Company since May 2003. Since 1989, Mr. King has been President of King Associates, which provides consulting services to equipment companies serving the semiconductor and flat panel display industries. He currently serves on the advisory board of a privately-held company, which provides equipment to the flat panel display industry. From 1968 to 1988, Mr. King was employed at Varian Associates, where he served in various marketing positions, including Vice President of Marketing for the Semiconductor Equipment Division. Mr. King also served on the Board of Directors of Varian s joint venture semiconductor equipment companies located in Korea and Japan.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires the Company s directors and executive officers, as well as persons beneficially owning more than 10% of our outstanding Common Stock, to file certain reports of ownership with the SEC within specified time periods. Such officers, directors and shareholders are also required by SEC rules to furnish the Company with copies of all Section 16(a) forms they file.

Based solely on our review of such forms received by us during the fiscal year ended September 30, 2006, or written representations from certain reporting persons, we believe that between October 1, 2005 and September 30, 2006, all Section 16(a) filing requirements applicable to its officers, directors and 10% shareholders were complied with.

CODE OF ETHICS

The Board of Directors has adopted a Code of Ethics for all employees of the Company, as recommended by the Audit Committee. A copy of this Code of Ethics may be viewed on our website (www.amtechsystems.com), or obtained at no charge by written request to the Company s Corporate Secretary.

ITEM 11. EXECUTIVE COMPENSATION

The following table sets forth information regarding annual and long-term compensation for services rendered to the Company during the fiscal years ended September 30, 2006, 2005 and 2004 by the Company s Chief Executive Officer and the other most highly compensated executive officers of the Company who received annual compensation exceeding $100,000 during such periods (collectively, the Named Executive Officers).

SUMMARY COMPENSATION TABLE

					Long-Term Compensation			
		Annual Compensation (1)			Awards		Payouts	
Name and Principal Position	Fiscal Year	Salary (2)	Bonus (3)(4)	Other Annual Compensation	Restricted Stock Awards	Securities Underlying Options/SARs	Long-term Incentive Plans	All Other Compensation
Jong S. Whang	2006	$ 175,361	$ 100,000					
President and Chief	2005	$ 150,722	$ 18,555					
Executive Officer	2004	$ 150,722	$					
Bradley C. Anderson	2006	$ 75,015	$ 16,000	0	0	10,000	0	
Chief Financial Officer								
Robert T. Hass	2006	$ 116,885	$					
Chief Accounting	2005	$ 102,000	$					
Officer	2004	$ 102,000	$ 57,461					

(1) Messrs. Whang, Anderson and Hass have not received personal benefit perquisites in excess of the lesser of $50,000 or 10% of their aggregate salary and bonus.

(2) Effective March 15, 2001, Mr. Whang entered into a five-year employment agreement with the Company. The agreement provided for an annual base salary of $188,402, with annual increases of no less than 5%. Effective April 1, 2001, Mr. Whang voluntarily reduced his annual salary by 20% to $150,722, which reductions remained in effect as of the end of fiscal 2005. Mr. Whang s annual salary was increased to $200,000 effective April 2006 following the expiration of his employment contract, and was increased to $250,000 effective December 1, 2006. Effective April 1, 2001, Mr. Hass voluntarily reduced his annual salary by 15% to $102,000, which reductions remained in effect as of the end of fiscal 2005. Mr. Hass annual salary was restored to $120,000 effective December 2005. Mr. Anderson joined the company April 24, 2006 at an annual salary of $169,600, which was increased to $189,600 effective December 1, 2006.

(3) See Employment And Change In Control Arrangements for a description of how Mr. Whang s incentive compensation is determined.

(4) The discretionary cash bonus granted to Mr. Hass in 2004 was in consideration of work performed in connection with the acquisition of Bruce Technologies, Inc.

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Option Grants in Last Fiscal Year

Name and Principal Position	Number of securities underlying options granted (#)	Percent of total options ganted to employees in fiscal year 2006	Exercise Price $/Share	Expiration Date	Potential realizable value at assumed annual rates of stock price appreciation for option term 5%	10%
Bradley C. Anderson Chief Financial Officer	10,000	46%	$ 8.51	4/24/2016	$ 54,000	$ 136,000

Aggregated Option Exercises and Fiscal Year-End Option Values

The following table sets forth information (on an aggregated basis) concerning exercises of stock options during fiscal 2006 by each of the Named Executive Officers, and the year-end value of unexercised options.

Name	Shares Acquired On Exercise (#)	Value Realized ($)	Number of Securities Underlying Unexercised Options at Fiscal Year-End (#)		Value of Unexercised In-The-Money Options at Fiscal Year-End($) (1)	
			Exercisable	Unexercisable	Exercisable	Unexercisable
Jong S. Whang	44,000	312,000	150,000		$ 23,000	
Bradley C. Anderson				10,000		
Robert T. Hass	9,000	65,000	1,000	1,000	$ 2,000	$ 2,000

(1) Options are in-the-money at the fiscal year-end if the fair market value ($6.65 per share, based on the closing price of the Company s Common Stock on the NASDAQ Stock Market on September 30, 2006) of the underlying securities exceeds the exercise or base price of the option on such date. The dollar values in the last two columns of the table are the amounts by which the sum of the fair market values of the in-the-money options exceed the sum of their exercise prices.

Directors Compensation

Directors who are full-time employees of the Company receive no additional compensation for serving as directors. Non-employee directors receive an annual retainer of $8,000 and fees of $1,250 per Board meeting attended in person and $750 per Board meeting attended telephonically and per committee meeting attended. In addition, under the Company s Non-Employee Directors Stock Option Plan, each outside director currently receives an annual grant of options to purchase 6,000 shares of Common Stock, or such other number of shares as maybe determined by the Board, when first elected or appointed to the Board, and 5,000 shares of Common Stock, or such other number of shares as maybe determined by the Board, upon each re-election to the Board at the Company s Annual Meeting of Shareholders. The exercise price of the options is set at the fair market value of Common Stock on the date of grant. Each option has a term of ten years and is exercisable in three equal installments commencing on the first anniversary of the date of grant and continuing for the two successive anniversaries thereafter. In the event of disability (as defined in the plan) or death of an outside director, all options remain exercisable for a period of 30 days following the date such person ceased to be a director, or such other date as may be determined by the Board, but only to the extent such options were exercisable on the date the director ceased to be a director. Furthermore, the director serving as the Chairman of the Audit Committee and the Audit Committee Financial Expert receives an annual retainer of $14,000.

Compensation Committee Interlocks and Insider Participation

The Compensation and Option Committee is presently comprised of Mr. Robert F. King, and Mr. Lawrence D. Firestone who are not, and have never been, an officer or employee of the Company.

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

The following table sets forth certain information, as of September 30, 2006, concerning outstanding options and rights to purchase Common Stock granted to participants in all of the Company s equity compensation plans and the number of shares of Common Stock remaining available for issuance under such equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders (1)	308,384	5.95	255,837
Equity compensation plans not approved by security holders			
Total	308,384		255,837

(1) Represents the 1995 and 1998 Employee Stock Option Plans and the Non-Employee Director Stock Option Plan and any respective amendments thereto.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

The following table sets forth certain information concerning the beneficial ownership of our Common Stock as of December 8, 2006, by (i) each director and executive officer of the Company, including the Named Executive Officers, (ii) all executive officers and directors of the Company as a group, and (iii) each person known by the Company to be the beneficial owner of more than 5% of our Common Stock. This information was determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended, and is based upon the information furnished by the persons listed below. Except as otherwise indicated, each shareholder listed possesses sole voting and investment power with respect to the shares indicated as being beneficially owned.

Name and Address (1) (2)	No. of Shares of Common Stock Beneficially Held (3)	Percent of Common Stock Ownership (3)
Officers and Directors:		
Jong S. Whang	234,455(4)	6.5%
Robert T. Hass	35,375(5)	1.0%
Bradley C. Anderson	1,000	*
Lawrence D. Firestone	2,000(6)	*
Robert F. King	11,000(7)	*
Director and Officer Total	283,830(8)	8.2%
5% Shareholders:		
Robert Sussman 520 Madison Avenue, 41st Floor New York, NY 10022	202,500(9)	5.8%
Richard L. Scott 700 11th StreetS, Suite 101 Naples, FL 34102	484,054(10)	13.9%
Steven N. Bronson 100 Mill Plain Road Danbury, CN 06811	194,849(11)	5.6%

* Less than 1%.

(1) Except as otherwise noted, the address for each person listed in this table is c/o Amtech Systems, Inc., 131 South Clark Drive, Tempe, Arizona 85281.

(2) Mr. Whang is the Company s President, CEO and a director. Mr. Hass is the Chief Accounting Officer. Mr. Anderson is the Company s Vice President-Chief Financial Officer, Treasurer and Secretary. Messrs. King and Firestone are directors of the Company.

(3) The share amounts and percentages shown include shares of Common Stock actually owned as of December 8, 2006, and shares of Common Stock with respect to which the person had the right to acquire beneficial ownership within 60 days of such date pursuant to options or warrants. All shares of Common Stock that the identified person had the right to acquire within 60 days of December 8, 2006, upon the exercise of options or warrants, are deemed to be outstanding when computing the percentage of the securities owned by such person, but are not deemed to be outstanding when computing the percentage of the securities owned by any other person.

(4) Includes (i) 351 shares held jointly with Mr. Whang s spouse and (ii) 150,000 shares issuable upon exercise of options exercisable within 60 days of December 8, 2006.

(5) Includes 26,000 shares issuable upon exercise of options exercisable within 60 days of December 8, 2006.

(6) Includes 2,000 shares issuable upon exercise of options exercisable within 60 days of December 8, 2006.

(7) Includes 11,000 shares issuable upon exercise of options exercisable within 60 days of December 8, 2006.

(8) Includes 189,000 shares issuable upon exercise of options exercisable within 60 days of December 8, 2006.

(9) Includes 2,500 shares jointly owned with Mr. Sussman s spouse.

(10) Mr. Scott is a controlling member of Amtech Investments, LLC, a member-managed limited liability company which owns 484,054 shares of Common Stock.

(11) Mr. Bronson is managing member of Catalyst Fund GP, LLC, which is the general partner of Catalyst Fund, L.P. Catalyst Fund, L.P. owns 136,449 shares of Common Stock.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company had no transactions during fiscal 2006 with any director, director nominee, executive officer, security holder known to the Company to own of record or beneficially more than 5% of the Common Stock, or any member of the immediate family of any of the foregoing persons, in which the amount involved exceeded $60,000.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated herein by reference to the Proxy Statement, which will be filed with the Securities and Exchange Commission within 120 days of the end of our fiscal year.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) The consolidated financial statements required by this item are set forth on the pages indicated at Item 8.

(2) All financial statement schedules are omitted because they are either not applicable, or because the required information is shown in the consolidated financial statements or notes thereto.

(3) Exhibits: The response to this section of Item 15 is included in the Exhibit Index of the Annual Report and is incorporated herein by reference.

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.

AMTECH SYSTEMS, INC.

December 21, 2006

By: /s/ Bradley C. Anderson

Bradley C. Anderson,
Vice President Finance and
Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report on Form 10-K 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
*	Chairman of the Board,	December 21, 2006
Jong S. Whang	President and Chief Executive Officer (Principal Executive Officer)	
/s/ Bradley C. Anderson	Vice President Finance	December 21, 2006
Bradley C. Anderson	and Chief Financial Officer (Principal Financial Officer)	
*	Chief Accounting Officer	December 21, 2006
Robert T. Hass	(Principal Accounting Officer)	
*	Director	December 21, 2006
Lawrence D. Firestone		
*	Director	December 21, 2006
Robert F. King		

*By: /s/ Bradley C. Anderson

Bradley C. Anderson, Attorney-In-Fact**

**By authority of the power of attorney filed as Exhibit 24 hereto.

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION	METHOD OF FILING
3.1	Articles of Incorporation	A
3.2	Articles of Amendment to Articles of Incorporation, dated April 27, 1983	A
3.3	Articles of Amendment to Articles of Incorporation, dated May 19, 1987	B
3.4	Articles of Amendment to Articles of Incorporation, dated May 2, 1988	C
3.5	Articles of Amendment to Articles of Incorporation, dated May 28, 1993	D
3.6	Articles of Amendment to Articles of Incorporation, dated March 14, 1999	E
3.7	Certificate of Designations, Preferences and Privileges of the Series A Convertible Preferred Stock, dated April 21, 2005	M
3.8	Amended and Restated Bylaws	F
4.1	Rights Agreement dated May 17, 1999	G
4.2	Form of Subscription Agreement for the Series A Convertible Preferred Stock	M
4.3	Form of Common Stock Certificate	*
10.1	Amended and Restated 1995 Stock Option Plan	H
10.2	Non-Employee Directors Stock Option Plan	I
10.3	Amendment to Non-Employee Directors Stock Option Plan effective July 8, 2005	O
10.4	Employment Agreement with Robert T. Hass, dated May 19, 1992	J
10.5	1998 Employee Stock Option Plan (Amended as of March 29, 2002)	K
10.6	Asset Purchase Agreement, dated May 3, 2004, by and between Kokusai Semiconductor Equipment Corporation and the Company	L
10.7	Amendment, dated June 25, 2004, to the Asset Purchase Agreement by and between Kokusai Semiconductor Equipment Corporation and the Company	L
10.8	Amendment, dated July 1, 2004, to the Asset Purchase Agreement by and between Kokusai Semiconductor Equipment Corporation and the Company	L
10.9	Asset Purchase Agreement, dated May 3, 2004, by and between Kokusai Electric Europe GmbH and the Company	L
10.10	Amendment, dated June 25, 2004, to the Asset Purchase Agreement by and between Kokusai Electric Europe GmbH and the Company	L
10.11	Warrant to Purchase Common Stock, dated April 22, 2005	O
10.12	Loan and Security Agreement (Domestic), dated April 7, 2006, between Silicon Valley Bank and the Company	Q
10.13	Loan and Security Agreement (EXIM), dated April 7, 2006, between Silicon Valley Bank and the Company	Q
10.14	Export-Import Bank of the United States Working Capital Guarantee Program Borrower Agreement, dated April 7, 2006	Q
10.15	Third Amendment to Lease, dated as of August 11, 2006, between Wakefield Investments, Inc. and Bruce Technologies, Inc.	R
16	Letter from KPMG LLP declining to stand for reappointment	N
21	Subsidiaries of the Registrant	*
23.1	Consent of Independent Registered Public Accounting Firm - Mayer Hoffman McCann P.C.	*
23.2	Consent of Independent Registered Public Accounting Firm - KPMG LLP	*
24	Powers of Attorney	*

31.1	Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
31.2	Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*

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* Filed herewith.

A Incorporated by reference to Amtech s Form S-1 Registration Statement No. 2-83934-LA.

B Incorporated by reference to Amtech s Annual Report on Form 10-K for the year ended September 30, 1987.

C Incorporated by reference to Amtech s Annual Report on Form 10-K for the year ended September 30, 1988.

D Incorporated by reference to Amtech s Form S-1 Registration Statement (File No. 33-77368).

E Incorporated by reference to Amtech s Annual Report on Form 10-K for the year ended September 30, 1999.

F Incorporated by reference to Amtech s Annual Report on Form 10-K for the year ended September 30, 1991.

G Incorporated by reference to Amtech s Current Report on Form 8-A, filed with the Securities and Exchange Commission on May 17, 1999.

H Incorporated by reference to Amtech s Form S-8 Registration Statement (related to the Amended and Restated 1995 Stock Option Plan), filed with the Securities and Exchange Commission on August 9, 1996.

I Incorporated by reference to Amtech s Form S-8 Registration Statement (related to the Non-Employee Director Stock Option Plan), filed with the Securities and Exchange Commission on August 9, 1996.

J Incorporated by reference to Amtech s Annual Report on Form 10-K for the year ended September 30, 1993.

K Incorporated by reference to Amtech s Form S-8 Registration Statement (related to the 1998 Employee Stock Option Plan), filed with the Securities and Exchange Commission on February 11, 2003.

L Incorporated by reference to Amtech s Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 15, 2004.

M Incorporated by reference to Amtech s Current Report on Form 8-K filed with the Securities and Exchange Commission on April 28, 2005.

N Incorporated by reference to Amtech s Current Report on Form 8-K filed with the Securities and Exchange Commission on May 24, 2005.

O Incorporated by reference to Amtech s Annual Report on Form 10-K for the year ended September 30, 2005.

P Incorporated by reference to Amtech s Annual Report on Form 10-K for the year ended September 30, 2006.

Q Incorporated by reference to Amtech s Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 12, 2006.

R Incorporated by reference to Amtech s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2006.