AUGUST TECHNOLOGY CORP
Form 10-K
March 04, 2003

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2002 **Commission File Number 000-30637**

AUGUST TECHNOLOGY CORPORATION

(Exact name of Registrant as specified in its charter)

Minnesota	**41-1729485**
(State of incorporation)	(IRS Employer Identification No.)
4900 West 78th Street **Bloomington, MN** (Address of principal executive offices)	**55435** (Zip Code)

(952) 820-0080
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act: None

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

Title of each class:
Common Stock, no par value

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

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 the 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 an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes o No ý

The aggregate market value of voting stock held by nonaffiliates of the Registrant was $33,285,017 as of February 21, 2003.

The number of shares of Common Stock, no par value, outstanding as of February 21, 2003 was 13,163,592.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement to be delivered to shareholders in connection with the 2003 Annual Meeting of Shareholders are incorporated by reference into Part III.

AUGUST TECHNOLOGY CORPORATION

FORM 10-K

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PART I

Item 1. Business

Company Overview

Since being founded in 1992, August Technology has become recognized as a world-class provider of machine vision solutions for a variety of device manufacturing applications. From our initial product offering, a wafer carrier inspection system, through the introduction of the first fully automated second optical wafer and die defect inspection system, and more recently with the industry's first two-dimensional (2D) and three-dimensional (3D) defect and metrology inspection system specifically designed for advanced packaging, we have continued to enhance our leadership position in the implementation of automated defect inspection throughout all microelectronic industries.

Our automated defect inspection systems provide manufacturers with information, which enables process-enhancing decisions, ultimately lowering manufacturing costs, improving time-to-market and enhancing the performance of their products. With hundreds of systems installed throughout the world, our products are proven and effective solutions for microelectronic device applications including semiconductors, advanced packaging, optoelectronics, photonics, micro electromechanical systems (MEMS), data storage and micro display manufacturing.

Headquartered in Bloomington, Minnesota, with offices and representation across the globe, we successfully serve our customers through our core competencies in the design, development and manufacture of inspection software and hardware products as well as with world-class marketing, sales, distribution and service. We currently offer several highly modular and flexible product families that provide a vast array of options for meeting these inspection and metrology needs.

Company Vision

Microelectronic device manufacturers are continually challenged to meet the price and performance demands placed on them by their customers. To meet these challenges, these device manufacturers must continually accelerate their time to market, reduce costs and improve device performance. Consequently, they are making significant manufacturing process enhancements such as the move toward 300mm wafer processing, the implementation of advanced packaging techniques (including wafer bumping) and the adoption of complete process automation and tool integration.

Due to the complexity of the microelectronic device manufacturing process, enhancements such as these pose significant implementation challenges. Increasingly, manufacturers are recognizing that timely, accurate and in depth process information enables the effective decision-making needed to address these challenges. We call the collection, analysis and management of this critical information, ***product characterization***.

We believe that our systems can have a significant impact on the ability of microelectronic device manufacturers to meet their cost, time to market and product performance goals by expanding our capability to provide them with process-enhancing information through innovative, flexible and affordable product characterization solutions. Our vision statement clearly states this course for our future:

It is our vision to dominate automated inspection and generate complete product characterization solutions for evolving microelectronic markets in order to drive down costs and time-to-market.

Our Market

Our customer base includes all companies that manufacture microelectronic devices on silicon, compound semiconductor or similar substrates. These companies include manufacturers of

semiconductor devices such as microprocessors and memory; optoelectronic devices such as lasers and light emitting diodes (LEDs); MEMS devices such as pressure transducers and micro-mirrors; data storage devices such as read write heads for hard drives; micro display devices; and other types of microelectronic devices. These devices are found in a wide variety of consumer products such as personal computers and computer peripherals, mobile phones, handheld electronic devices, set-top boxes, electronic games, security systems, automobiles and throughout the communications infrastructure in electrical, optical and wireless networks. Our customers are located throughout the world with the largest concentrations in North America, Taiwan, Southeast Asia, South Korea, Europe and Japan.

Our market opportunity is driven by the device manufacturers' need to better understand their manufacturing process, the quality of their products and their immediate need to ship only good devices. The industry has historically relied on people using microscopes and offline manual metrology systems to provide this information. However, these conventional manual characterization techniques are increasingly becoming obsolete as the manufacturing process has evolved and manufacturers cannot afford the time or expense of the inefficient and error-prone manual inspection process.

We offer solutions that provide critical process enhancing information through fully automatic inspection systems. Our core inspection technologies excel in applications where the defect sizes are 0.5 microns or greater, the same applications that have historically required manual inspections. Our systems provide the platforms with which manufacturers can replace their costly and slow manual inspections with high throughput, highly reliable and highly repeatable inspections that are virtually "transparent" to the manufacturing process. By incorporating proprietary software and hardware designs, innovative automated materials handling capabilities and expertise in machine vision technology, our defect inspection systems have advanced to the point where manufacturers can implement new cost saving and process improving inspections at points in the manufacturing process previously believed impractical for inspection.

Our Strategy

We have identified five strategic initiatives, critical to successfully implementing our vision. They are: Market Diversification, Technology Leadership, Customer Application Partnerships, Global Presence and External Growth.

Market Diversification

Our Market Diversification initiative leverages our core competencies across a variety of microelectronic industries and within multiple applications, maximizing our market opportunity while lessening the impact from the economic cycles of any one industry. We also are able to gain valuable application experience that ultimately leads us to develop additional technologies that enhance our competitive advantage in all of the markets we serve.

We also believe that our ability to interpret the needs of the customers within these markets is paramount to the success of our business. Therefore we emphasize the role of our marketing organization to provide foresight and a clear understanding of the needs of these markets and to identify possible solutions that may already exist in the industry, so that we will be ready when our customers are ready for us.

Technology Leadership

Our Technology Leadership initiative drives product innovation focused on the needs of our customers, emphasizing performance and cost leadership. This initiative allows us to increase our competitive win rate, maintain strong gross margins and build market dominance. In particular, we focus on:

Superior Performance: We strive to offer the best price/performance systems by focusing on our core competencies in machine vision technology, optics, lighting, precision motion control and data management.

Flexible Technologies: We focus on technologies that allow us to easily meet the growing and changing needs of our customers in a timely and cost effective manner. Our flexible designs enable us to serve multiple microelectronic markets with the same core products. Our modular solutions provide our customers with cost efficient choices to configure their systems to meet specific needs.

Complete solutions through data management: We provide products that not only collect inspection and metrology data but also facilitate engineering and manufacturing decisions by converting the data into useful process enhancing information. Our data management and analysis tools are designed to integrate seamlessly with our customers' manufacturing data management systems, enabling the fast and efficient flow of information.

Our Technology Leadership initiative drove increased product development investment in 2002, which resulted in several significant new product and feature introductions within our NSX Series, 3Di Series and YieldPilot product lines.

Customer Application Partnerships

Our Customer Application Partnership initiative allows our customers to maximize the benefit they receive as they integrate and optimize our systems in their production lines. This initiative is key to serving new and emerging markets where requirements are not always well known or understood, as well as more mature markets where active players have become complacent and rigid. Further, it helps us gain market access and anticipate market needs, while enhancing customer loyalty and providing competitive barriers.

Global Presence

Many of the microelectronics companies we serve have operations throughout Europe, the U.S. and Asia. Our Global Presence initiative drives the infrastructure necessary to support a global industry, effectively placing us in our customers' "backyard". We have created an efficient global sales network through an increasing direct sales and service presence in key regions of the world and select international distribution partnerships. Support services include web-based remote service capability and 24-hour global support.

In 2002, we enhanced our presence in Asia with added staff in our Taiwan office and direct sales and service in Singapore to better support our customers in Southeast Asia. For the first time, our overseas sales accounted for the majority of our annual revenues, Taiwan in particular accounted for 37% of the total. We are bullish about our strengths in Taiwan especially since the large Taiwanese foundries have shown themselves to be a catalyst for expansion in mainland China. We believe our direct presence in the region will allow us to effectively serve the emerging needs of greater China.

External Growth

In the existing competitive environment, especially in today's down industry, the go-it-alone strategy is no longer an option. Our External Growth initiative drives our active participation in industry collaborations between leading chip manufacturers and equipment suppliers and our efforts to capitalize on market opportunities through acquisitions, licensing and joint ventures. These collaborations serve as crucial forums for understanding industry trends and in some cases creating these trends.

A key 2002 activity was our involvement in developing the Advanced Packaging and Interconnect Alliance, (APiA), into a respected industry organization of over 25 leading equipment and materials suppliers. Our participation in the APiA has enabled us to build stronger relationships with industry leaders and government officials in key regions of microelectronics activity, including China, Singapore and Europe.

We are also members of the Die Products Consortium (DPC), a collaboration of leading chip manufacturers and equipment suppliers organized to accelerate the adoption of semiconductor devices without conventional packaging, a growing market that includes die packaged at the wafer level and other advanced applications. We believe that organizations such as the APiA and DPC will ultimately drive the need for advanced automated inspection products, increasing the market opportunity for us.

Our Solutions

Automated defect inspection systems-NSX Series.

We became pioneers of automated 0.5 micron and larger defect inspection in 1997 with the introduction of our NSX Series. These flexible automated wafer and die defect inspection systems deliver high-speed, consistent, reliable defect detection to microelectronic device manufacturers. As a replacement for humans in the inspection process, our NSX automated inspection systems significantly improve inspection quality while at the same time, increase the throughput of the inspection process and lower overall manufacturing costs. Our customers find that the NSX Series, with its flexibility and high throughput, provides them a method of collecting critical process information at numerous points in their manufacturing process, enabling them to make process improvements and filter out defective products with minimal impact on the manufacturing cycle time.

Revenues from the NSX Series represented 45% and 77% of our net revenues in 2002 and 2001, respectively. The NSX Series is driven by advanced proprietary software and includes integrated yield enhancement tools including automated data collection and reporting, extensive communication options and fast, easy setup using Windows®-based menus. The NSX handles all wafer sizes, 50mm up to 300mm, with both whole wafer and film frame capabilities. We currently offer the NSX-75, NSX-90, NSX-95 and the NSX-105, which was introduced in 2002. The new NSX-105 is the highest performance model in the series, demonstrating industry-leading inspection throughput and capabilities, and delivering the best price/performance ratio of all NSX models.

Our NSX Series systems range in price from approximately $275,000 to $1,100,000, depending on the complexity of the configuration. Customers may tailor systems toward their specific application, process, or budget by choosing from a range of system capabilities.

Automated wafer bump inspection systems-3Di Series.

We introduced our 3Di-8000 automated inspection and metrology system in 2001 as the first high throughput, 2D and 3D, metrology and defect inspection tool specifically designed for the latest and most advanced microelectronic device packaging processes, including flip-chip wafer bumping. In 2002, we enhanced this product family with the introduction of the affordable 3Di-7500 and a high performance 3Di-8500. The 3Di Series has quickly developed a reputation as an essential tool for those manufacturers with high volume advanced packaging manufacturing processes. With three model options, the 3Di Series is well suited to serve the needs of our customers.

Though closely related to the NSX Series in terms of its 2D defect inspection capabilities, the 3Di Series features our Rapid Confocal Sensor (RCS) 3D inspection technology. This patent-pending technology has demonstrated its high speed, high accuracy 3D inspection capabilities in

the production lines of leading semiconductor manufacturers. The RCS technology, conceived by merging the proven concepts of confocal microscopy with innovative optical design and proprietary software, meets and exceeds the performance of existing competitive 3D metrology technologies. The RCS is particularly well suited for the future of 3D bump and other advanced packaging inspection because of its ability to scale down to meet the future requirements of our customers. The 3Di Series, combining defect inspection and 2D and 3D metrology capabilities, offers a complete inspection solution for those manufacturers who bump wafers or handle them with subsequent processing.

In 2002, revenues from the 3Di Series represented 37% of our net revenues. As with the NSX Series, the 3Di Series is available with up to 300mm wafer handling in addition to film frame handling and may be tailored toward specific customer applications with various options and features. The 3Di Series currently ranges in price from approximately $475,000 to $1,300,000, depending upon the complexity of the configuration.

Defect review and process analysis software-YieldPilot.

Introduced in 2000, Yield*Pilot* provides our customers with additional functionality for their inspection process by both simplifying and speeding up the defect review process and providing an engineering data analysis tool that can be used to turn inspection data into useful process improving information. In 2002 we introduced an additional module for Yield*Pilot* that allows it to handle metrology data in addition to defect data, significantly enhancing its appeal to 3Di Series customers. Yield*Pilot* is sold in multiple configurations ranging from $65,000 to $220,000, providing users different capabilities depending on their needs.

Cassette verification and metrology-CV Series.

The CV Series is designed to automatically verify critical wafer carrier dimensions. Using advanced machine vision technology and proprietary software, our CV Series systems identify out-of-tolerance cassettes and 300mm FOUPs, allowing microelectronic device manufacturers to remove dimensionally defective carriers and thereby decrease wafer damage and improve yield. CV Series systems currently range in price from $115,000 to $250,000 depending upon the configuration of the system.

Research and Development

Our success depends on our ability to effectively develop and commercialize new technologies and products. Our research and development activities emphasize application development and new product introductions in collaboration with our customers. Our engineering teams support these efforts with software development, machine vision technology, optics, lighting and precision motion control expertise. Our research and development efforts throughout 2002 have focused on the introduction of our NSX-105, 3Di-7500 and 3Di-8500 models in addition to enhancements to our Yield*Pilot* software and existing systems in the NSX and 3Di Series. We also placed significant effort into leveraging our core automated visual inspection (AVI) technologies into other applications within the microelectronic manufacturing process and anticipate introducing new products related to this effort in 2003. We spent 39.3% of our net revenue on research and development during 2002, 26.7% during 2001 and 21.9% during 2000.

To maintain technology leadership and pursue customer driven opportunities for the application of our core AVI technologies, we plan to continue to invest in research and development to bring new products to market and add additional capabilities to extend our market leadership and meet our customers product characterization needs. Our investment in new product introductions and enhancements may contribute to fluctuations in operating results. Our customers may defer ordering existing products and our products may not be accepted in the marketplace. If new products have

reliability or quality problems, those problems may result in reduced orders, higher manufacturing costs, delays in acceptance of and payment for new products and additional service and warranty expenses. There can be no assurance that we will successfully develop and manufacture new hardware and software products. If we do not successfully introduce new products, our results of operations will be affected adversely.

Customers

We have sold our systems to many of the leading microelectronic device manufacturers throughout the world. In 2002, 52% of our net revenues were derived from sales outside of the U.S., consisting of 37% to customers in Taiwan and 15% to customers in other countries, including South Korea, Singapore, Northern Ireland, Japan, Switzerland and the United Kingdom. Customers accounting for greater than 10% of net revenues during 2002 included Intel Corporation and Silicon Precision Industries Co., Ltd. Customers accounting for greater than 10% of net revenues during 2001 included Intel Corporation and Seagate Technology LLC. There were no other customers, excluding our distributors, which accounted for greater than 10% of net revenues during 2002 or 2001.

Our business is cyclical and depends upon the capital expenditures of microelectronic device manufacturers, which in turn depend on the current and anticipated market demand for microelectronic devices and products utilizing these devices. Downturns in the microelectronic industry or slowdowns in the worldwide economy could have a material adverse effect on our future business and financial results.

Sales, Service and Marketing

We provide direct sales, service and field application support through strategically placed offices in key regions throughout the world. In the U.S., we currently have sales and service personnel in Silicon Valley, southern California, Arizona, Florida, New Mexico, North Carolina, Oregon, Texas and at our corporate headquarters in Minnesota. Internationally, we service our customers directly in Taiwan, China, Southeast Asia, the United Kingdom, Ireland, Benelux, Scandinavia and regions of France. In addition, we have sales and service personnel in Europe, Japan and South Korea to support our distributors in these areas.

In 2001, we modified our ongoing relationship with our distributor, Metron Technology B.V., to exclude Taiwan and made further modifications in 2002 to focus Metron's activities entirely on South Korea. We have also negotiated the termination of our distributor agreement with Firfax Systems in order to provide direct sales, customer service and support to customers in select territories in Europe. We market our products in Japan through Marubeni Solutions and in most of the continent of Europe through Quasys AG. Each of our primary distributors has entered into international distributor agreements with us. All of our distributor agreements grant our distributors an exclusive territory, provide for price and payment procedures, specify the applicable warranty procedures and contain a confidentiality provision.

We believe international sales will continue to be a significant percentage of our revenues. Our future performance will depend, in part, on our ability to continue to compete successfully in Asia, one of the largest markets for our products. Our ability to compete in this area is dependent upon the continuation of favorable trading relationships between countries in the region and the United States, and our continuing ability to maintain satisfactory relationships with customers in the region.

International sales and operations may be adversely affected by imposition of governmental controls, restrictions on export technology, political instability, trade restrictions, changes in tariffs and the difficulties associated with staffing and managing international operations. In addition, international sales may be adversely affected by the economic conditions in each country. These factors could have a material adverse effect on our future business and financial results.

Backlog

Our backlog was $9.1 million as of December 31, 2002, as compared to $5.2 million as of December 31, 2001. Our backlog consists of orders for which we have accepted purchase orders and assigned shipment dates within the next twelve months. These orders are subject to cancellation or delay by the customer without penalty. In addition, since only a portion of our revenues for any quarter represents systems in backlog, we do not believe that backlog is a meaningful or accurate indication of our future revenues and performance.

Competition

While we believe that we are currently the leader in the commercialization of solutions for the inspection of defects of 0.5 micron and larger, several other firms also manufacture similar products. In 2002, our primary competitors were Semiconductor Technologies & Instruments, Inc. ("STI"), Robotic Vision Systems, Inc., Electroglas, Inc. and Toray Industries, Inc. In addition, a number of other companies are active in the microelectronics capital equipment market, particularly in automated inspection for sub-micron defects in the wafer processing portion of the microelectronic device manufacturing process and could become competitors in the future. On February 26, 2003, we entered into a Settlement and Purchase Agreement with STI and its sole shareholder, ASTI Holding, Ltd. ("ASTI"), a Singapore Company, to purchase all of STI's outstanding stock and to resolve any remaining disputes with STI and ASTI with respect to our May 2002 Purchase Agreement with STI and ASTI which we terminated in August 2002.

Significant competitive factors in our market include performance, ease of use, development of new technologies, established customer base, application support, customer service, product flexibility, price and ability to deliver products on a timely basis. We believe we compete favorably with respect to these factors, but must continue to develop and design new and improved products in order to maintain our competitive position. Many of our competitors and potential competitors have substantially greater financial, engineering, manufacturing and marketing resources. We expect our competitors to continue to improve the design and performance of their current products and processes and to introduce new products and processes with improved price and performance characteristics. We believe that, to remain competitive, we will require significant financial resources to maintain sales and service support and to develop and enhance new and existing products.

Manufacturing

We perform system design, assembly and testing at our headquarters in Bloomington, Minnesota. We utilize an outsourcing strategy for the manufacture of many of our components and major subassemblies. Our manufacturing activities are considered horizontal in nature and consist primarily of testing and assembling parts, components and subassemblies (collectively "parts") acquired from our vendors, and integrating the parts into our products. To meet specific customer requirements, we often manufacture products that include custom system engineering and software development. Our manufacturing operations do not require a major investment in capital equipment.

We use numerous domestic and international vendors to supply parts for the manufacture and support of our products. Although we make reasonable efforts to ensure that parts are available from multiple qualified suppliers, this is not always possible; accordingly, some key parts may be obtained only from a single supplier or a limited group of suppliers. We endeavor to minimize the risk of product interruption by selecting and qualifying alternative suppliers for key parts, monitoring the financial condition of key suppliers and maintaining appropriate inventories of key parts. If we do not receive a sufficient quantity of parts in a timely and cost-effective manner to meet production requirements, our results of operations may be materially and adversely affected. We do not maintain long-term supply contracts with any of our suppliers. We do enter into blanket purchase orders with

key suppliers for parts with long lead times. These purchase orders are generally to lock-in price and provide the supplier with visibility of future requirements.

Intellectual Property

Proprietary information plays a significant role in the development of our products. We rely upon a combination of contract provisions and copyright, trademark, patent and trade secret laws to protect our proprietary know-how, ideas, inventions, goodwill and rights in our solutions and products. We also have a policy of seeking U.S. and foreign patents on technology considered of particular strategic or competitive importance. As of December 31, 2002, we have two issued U.S. patents and a variety of pending U.S. patent applications on our key inventions including those associated with our key product lines including the NSX and 3Di series. We have also applied for foreign patent rights in key strategic markets as to key solutions and products. The technological focus of the issued and pending applications includes general microelectronic 2D and 3D inspection techniques as well as devices, systems and processes in the following areas: lighting, focusing, sensing, viewing, material handling, imaging, inspecting and data manipulating.

Although we believe that the copyrights, trademarks and patents we own are of value, we do not believe that they will determine our success, which depends principally upon our engineering, manufacturing, marketing and service skills. We also license some of our exclusive and non-exclusive software programs from third party developers and incorporate them in our products.

In the normal course of business, we regularly monitor and make inquiries, if necessary, regarding possible infringement of our patents by others. Should it become necessary or prudent, we intend to protect our rights when, in our view, others infringe upon these rights. We similarly take necessary and prudent steps to respect the intellectual property rights of others.

Employees

As of December 31, 2002, we employed 162 people, including 63 in research and development, 33 in service, technical support and training, 27 in sales and marketing, 20 in administration and 19 in manufacturing. We also utilize independent contractors and temporary employees. None of our employees is represented by a labor union and we consider our employee relations to be good.

Acquisitions

On February 26, 2003 we entered into a Settlement and Purchase Agreement with STI and its sole shareholder, ASTI, to purchase all of the outstanding stock of STI and resolve any remaining disputes with ASTI and STI regarding our May 2002 Stock Purchase Agreement with STI and ASTI which we terminated in August 2002. Pursuant to the Settlement and Purchase Agreement, we have agreed to purchase all of the outstanding stock of STI for a purchase price of $1.25 million in cash and 215,385 shares of our common stock. The agreement is subject to approval of the shareholders of ASTI and we expect to close the purchase in the second quarter of 2003. We intend to maintain a portion of STI's facility in Dallas, Texas where we will focus on technology and applications development as well as sales and service support. We believe that adding STI's intellectual property and technical resources related to 2D and 3D inspections on the probe floor and their customer list will enhance our leadership in the automated visual defect inspection.

The closing of the proposed acquisition of STI remains subject to various risks, including the possibility that shareholders of ASTI will not approve the transaction or that other legal or regulatory issues may arise that prevent the closing. Even if the closing takes place, our ability to benefit from the acquisition will depend upon how quickly and effectively we integrate STI's operations and personnel with our business. Unanticipated difficulties or costs in this integration process may adversely affect our business.

If we are unable to close the acquisition, ASTI and STI may continue to seek resolution of disputes with respect to our May 2002 Purchase Agreement. In August 2002, we terminated the May 2002 Purchase Agreement and asserted that ASTI owed us a break up fee of $2.6 million. ASTI claimed that we had improperly terminated the agreement and asserted that we owed the $2.6 million break up fee to them. If we are unable to resolve this dispute by closing the proposed acquisition, resulting damage awards or the payment of the break up fee may have a material adverse effect on our financial condition. Whether or not we prevail, the legal expenses involved in any such proceeding may be material.

Available Information

Our web site is http://www.augusttech.com. We make available free of charge, on or through our web site, our annual, quarterly and current reports, and any amendments to those reports, as soon as reasonably practicable after electronically filing such reports with the Securities and

Exchange Commission. Information contained on our web site is not part of this report.

Item 2. Properties

Location	Type	Principal Use	Square Footage	Ownership
Bloomington, MN	Office, plant, warehouse	Headquarters, Research and Development, Sales and Service, Manufacturing, Marketing and Administration	78,437	Leased
Hsinchu, Taiwan	Office, warehouse	Sales and Service	4,607	Leased

Item 3. Legal Proceedings

From time to time in the ordinary course of business, we are subject to claims, asserted or unasserted, or named as a party to lawsuits or investigations. Litigation, in general, and intellectual property and securities litigation in particular, can be expensive and disruptive to normal business operations. Moreover, the results of legal proceedings cannot be predicted with any certainty and in the case of more complex legal proceedings such as intellectual property and securities litigation, the results are difficult to predict at all. Except as described below, we are not aware of any asserted or unasserted legal proceedings or claims that we believe would have a material adverse effect on our financial condition or results of our operations.

As described above under the heading "Acquisitions", we have entered into a Settlement and Purchase Agreement with ASTI and STI to purchase all of the outstanding stock of STI and resolve any remaining disputes with ASTI and STI regarding our May 2002 Stock Purchase Agreement with ASTI and STI which we terminated in August 2002. If we are unable to close the acquisition, ASTI and STI may continue to seek resolution of disputes with respect to our May 2002 Purchase Agreement. In August 2002, we terminated the May 2002 Purchase Agreement and asserted that ASTI owed us a break up fee of $2.6 million. ASTI claimed that we had improperly terminated the agreement and asserted that we owed the $2.6 million break up fee to them. If we are unable to resolve this dispute by closing the proposed acquisition, resulting damage awards or the payment of the break up fee may have a material adverse effect on our financial condition. Whether or not we prevail, the legal expenses involved in any such proceeding may be material.

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

There were no matters submitted to a vote of our shareholders during the quarter ended December 31, 2002.

Executive Officers of the Registrant

The following sets forth the names and ages of our current executive officers in addition to information regarding their positions, their periods of service in such positions and their business experience for the past five years. Executive officers generally serve in office for terms of approximately one year.

Name	Age	Position
Jeff L. O'Dell	42	Chief Executive Officer and Director
David L. Klenk	38	President, Chief Operating Officer and Assistant Secretary
Scott A. Gabbard	36	Acting Chief Financial Officer and Vice President, Finance
John M. Vasuta	34	Vice President, Intellectual Property, General Counsel and Secretary
D. Mayson Brooks	44	Vice President, Global Sales and Field Operations
Wayne J. Hubin	59	Vice President, Manufacturing

Name	Age	Position
Albert A. Eliasen	37	Vice President, Engineering
Wayne E. Holtmeier	54	Vice President, Employee Services

Jeff L. O'Dell co-founded August Technology in 1992 and has served as our Chief Executive Officer since 1992 and Chairman of the Board since 1994. From 1992 to July 2001, Mr. O'Dell also served as President. From August 1987 to August 1992, Mr. O'Dell was Director of Sales and Marketing for MicroVision Corporation, which develops and manufactures robotic and inspection systems. From February 1985 to August 1987, Mr. O'Dell was a Field Applications Engineer for Cognex Corporation, which designs, develops and markets machine vision systems that are used to automate a wide range of manufacturing processes. From March 1984 to February 1985, Mr. O'Dell served as a Systems Analyst for Control Data Corporation.

David L. Klenk has been with us since April 1993 and has served as our President since July 2001 and Chief Operating Officer since April 1999. Mr. Klenk served on our Board of Directors from 1994 to March 2000. Mr. Klenk oversees the engineering, manufacturing, customer service and employee services groups. Prior to becoming our Chief Operating Officer, Mr. Klenk served as our Director of Operations. Mr. Klenk is a brother-in-law of Mark Harless, one of our co-founders who currently serves us as an Engineering Fellow.

Scott A. Gabbard became our Vice President of Finance in July 2002. Mr. Gabbard also currently serves as our Acting Chief Financial Officer. Prior to becoming Acting Chief Financial Officer and Vice President of Finance, Mr. Gabbard served as our Corporate Controller since joining us in February 2000. From September 1995 through January 2000, Mr. Gabbard was Assistant Controller with U.S. Office Products, an international supplier of office products and business services. From August 1993 to September 1995, Mr. Gabbard was an auditor with Price Waterhouse, LLP. Mr. Gabbard is a certified public accountant.

John M. Vasuta has been our Vice President of Intellectual Property and General Counsel since May 2000. Mr. Vasuta has also been our Secretary or Assistant Secretary since October 2000. From February 1999 to May 2000, Mr. Vasuta was Senior Intellectual Property Counsel with Bridgestone-Firestone, a manufacturer of tires, fiber optics and automotive parts. From July 1997 to February 1999, Mr. Vasuta was Senior Patent Counsel and Research and Development Business Manager for

Kennametal Inc., a tooling manufacturer. Mr. Vasuta was an attorney in various law firms from 1991 to 1997, most recently at Sand & Sebolt, where he was a partner.

D. Mayson Brooks became our Vice President of Global Sales and Field Operations in February 2002. Prior to becoming Vice President of Global Sales and Field Operations, Mr. Brooks served as our Vice President of Sales and Marketing since July 1999. Prior to joining us, from June 1987 through June 1999, Mr. Brooks worked in various managerial capacities for Air Products and Chemicals, Inc., most recently as Commercial Manager, European electronics division. Mr. Brooks served from June 1981 to May 1987 in the United States Navy and was awarded two achievement medals.

Wayne J. Hubin has been our Vice President of Manufacturing since November 1999. Before joining us, Mr. Hubin was Manufacturing Operations Manager for BOC Edwards, Inc. from August 1999 to November 1999. From 1984 to August 1999, Mr. Hubin worked in various managerial capacities for FSI International, Inc., a supplier of micro-lithography, surface conditioning and chemical dispense equipment used in the fabrication of microelectronics, most recently as Manufacturing Operations Manager.

Albert A. Eliasen joined us as Vice President of Engineering in November 2000. Prior to joining us, Mr. Eliasen was employed by Axcelis Technologies, Inc., a semiconductor equipment supplier, from May 1994 to November 2000. He served in various capacities with Axcelis Technologies, most recently as TPS Platform Manager, managing engineers for the thermal products platform including new product development and sustaining engineering.

Wayne E. Holtmeier became our Vice President of Employee Services in September 2002. Prior to becoming Vice President of Employee Services, Mr. Holtmeier served as our Director of Human Resources since joining us in April 2001. Mr. Holtmeier was Director of Human Resources for Tescom Corp. from August 2000 through March 2001. From January 1981 to October 1999, Mr. Holtmeier worked in various human resource managerial capacities for Fluoroware, Inc. (Entegris Inc.), a leading materials management company serving the microelectronics industry, most recently as Vice President of Human Resources.

PART II

Item 5. Market for Registrant's Common Stock and Related Shareholder Matters

Market Information

Our common stock, no par value (the "Common Stock"), has traded under the symbol "AUGT" on the Nasdaq National Market since our initial public offering on June 14, 2000. There was no market for our Common Stock prior to that date.

The following table sets forth the reported high and low closing sale prices for shares of our Common Stock on the Nasdaq National Market during the indicated quarters.

	2002		2001	
	High	Low	High	Low
First	$ 14.59	$ 8.05	$ 14.50	$ 9.94
Second	16.35	9.35	14.35	9.60
Third	9.23	3.47	14.71	8.20
Fourth	7.40	3.89	11.04	7.35

Holders

As of February 21, 2003, there were approximately 197 holders of record of our Common Stock. In addition, based on information obtained from our transfer agent, there are approximately 1,908 holders whose stock is held in nominee name and/or street name brokerage accounts.

Dividends

We have not declared or paid cash dividends on our Common Stock to date and do not anticipate paying cash dividends for the foreseeable future. We currently intend to retain earnings, if any, to support the development of our business. Payment of future dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results and current and anticipated cash needs. In addition, our current credit facility limits our ability to pay cash dividends without our lender's consent.

Item 6. Selected Financial Data

The consolidated statement of operations data set forth below for each of the years ended December 31, 2002, 2001 and 2000 and the consolidated balance sheet data as of December 31, 2002 and 2001 are derived from the audited consolidated financial statements, included elsewhere in this Form 10-K. The statement of operations data set forth below for the years ended December 31, 1999 and 1998 and the balance sheet data as of December 31, 2000, 1999 and 1998 are derived from audited financial statements, which are not included in this Form 10-K. You should read the data set forth below in conjunction with the audited consolidated financial statements and notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this Form 10-K.

	Years Ended December 31,				
	2002	2001	2000	1999	1998
	(In thousands, except per share data)				
Consolidated Statement of Operations Data:					

	Years Ended December 31,				
Net revenues	$ 25,058	$ 29,784	$ 31,666	$ 12,058	$ 5,787
Cost of revenues	11,068	12,039	12,594	5,110	2,686
Gross profit	13,990	17,745	19,072	6,948	3,101
Selling, general and administrative expenses	11,769	11,800	10,100	4,737	2,174
Research and development expenses	9,847	7,940	6,945	2,318	924
Non-recurring expenses	1,244	579	326		
Operating income (loss)	(8,870)	(2,574)	1,701	(107)	3
Interest income (expense), net	624	1,427	978	(42)	(1)
Other expense		(17)			
Income (loss) before provision for (benefit from) income taxes	(8,246)	(1,164)	2,679	(149)	2
Provision for (benefit from) income taxes	687	(813)	807	(17)	2
Net income (loss)	$ (8,933)	$ (351)	$ 1,872	$ (132)	$
Net income (loss) per share:					
Basic	$ (0.69)	$ (0.03)	$ 0.17	$ (0.02)	$
Diluted	$ (0.69)	$ (0.03)	$ 0.16	$ (0.02)	$
Weighted average common shares:					
Basic	13,033	12,723	11,049	8,688	7,955
Diluted	13,033	12,723	11,770	8,688	7,955

	December 31,				
	2002	2001	2000	1999	1998
	(In thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable debt instruments	$ 18,777	$ 25,857	$ 29,193	$	$
Working capital	29,376	37,171	36,872	2,494	1,125
Total assets	39,510	47,155	47,897	6,676	2,686
Total debt				1,224	190
Total shareholders' equity	34,867	42,523	41,685	3,347	1,411

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 the audited consolidated financial statements and the notes thereto and with the "Cautionary Statements" section included elsewhere in this Form 10-K.

In preparing the consolidated financial statements in conformity with accounting principles generally accepted in the United States of America, we must make decisions which impact the reported amounts and the related disclosures. Such decisions include the selection of the appropriate accounting principles to be applied and the assumptions on which to base accounting estimates. In reaching such decisions, we apply judgment based on our understanding and analysis of the relevant circumstances. Note 1 to the consolidated financial statements provides a summary of the significant accounting policies followed in the preparation of the consolidated financial statements.

Critical Accounting Policies, Significant Judgments and Estimates

Revenue Recognition. We derive revenues from the sale of systems, spare parts and services.

System sales: We require customers, excluding our distributors, that have new inspection applications to complete pre-shipment authorization testing of purchased systems at our facility, prior to shipment. During this testing, the customer verifies that the system meets their specifications and authorizes shipment. For systems that require such testing, revenue is recognized as follows:

Revenue from systems meeting pre-shipment authorization testing is recognized when the product has shipped, title and risk of loss have transferred to the customer and collection of the resulting receivable is probable. We do not deem installation to be essential to the functionality of our systems as it does not involve altering the system's features or capabilities or the building of complex interfaces.

Revenue from systems that have not been demonstrated to meet customer specifications prior to shipment is recognized when title and risk of loss have transferred to the customer, installation has occurred and collection of the resulting receivable is probable.

When the customer has already accepted a previous system, with the same specifications, for the same application, we do not require pre-shipment authorization testing. Revenue is recognized when the product has shipped, title and risk of loss have transferred to the customer and collection of the resulting receivable is probable.

System sales are accounted for as multiple-element arrangements. In transactions that include multiple products and/or services, we allocate the revenue to each element based on their relative fair value (or in the absence of fair value, the residual method) and recognize the associated revenue when all revenue recognition criteria have been met for each element.

Spare parts revenue: Spare parts revenue is recognized when the parts have been shipped, title and risk of loss have transferred to the customer and collection of the resulting receivable is probable.

Service revenue: Service revenue is recognized after the services are performed and collection of the resulting receivable is probable. Revenue, from maintenance contracts, is recognized ratably over the period of the contract. Service revenues were insignificant during the years ended December 31, 2002, 2001 and 2000.

Valuation of Accounts Receivable. We review accounts receivable to determine which are doubtful of collection. In making the determination of the appropriate allowance for doubtful accounts, we consider our history of write-offs, relationships with our customers and the overall credit worthiness of our customers. For the three years ended December 31, 2002, we have had accounts receivable

write-offs totaling $20,000. Changes in the credit worthiness of customers, general economic conditions and other factors may impact the level of future write-offs.

Valuation of Inventory. We review inventory for obsolescence and excess quantities to determine that items deemed obsolete or excess are appropriately reserved. In making the determination, we consider future sales of related products and the quantity of inventory at the balance sheet date assessed against each part's past usage rates and future expected usage rates. For the three years ended December 31, 2002, we have written off inventory totaling $200,000. We have an allowance for obsolete and excess inventory of $281,000 at December 31, 2002, which represents our estimate of obsolete and excess inventory. Changes in factors such as technology, customer demand, competitor product introductions and other matters could affect the level of obsolete and excess inventory in the future.

Accounting for Income Taxes. The preparation of our consolidated financial statements requires us to estimate our actual current tax exposure together with our temporary differences resulting from differing treatment of tax items for tax and accounting. These temporary differences result in the recognition of deferred tax assets and liabilities, which are included within our consolidated balance sheet. Statement of Financial Accounting Standards ("SFAS") No. 109 "Accounting for Income Taxes," requires the establishment of a valuation allowance to reflect the likelihood of the realization of deferred tax assets. Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. We evaluate the weight of all available evidence to determine whether it is more likely than not that some portion or all of the deferred income tax assets will not be realized. During the second quarter of 2002 we recorded a valuation allowance for the full amount of our deferred tax assets due to uncertainties surrounding our ability to utilize some or all of our deferred tax assets, primarily consisting of certain net operating losses, as well as other temporary differences between book and tax accounting. If the realization of deferred tax assets in the future is considered more likely than not, an adjustment to the deferred tax assets would increase net income in the period such determination is made. In the event that actual results differ from these estimates or we adjust these estimates in future periods, we may need to adjust our valuation allowance, which could materially affect our financial position and results of operations.

Off-Balance Sheet Arrangements. We have not created, and are not party to, any special-purpose or off-balance sheet entities for the purpose of raising capital, incurring debt or operating parts of our business that are not consolidated into our financial statements. We do not have any arrangements or relationships with entities that are not consolidated into our financial statements that are reasonably likely to materially affect our liquidity or the availability of our capital resources.

Results of Operations

The following table presents the consolidated statements of operations as a percentage of net revenues.

	Years Ended December 31,		
	2002	2001	2000
Net revenues	100.0%	100.0%	100.0%
Cost of revenues	44.2	40.4	39.8
Gross profit	55.8	59.6	60.2
Selling, general and administrative expenses	47.0	39.6	31.9
Research and development expenses	39.3	26.7	21.9
Non-recurring expenses	5.0	1.9	1.0
Operating income (loss)	(35.5)	(8.6)	5.4
Interest income, net	2.5	4.8	3.1
Other expense		(0.1)	
Income (loss) before provision for (benefit from) income taxes	(33.0)	(3.9)	8.5
Provision for (benefit from) income taxes	2.7	(2.7)	2.6
Net income (loss)	(35.7)%	(1.2)%	5.9%

Our business is subject to the cyclical nature of the microelectronic device manufacturing markets we serve. These cycles are caused by significant fluctuations in the supply and demand of microelectronic devices driven by such factors as changes in technology and global economic conditions. During 2002 and 2001 there has been a dramatic slowdown in demand for microelectronic devices resulting in excess capacity and decreased demand for microelectronic manufacturing equipment. The decreased demand has caused our quarterly orders and sales to fluctuate dramatically. We are not able to predict when the microelectronic industries will recover. Future quarterly and annual results will continue to be impacted by these cycles, the timing of new product announcements and releases by us or our competitors, market acceptance of new or enhanced versions of our products, changes in the pricing of our products and the timing and level of our research and development

expenditures.

During the second quarter of 2001, in response to the current downturn, we implemented and are still using components of a cost management program. The program has included, at various times, raw material cost reductions, reductions in temporary and contract staff, work force reductions, mandatory time-off and decreases in discretionary spending, reductions in executive compensation and overtime (the "Cost Cutting Programs"). Although we continued to maintain various components of the Cost Cutting Programs during 2002, these savings were offset by our decision to invest in developing our worldwide sales and service organization and in the continued development of new and existing products to better serve our customers and maintain our technology leadership.

Year ended December 31, 2002 compared to the year ended December 31, 2001

Net Revenues. Net revenues decreased $4.7 million, or 15.9%, to $25.1 million in 2002, from $29.8 million in 2001. The decrease in net revenues was the result of lower NSX revenues, partially offset by revenues from our 3Di Series, which was introduced in the fourth quarter of 2001. The decrease in NSX revenues was due to the continued downturn in the microelectronic industries. Net revenues derived from international sales represented 52% and 44% of net revenues in 2002 and 2001, respectively. International net revenues were primarily the result of sales to Asia, which comprised 45% and 34% of net revenues in 2002 and 2001, respectively.