SPECTRUM CONTROL INC
Form 10-K
February 23, 2005
Table of Contents

Securities and Exchange Commission

Washington, D.C. 20549

Form 10-K

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

For the fiscal year ended November 30, 2004

OR

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

For the transition period from _____ to _____

Commission File Number 0-8796

Spectrum Control, Inc.

(a Pennsylvania Corporation)

(I.R.S. Employer Identification No. 25-1196447)

8031 Avonia Road, Fairview, Pennsylvania 16415

Telephone 814-474-2207

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	Name of each exchange on which registered
Common Stock - No Par Value	The Nasdaq Stock Market

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, and (2) has been subject to such filing requirements for the past 90 days. Yes x 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 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 ¨.

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

At January 31, 2005, the aggregate market value of voting Common Stock held by non-affiliates of the registrant based on a closing price of $7.34 was $41,244,671. Shares of Common Stock held by each officer and director and by each person who owns 5% or more of the outstanding Common Stock of the Company have been excluded because such persons may be deemed to be affiliates.

As of January 31, 2005, the registrant had outstanding 13,029,552 shares of Common Stock, no par value.

Documents incorporated by reference

Portions of the registrant s Proxy Statement for the annual meeting of shareholders to be held April 4, 2005 are incorporated by reference into Part III of this Form 10-K.

Table of Contents

Table of Contents

Table of Contents

PART I

ITEM 1. BUSINESS

Except for the historical information contained herein, the following discussion contains forward-looking statements that involve risks and uncertainties. The Company intends these forward-looking statements to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, descriptions of management s expectations regarding the future markets for the Company s products, future operating performance, and other future plans and objectives. Words such as expect , anticipate , believe , intend , and variations of such words identify forward-looking statements. These forward-looking statements are only predictions and are not guarantees of future performance. Actual results or events may differ materially from historical results or those suggested by these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this section, as well as in the section entitled Management s Discussion and Analysis of Financial Condition and Results of Operations in this report.

GENERAL

Spectrum Control, Inc. and its subsidiaries (hereinafter referred to as we , us , our , or the Company) design, manufacture and market a broad line of control products and systems used to condition, regulate and govern electronic performance. The Company was founded as a solutions-oriented company, designing and manufacturing products to suppress or eliminate electromagnetic interference (EMI). Over the past several years, we have leveraged our core EMI filtering expertise to offer our customers a diverse line of control products and systems. Our Signal Integrity Products Group designs and manufactures various low pass EMI filters, surface mount EMI filters, filtered arrays, filtered connectors, gaskets, specialty ceramic capacitors, and our recently developed motor line feed-thru (MLFT) filters. Our Power Integrity Products and Management Systems Group designs and manufactures numerous power integrity products (power line filters, power entry modules, multisection filters, power terminal blocks, and custom power filter assemblies) and power management systems (power distribution units, remote power management and monitoring systems, fuse interface panels, breaker interface panels, and custom power distribution systems). Our Frequency Control Products Group designs and manufactures ceramic resonators and bandpass filters, ceramic patch antennas, duplexers, lumped element filters, cavity filters, waveguides, amplifiers, frequency mixers, oscillators, synthesizers, multiple channel filter banks, and related products and systems. Our products are used in many different industries including telecommunications, aerospace, military, medical, computer, automotive, and industrial control equipment.

The need for EMI products results from the increasing dependency of our society on electronic equipment of various kinds, including wireless communication systems. This equipment both emits, and is sensitive to, random electromagnetic waves over a broad spectrum of wave lengths, which can interfere with and degrade the performance of other electronic equipment. The Company s EMI products are designed to suppress the emission of unwanted waves or to reduce their strength to an innocuous level, by reflecting them from one component to another in series or by converting their energy into heat which is then dissipated.

Spectrum Control, Inc. (the Parent company) was incorporated in Pennsylvania in 1968. The Parent company currently operates manufacturing facilities in Fairview, Pennsylvania and Wesson, Mississippi. Operations in Fairview include the design and manufacture of power management systems, as well as certain signal and power integrity products used primarily in military and other non-commercial applications. Operations in Wesson principally consist of metal fabrication manufacturing in support of our power integrity and management systems product offerings. The Parent company s executive offices are located in Fairview, Pennsylvania.

Spectrum Control Technology, Inc., a wholly-owned subsidiary, operates a facility in New Orleans, Louisiana, with advanced manufacturing equipment used in the production of ceramic capacitors, resonators, patch antennas, and specialty ceramic products. This subsidiary manufactures substantially all of the ceramic discoidal and tubular capacitors used in the Company s EMI filter products.

Spectrum Control, GmbH, a wholly-owned subsidiary of the Company located in Schwabach, Germany, acts as a distributor for the Company s products in the European market.

Spectrum Control de Mexico, a wholly-owned subsidiary of the Company located in Juarez, Mexico, commenced operations in June 2000 as the Company s low-cost manufacturing center for North America. Currently, this subsidiary manufactures various signal integrity, power integrity, and frequency control products for commercial applications.

Table of Contents

Spectrum FSY Microwave, Inc. (formerly FSY Microwave, Inc.), a wholly-owned subsidiary located in Columbia, Maryland, designs and manufactures a broad line of RF and microwave filters, and related products and systems.

Spectrum Control (Hong Kong) Limited (Spec HK), a wholly-owned subsidiary of the Company, currently operates as a logistics center for our sales in Asia.

Spectrum Control Electronics (Dongguan) Co. Ltd. (Spec China), a wholly-owned subsidiary of Spec HK located in Qiaotou Town, China, commenced operations in 2003 as the Company s low-cost manufacturing center for Asia. Currently, Spec China manufactures certain signal and power integrity products for our China telecom equipment customers.

RECENT DEVELOPMENTS

On October 15, 2004, we acquired substantially all of the assets and assumed certain liabilities of the radio frequency (RF) and microwave Components Business Unit (CBU) of REMEC, Inc. CBU, based in Palm Bay, Florida, designs and manufactures RF and microwave components for military, aerospace and commercial wireless markets. These high-end components include amplifiers, frequency mixers, and various types of oscillators (voltage control, dielectric resonator, and digitally tuned). Major applications for these products include weapons systems, missiles, satellite systems, wireless base stations, and cable TV systems. The aggregate cash purchase price for CBU was $8.1 million.

On February 27, 2004, we acquired all of the outstanding common stock of Salisbury Engineering, Inc. (SEI). SEI, based in Delmar, Delaware, designs and manufactures a full line of RF and microwave components and systems used primarily in military and aerospace applications. SEI s products include complex systems such as microwave synthesizers, multiple channel filter banks and preselectors, and global positioning system noise amplifiers. The aggregate cash purchase price for SEI was $5.6 million.

With the acquisitions of CBU and SEI, we significantly expanded our microwave product offerings and capabilities. As a result of offering a more comprehensive RF and microwave product line to customers, we believe that we can gain market share and increase revenues. We also believe that our existing customer relationships and manufacturing capabilities will provide additional revenue opportunities and improved profitability for CBU and SEI products.

For each of these acquisitions, the purchase price was entirely funded through our available cash reserves. The results of operations of the acquired businesses have been included in our consolidated financial statements since their respective acquisition dates. Accordingly, CBU net sales of $1.5 million and SEI net sales of $3.3 million have been included in our consolidated net sales for the year ended November 30, 2004. For operating segment purposes, these acquired businesses are reported within our Frequency Control Products Group.

MARKETS

Although our components and systems are used in many industries worldwide, our largest markets are telecommunications equipment and military/aerospace which collectively represented approximately 79% of our fiscal year 2004 sales. In telecommunications, our products are

used in numerous systems including wireless base stations, broadband switching equipment, Internet servers, optical networks, and global positioning systems. Military/aerospace applications for our products include missile defense systems, smart weapons and munitions, simulation equipment, secure communications, and avionic upgrades. Automotive represents an emerging market for our products, with significant applications in DC motors, telematics, and electronic safety controls. Our other primary markets include medical instrumentation, industrial control equipment, computer and office equipment.

Table of Contents

TELECOMMUNICATIONS EQUIPMENT

Throughout most of the last four years, the telecommunications equipment industry has experienced a severe slowdown and extreme volatility. Recently, market conditions in the industry have demonstrated improvement, but overall market trends and forecasts remain unpredictable. Beyond the current economic uncertainty in the telecommunications equipment market, we believe the factors fostering long-term market growth remain in place. Prior to 2001, the telecommunications industry experienced significant worldwide growth. This growth primarily resulted from increased business and consumer demand for wireless communication services and Internet access. Cost reductions and performance improvements in such wireless communication products as cellular, personal communication services (PCS), and satellite-based voice and data systems also contributed to this growth. As demand for wireless communication services continue to grow, and industry-wide excess inventory levels are consumed, service providers will need to make substantial investments in new equipment and infrastructure. Wireless communication systems can offer the functional advantages of wired communication systems without the costly and time consuming development of an extensive wired infrastructure. The relative advantages of wireless and wired communication systems with respect to cost, transmission quality, reliability and other factors depend on the specific applications for which such systems are used and the existence of a wired or wireless infrastructure already in place. The factors responsible for the market s long-term growth, coupled with regulatory changes in the United States and abroad as well as advances in wireless communication technology, have led to significant growth in existing wireless telecommunication systems and the emergence of new wireless applications.

The products designed and manufactured by the Company support a wide range of digital wireless communication protocols, systems and standards including PCS, Code Division Multiple Access (CDMA), Global System for Mobile Communications (GSM), Local Multipoint Distribution System (LMDS), Multi-Channel Multipoint Distribution System (MMDS), Third Generation Wireless (3G), Bluetooth, and Voice over internet (VoIP).

Worldwide demand for integrated voice, data and video communications services is also growing rapidly. The volume of high-speed data traffic across global communications networks has grown dramatically as the public Internet and private business intranets have become essential for daily communications and electronic commerce. The number of persons using the Internet to buy and sell goods and services is expected to grow rapidly. Servicing the increasing demand for higher bandwidth content and applications requires cost-effective and high-speed connections, which are often unavailable or inadequate over existing wire-based networks. For many users, wireless communications provide an advantageous access solution for high-speed Internet multimedia services. This is underscored by the increasing number of wireless subscribers worldwide.

A typical mobile or fixed wireless communications system comprises a geographic region containing a number of cells, each of which contains one or more base stations, which are linked in a network to form a service provider s coverage area. Each base station houses the equipment that receives incoming telephone calls from the switching offices of the local wire-based telephone company and broadcasts calls to the wireless users within the cell. A base station can process a fixed number of radio channels through the use of multiple transceivers, power amplifiers and tunable filters, along with an antenna to transmit and receive signals to and from the wireless user. The Company provides discrete EMI filters, filtered arrays, filtered connectors, power integrity products, low phase noise amplifiers, and power management systems to original equipment manufacturers (OEM s) of base station equipment. In addition, the Company s products are used in numerous other telecommunication applications including optical networks and switching equipment, wireless modems and LANs, Internet servers and global positioning systems. Using our solutions-oriented approach, we provide our OEM customers with products tailored to their specific transmission needs, anticipating and solving system architecture and performance.

Approximately 43% of the Company s total revenue during fiscal year 2004 was derived from sales of its products to OEM customers in the telecommunication industry. Most of these products are custom designed not only to conform to the specifications and requirements of the particular customer, but also to meet the performance and quality standards set by the agency or other governmental body whose regulations are applicable to the specific equipment or usage involved. A significant reduction in orders from such customers would have a materially adverse effect on the Company s business.

Table of Contents

MILITARY/AEROSPACE

Military forces worldwide are dependent on sophisticated electronic equipment. Military aircraft and naval vessels generally contain extensive communication equipment, electronic countermeasure equipment for defense against enemy weapons, smart weapons and munitions (such as AMRAAM and JDAM), and radar systems. The Company provides low pass filters, multisection assemblies, and various microwave components and subsystems to major equipment manufacturers for installation into these systems. The Company s customers, in turn, sell their equipment to major aerospace manufacturers or directly to governments. The Company also provides various EMI filtered arrays and filtered connectors to aerospace manufacturers for use in commercial applications such as point to point telemetry and avionic upgrades.

Military/aerospace sales were approximately $28.6 million in 2004 or 36% of our sales, compared to $20.0 million in 2003 or 32% of total sales. Demand for military/aerospace products may be impacted by numerous economic, technological and political factors. In addition, overall market conditions in the commercial aerospace industry are currently very soft. Accordingly, while the Company has developed and will continue to develop products for military/aerospace programs, there can be no assurance that sales to such customers will not decrease in the future.

OUR SOLUTION

We believe we are well positioned to capitalize on our long-term market opportunities. We combine engineering expertise, design and testing capabilities and vertically integrated and flexible manufacturing processes to provide custom solutions to our customers control products and systems needs.

We Offer Integrated Design, Development and Testing Services. We provide an integrated approach to problem solving by offering our customers consulting, diagnostic testing and design services. We believe that our testing facilities and capabilities exceed those of our major competitors and, accordingly, may give us a competitive advantage. Our engineers typically work closely with customers to develop a product or system design. Although our customers generally provide the initial engineering guidelines for a particular product, our design engineers are often called upon to work together with a customer s design team to develop a solution. An important part of our solution is ensuring at an early stage, before time and money are spent on manufacturing, that the product design will meet all performance specifications and can be produced efficiently and cost-effectively. Our design engineers include EMI, power and frequency control specialists. We believe that by integrating our product design and development efforts with those of our customers, we create increased reliance on us and increased incentives to utilize us as a single source strategic supplier.

We Offer Flexible, Low-Cost Production Capabilities. Once a design is completed, we apply our vertically integrated manufacturing processes to produce a solution that meets our customers functionality and cost objectives. We maintain a state-of-the-art ceramic production facility with advanced manufacturing equipment primarily designed for the production of ceramic capacitors. These ceramic products are critical components of our signal integrity products. Our extensive ceramic capability and expertise enable us to maintain short lead times for our signal product prototyping and production orders. We also maintain a metal fabrication facility with computer numerically controlled (CNC) equipment to manufacture the metal utilized in many of our power integrity and management systems product offerings. By performing the metal fabrication in-house, we are able to shorten the lead time for these product offerings and reduce our overall material costs. Our philosophy of vertical integration, along with utilizing demand flow manufacturing processes, enables us to meet the growing OEM customer demands for flexible production schedules and just-in-time inventories.

We Offer High Quality, High Performance Products. Our customers demand a high level of quality and performance. We believe we meet our customers requirements for high quality products manufactured to increasingly exacting specifications, including performance and quality

standards that are set by agencies and other governmental bodies whose regulations may apply to specific telecommunications or other equipment. We emphasize a quality culture, driving continuous product improvement and a company-wide commitment to quality. As part of our commitment to high quality manufacturing, all of our domestic and foreign manufacturing facilities have achieved and maintain ISO 9001 certification, and we have been approved by defense customers under the requirements of the U.S. military quality system. Four of our North American facilities also have achieved and maintained the automotive industry quality standard of QS 9000.

Table of Contents

OUR STRATEGY

Our goal is to increase sales and profits by expanding in our existing markets and by entering new markets where we can apply our design and manufacturing capabilities. Key elements of our strategy for achieving this goal include:

Leveraging Our Status as a Strategic Supplier to our OEM Customers. Our status as a strategic supplier to many of our OEM customers presents us with opportunities to develop and design new products for these customers on a collaborative, solutions-oriented basis giving us an advantage over our competitors. We use our position as a strategic supplier to these OEM customers to accelerate the introduction of new, more complex electronic control products and systems at higher profit margins. We seek to solidify our status as a strategic supplier to our OEM customers by continuing to provide:

- High levels of service;
- Extensive product lines;
- Custom and collaborative product design and manufacturing capabilities;
- Product delivery flexibility and reliability; and
- High quality products

Introducing New Signal and Power Integrity Product Lines. We are broadening our product lines to include a more comprehensive range of signal and power integrity products. In fiscal 2004, for example, our product development efforts enabled us to introduce a complete line of surface mount filter solutions for addressing EMI at the printed circuit board (PCB) level. This new line of surface mount inductors, low pass filters, high frequency filters, and power EMI filters is designed to offer high performance EMI filtering in a minimal PCB footprint. These new products are ideal for applications where smaller size is critical, including certain digital equipment, wireless base stations, modems, DSL equipment, global positioning systems (GPS), and LAN networking equipment. On an ongoing basis, our primary focus is on new higher-margin products to exploit the long-term expected growth in wireless devices and optical networking applications. Our customers increasingly look for greater capability to produce value-added systems integrating our existing signal and power integrity products. To respond to our customers needs, we intend increasingly to design and manufacture more sophisticated electronic control systems and assemblies.

Expanding in Markets for Higher Margin Power Management Systems. We continue to develop and expand our advanced systems product offerings to leverage our core competencies in design, manufacturing and assembly to become a provider of more complex, higher margin power management systems. We have successfully introduced our SMART start and SMART start Jr. products. These multifunctional units direct and manage power to connected servers and networking equipment, while providing remote operational flexibility and control. We intend to develop and introduce additional higher-margin advanced product offerings in the future.

Pursuing Acquisitions that Enhance Our Product Offerings. We continue to pursue acquisitions complementary to our core business. With the acquisitions of CBU and SEI in fiscal 2004, we significantly expanded our microwave product offerings and capabilities. We believe CBU and SEI products are a natural complement to our existing SPECWAVE line of ceramic-based wireless products. With these acquisitions, we can

now offer our customers a much broader line of frequency control products and custom engineered wireless solutions. Frequency control products represent a significant growth opportunity for us, with a total world market much larger than our traditional EMI filter market.

With OEM s increasingly demanding higher levels of service and lower overall product costs from their electronic component and systems suppliers, we believe that additional acquisition opportunities will emerge as smaller suppliers with insufficient technical and design expertise and limited access to capital choose to sell to larger organizations with greater technical and financial resources. We also expect to see acquisition opportunities from large manufacturers as they seek to focus their product offerings on those fully utilizing their core competencies.

Table of Contents

Remaining a Low-Cost, Efficient Producer. Our customers are under worldwide competitive pressure to reduce their product costs and these pressures are passed along to component and systems manufacturers. We are constantly seeking to reduce our material and labor costs, develop cost-efficient manufacturing equipment and processes, and design our manufacturing plants for efficient production. We have been able to reduce the manufacturing cost of our products by increasing materials efficiency, improving production yields, and utilizing in-house metal fabrication capabilities. In addition, we have taken steps to reduce assembly direct labor costs by locating plants in areas with relatively low-cost labor, such as Juarez, Mexico and Qiaotou Town, China (located in the Guangdong province of southern China). In addition to supplying product to our telecom customers in China, we expect our China manufacturing operation to ultimately enable us to participate in new Asian markets and become a low-cost center capable of competing in highly cost competitive industries, such as automotive.

PRODUCTS

The Company s product offerings include various signal integrity products, frequency control products, power integrity products, and power management systems.

SIGNAL INTEGRITY PRODUCTS

Control of unwanted electromagnetic waves is accomplished through various combinations of EMI suppression devices. The EMI suppression devices produced by the Company include those that are utilized as circuit components and whose function is to permit the desired frequencies to pass through a circuit while rejecting or preventing the unwanted signals. The majority of these products are composed of either reactive (reflecting energy) or loss (dissipating energy) elements or at times, combinations of the two. These products can be utilized as individual components or combined in various configurations to provide the amount of EMI control needed. Currently, the Company s primary signal integrity product offerings include low pass EMI filters, filtered arrays, filtered connectors, and specialty ceramic components.

LOW PASS EMI FILTERS

The Company s low pass EMI filter offerings include hermetically sealed and resin sealed/solder-in filters and capacitors. The Company s hermetically sealed filters are primarily used in military/secure communications, smart weapons and munitions, aerospace, power supplies, signal lines, and certain medical equipment. Resin sealed/solder-in filters are used in a wide range of products including telecommunications equipment, transceivers, and industrial control systems.

FILTERED ARRAYS

The Company s filtered array products consist of various filter plate assemblies. Filter plates are predominantly utilized in telecommunication equipment including wireless base stations, linear power amplifiers, and wireless microcell repeaters. This product offering often provides an economical method of meeting electromagnetic compatibility (EMC) requirements.

FILTERED CONNECTORS

The Company offers a range of custom connectors, datacomm interconnects, and D-Subminiature Connectors. These filtered connectors are used in numerous applications including telecommunications equipment, wireless base stations, secured communications, industrial process equipment, and certain personal computers.

SPECIALTY CERAMIC COMPONENTS

Spectrum Control Technology, Inc., a wholly-owned subsidiary of the Company, manufactures and sells a broad range of specialty ceramic capacitors including tubular and discoidal, single-layer microwave, temperature compensating, high voltage, switch-mode, and high Q capacitors. These products are primarily used in testing and measurement instruments, medical implantibles, high frequency power supplies, RF amplifiers, and other communications equipment.

During the year ended November 30, 2004, approximately 59% of the Company s total revenue was generated from the sale of signal integrity products.

Table of Contents

FREQUENCY CONTROL PRODUCTS

The Company manufactures and sells coaxial ceramic resonators, bandpass filters, patch antennas, and duplexers. These products primarily serve the communications industry with applications in wireless telephones and base stations, satellite transceivers, GPS, wireless modems and LANS, and CATV. In addition, the Company also manufactures and sells lumped element filters, cavity filters, combiners, waveguide filters, and related systems. These components and systems are used in wireless base stations and amplifiers, as well as numerous military, aerospace and medical applications.

With the acquisitions of CBU and SEI in fiscal 2004, the Company significantly expanded its frequency control product offerings. CBU designs and manufactures amplifiers, frequency mixers, and various types of oscillators (voltage control, dielectric resonator, and digitally tuned). Major applications for these products include weapons systems, missiles, satellite systems, wireless base stations, and CATV. SEI s products include microwave synthesizers, multiple channel filter banks and preselectors, and GPS amplifiers. These complex components and systems are primarily used in military and aerospace applications.

During the year ended November 30, 2004, approximately 17% of the Company s total revenue was generated from the sale of frequency control products.

POWER INTEGRITY PRODUCTS

The Company s power product offerings currently include commercial custom assemblies, multisection filters, power line filters, power entry modules, and power terminal blocks. The Company s multisection products primarily serve the military/aerospace market with applications in satellite communications, electronic warfare, and ground/air weapons systems. Other power products are principally used in communications equipment, including telecommunication racks, wireless base stations, Internet servers, and networks.

POWER MANAGEMENT SYSTEMS

The Company s advanced systems product offerings currently include power distribution units, fuse and breaker interface panels, and remote power management systems. Our power management systems include a line of digital radio-frequency control equipment designed to monitor various functions and equipment and provide automatic management, as well as remote management, through wireless or external communication links. These remote management systems incorporate highly flexible software that enable our customers to control and monitor their systems from remote locations. The primary markets for these systems include wireless base station infrastructure systems, remote battery back-up or UPS server systems, sonet switching systems, fire and 911 security systems, and LAN/WAN network systems.

During the year ended November 30, 2004, approximately 24% of the Company s total revenue was generated from the sale of power integrity products and power management systems.

REPORTABLE OPERATING SEGMENTS

The Company was founded as a solutions-oriented company, designing and manufacturing products to suppress or eliminate EMI. In recent years, the Company has broadened its focus and product lines to become a control products and systems company, providing a wide range of components and systems used to condition, regulate, transmit, receive, or govern electronic performance. Effective December 1, 2002, the Company realigned its business segments to better reflect its current strategic focus.

The Company s current operations are conducted in three reportable segments: signal integrity products; power integrity products and management systems; and frequency control products. The Company s Signal Integrity Products Group designs and manufactures a broad range of low pass EMI filters, surface mount EMI filters, filtered arrays, filtered connectors, gaskets, specialty ceramic capacitors, and our recently developed motor line feed-thru (MLFT) filters. The Power Integrity Products and Management Systems Group designs and manufactures numerous power integrity products (power line filters, power entry modules, multisection filters, power terminal blocks, and custom power filter assemblies) and power management systems (power distribution units, remote power management systems, fuse interface panels, breaker interface panels, and custom power distribution systems). Our Frequency Control Products Group designs and manufactures ceramic resonators and bandpass filters, ceramic patch antennas, duplexers, lumped element filters, cavity filters, waveguides, amplifiers, frequency mixers, oscillators, synthesizers, mutiple channel filter banks, and related products and systems. The reportable segments are each managed separately because they manufacture and sell distinct products with different production processes.

Table of Contents

The Company evaluates performance and allocates resources to its reportable segments based upon numerous factors, including segment income or loss before income taxes. The accounting policies of the reportable segments are the same as those utilized in the preparation of the Company s consolidated financial statements. However, substantially all of the Company s selling expenses, general and administrative expenses (including amortization of intangible assets), and nonoperating expenses are not allocated to the Company s reportable operating segments and, accordingly, these expenses are not deducted in arriving at segment income or loss. Segment reportable assets are comprised of certain tangible assets (property, plant, equipment, and inventories) and goodwill.

Table of Contents

Prior period amounts in the following tables have been restated to correspond with the new business segment presentation. For each period presented, the accounting policies and procedures used to determine segment income or loss have been consistently applied. For the years ended November 30, 2004, 2003, and 2002, reportable segment information is as follows (in thousands):

2004	Signal Integrity Products	Power Integrity Products and Mgt. Systems	Frequency Control Products	Total
Revenue from unaffiliated customers	$ 47,793	$ 19,146	$ 13,538	$ 80,477
Depreciation expense	2,175	737	395	3,307
Segment income	15,970	3,978	700	20,648
Segment assets				
Tangible assets	14,661	6,584	9,011	30,256
Goodwill	10,557	3,686	7,776	22,019
Capital expenditures	979	526	625	2,130

2003	Signal Integrity Products	Power Integrity Products and Mgt. Systems	Frequency Control Products	Total
Revenue from unaffiliated customers	$ 42,362	$ 13,442	$ 7,181	$ 62,985
Depreciation expense	2,799	740	130	3,669
Segment income	11,171	1,085	11	12,267
Segment assets				
Tangible assets	16,084	6,601	1,872	24,557
Goodwill	10,557	3,686	3,776	18,019
Capital expenditures	679	62	86	827

2002	Signal Integrity Products	Power Integrity Products and Mgt. Systems	Frequency Control Products	Total
Revenue from unaffiliated customers	$ 41,230	$ 11,845	$ 4,138	$ 57,213
Depreciation expense	3,460	868	76	4,404
Segment income (loss)	9,344	(605)	2	8,741
Segment assets				
Tangible assets	20,013	6,656	1,995	28,664
Goodwill	14,333	3,686		18,019

Capital expenditures	337	81	20	438

Table of Contents

For the years ended November 30, 2004, 2003, and 2002, reconciliations of reportable segment information to the Company s consolidated financial statements are as follows (in thousands):

Depreciation expense	**2004**	**2003**	**2002**
Total depreciation expense for reportable segments	$ 3,307	$ 3,669	$ 4,404
Unallocated amounts:			
Depreciation expense related to selling, general and administrative activities	131	129	125
Consolidated depreciation expense	$ 3,438	$ 3,798	$ 4,529

Income (loss) before provision for income taxes	**2004**	**2003**	**2002**
Total income for reportable segments	$ 20,648	$ 12,267	$ 8,741
Unallocated amounts:			
Selling, general and administrative expense	(13,943)	(11,037)	(10,995)
Interest expense	(112)	(136)	(140)
Other income and expense, net	184	319	1,191
Consolidated income (loss) before provision for income taxes	$ 6,777	$ 1,413	$ (1,203)

Assets	**2004**	**2003**	**2002**
Total assets for reportable segments	$ 52,275	$ 42,576	$ 46,683
Unallocated amounts:			
Cash and cash equivalents	17,535	24,779	19,934
Accounts receivable	15,484	11,521	10,035
Other assets	6,055	4,495	5,172
Total consolidated assets	$ 91,349	$ 83,371	$ 81,824

Capital expenditures	**2004**	**2003**	**2002**
Total capital expenditures for reportable segments	$ 2,130	$ 827	$ 438
Capital expenditures related to selling, general and administrative activities	86	88	78
Total consolidated capital expenditures	$ 2,216	$ 915	$ 516

Table of Contents

The Company has operations in the United States, Mexico, Germany and China. Sales are attributed to individual countries based on the location of the customer. The geographic distribution of sales and long-lived assets for 2004, 2003, and 2002 is as follows (in thousands):

2004	United States	Mexico	Germany	China	All Other Countries	Total
Revenue from unaffiliated customers	$ 50,649	$ 621	$ 4,457	$ 7,431	$ 17,319	$ 80,477
Long-lived assets:						
Property, plant and equipment	15,579	132	41	214		15,966
Intangible assets	24,277					24,277

2003	United States	Mexico	Germany	China	All Other Countries	Total
Revenue from unaffiliated customers	$ 40,149	$ 369	$ 4,289	$ 4,587	$ 13,591	$ 62,985
Long-lived assets:						
Property, plant and equipment	12,447	162	37			12,646
Intangible assets	18,283					18,283

2002	United States	Mexico	Germany	China	All Other Countries	Total
Revenue from unaffiliated customers	$ 38,482	$ 201	$ 2,548	$ 3,510	$ 12,472	$ 57,213
Long-lived assets:						
Property, plant and equipment	15,277	226	40			15,543
Intangible assets	18,313					18,313

The Company expects that international sales will continue to account for a significant portion of its total sales. There can be no assurance, however, that the Company will be able to maintain or increase international demand for the Company s products or that the Company will be able to effectively meet that demand. The Company s international sales are denominated in several different currencies including U.S. Dollars, British Pounds Sterling, and the Euro. An increase in the value of these currencies relative to other foreign currencies could make the Company s products more expensive and, therefore, potentially less competitive in those markets. Additional risks inherent in the Company s international business activities include potentially adverse tax consequences, repatriation of earnings, and the burdens of complying with a variety of foreign laws. There can be no assurance that such factors will not have an adverse effect on the Company s future results of operations.

Sales to the Company s largest single customer (Motorola, Inc.) represented 9% in 2004, 8% in 2003, and 7% in 2002 of total consolidated net sales. Sales to this major customer primarily consisted of signal and power integrity products.

Table of Contents

PRODUCTION

The Company substantially relies on its internal manufacturing capabilities for production of its control products and systems. The Company s Ceramic Components Division in New Orleans, Louisiana, designs and manufactures various ceramic components including tubular capacitors, discoidal capacitors, and resonators. The tubular and discoidal capacitors are primarily utilized in the manufacture of electronic filter products at the Company s facility in Fairview, Pennsylvania and its low-cost manufacturing center in Juarez, Mexico. Coaxial ceramic dielectric resonators are principally used in the manufacture of bandpass filters and duplexers at the Company s facility in Juarez, Mexico. The Company designs and manufacturers its frequency control products in several locations. In Columbia, Maryland, we currently design numerous frequency control products including lumped element filters, cavity filters, combiners and waveguides. In addition to Columbia, Maryland, these products are manufactured at our facility in Juarez, Mexico. With the acquisitions of CBU and SEI in fiscal 2004, we also design and manufacture RF and microwave components in Palm Bay, Florida, and Delmar, Delaware. The design of our power integrity products and management systems is performed at our facility in Fairview, Pennsylvania, with the manufacturing of these products conducted at our facilities in Juarez, Mexico; Wesson, Mississippi; Qiaotou Town, China; and Fairview, Pennsylvania. Although the Company produces a standardized line of products for sale from inventory or through distributors, most orders require relatively short production runs of custom designed components.

The Company purchases brass bushings, castings, miniature metal stampings, as well as other hardware used in the assembly and production of its products. These items are available from numerous sources. The principal raw materials used by the Company in the manufacture of ceramic capacitors and resonators are barium titanate ceramic, silver, palladium, and platinum. Precious metals are available from many sources; however, their prices may be subject to significant fluctuations and such fluctuations may have a material and adverse affect on the Company s operating results.

The Company s customers demand a high level of quality. As a result, the Company maintains an extensive quality control system designed to meet the requirements of sophisticated defense and commercial communications products. The Company has been approved by defense customers under the requirements of the U.S. military quality system, which approval is also often accepted by commercial customers. In addition, all of the Company s facilities have achieved and maintain ISO 9001 certification, and four of the Company s North American facilities have achieved and maintain the automotive industry quality standard of QS 9000.

In recent years, a majority of the Company s capital investment has been expended to establish new production lines and improve manufacturing processes. There can be no assurance that the Company can continue to make such investments in a timely manner so as to take advantage of market demand.

SALES AND DISTRIBUTION

The Company sells its products primarily through manufacturers representatives, managed by the Company s internal sales force, and distribution. The Company maintains representatives throughout North America and Europe, and portions of South America, Asia and the Middle East. The Company also maintains within its sales organization employees dedicated to new business development as well as additional employees dedicated to distribution sales management. In fiscal 2004, approximately 21% of the Company s consolidated sales was through distribution. Domestic distribution is done through various national and regional distributors. International distribution is done through the Company s wholly-owned German subsidiary, Spectrum Control GmbH.

During fiscal year 2004, the Company sold its products to approximately 1,200 accounts. Sales of products to the Company s top ten customers represented 43% ($34.2 million) of total consolidated net sales in 2004. The top ten customers primarily consist of original equipment

manufacturers of telecommunications equipment and military/aerospace prime contractors. All of the Company s major customers are unaffiliated with Spectrum Control, Inc. and its subsidiaries.

Shipments are made by common carrier. Most of the Company s signal integrity and frequency control products are either small or miniaturized and light weight. Accordingly, shipping charges for these products are not significant to the Company s business. However, transportation costs for the Company s power integrity products and managements systems may be significant. Accordingly, shipping charges and delivery time for these products may affect the Company s ability to compete for business, particularly in international markets.

No material portion of the Company s business is subject to renegotiation of profits or termination of contracts or sub-contracts at the election of the U.S. Government.

Table of Contents

BACKLOG

The Company s backlog, which consists of purchase orders by customers, totaled approximately $30.6 million at November 30, 2004 and $24.6 million at November 30, 2003. It is anticipated that approximately 90% of the Company s backlog as of November 30, 2004 will be shipped within one year. Annual requirement contracts are taken into backlog only to the extent that orders are actually released thereunder. Although the terms and conditions contained in the Company s quotation forms place certain restrictions on a customer s right to cancel, purchase orders generally provide for cancellation. In practice, the Company negotiates each cancellation and schedule change based on the cost it has incurred prior to such occurrence. The Company expects to continually reduce its average lead time (the length of time from the receipt of a customer order to shipment of finished product to the customer). As a result, the Company s backlog may decrease in the future due to reduced lead times.

EMPLOYEES

As of November 30, 2004, the Company had a total of 1,065 employees, including 43 in sales, marketing and customer support; 101 in engineering and product development; 892 in manufacturing; and 29 in finance and administration. The Company s future success depends in significant part upon the continued service of its key technical and senior management personnel and its continued ability to attract and retain highly qualified technical and managerial personnel. Competition for such personnel is intense, and there can be no assurance that the Company can retain its key managerial and technical employees or that it can attract, assimilate, or retain other highly qualified technical and managerial personnel in the future. None of the Company s employees is represented by a labor union. The Company has not experienced any work stoppages and considers its relations with its employees to be good.

PROPRIETARY RIGHTS

The Company relies on trade secrets, know-how, and to a lesser extent patents, to establish and protect proprietary rights to technologies and products. Trade secrets and know-how are protected through confidentiality agreements and internal procedures. In connection with the manufacture and sale of control products and systems, the Company owns numerous United States and foreign patents and has certain patents pending. None of these patents and patent applications are critical to the Company s business. The Company s policy is to file patent applications to protect proprietary technology, inventions and improvements. There can be no assurance that patents will issue from any of the Company s pending applications or that any claims allowed from existing or pending patents will be sufficiently broad to protect the Company s technology. While the Company intends to protect its intellectual property rights vigorously, there can be no assurance that any patents held by the Company will not be challenged, invalidated or circumvented, or the rights granted thereunder will provide competitive advantages to the Company.

The Company currently holds eight (8) United States patents and forty-one (41) foreign patents relating to polymer multilayer technology. The Company has entered into several agreements regarding licensing the technology covered by these patents. However, it is not known what commercial value, if any, these patents and related licenses may have.

GOVERNMENT REGULATIONS

The Company s products are incorporated into communications systems which are subject to various FCC regulations. Regulatory changes, including changes in the allocation of available frequency spectrum, could significantly impact the Company s operations by restricting development efforts by the Company s customers, obsoleting current products or increasing the opportunity for additional competition. Changes

in, or the failure by the Company to comply with, applicable domestic and international regulations could have an adverse effect on the Company s business, operating results and financial condition. In addition, the increasing demand for wireless communications has exerted pressure on regulatory bodies worldwide to adopt new standards for such products and services, generally following extensive investigation of and deliberation over competing technologies. The delays inherent in this government approval process may cause the cancellation, postponement or rescheduling of the installation of communications systems by the Company s customers, which in turn may have a material adverse effect on the sale of products by the Company to such customers.

In order to qualify as an approved supplier of products for use in equipment purchased by the military services or aerospace programs, the Company is required to meet the applicable portions of the quality specifications and performance standards designed by the Air Force, the Army, and the Navy. The Company s products must also conform to the specifications of the Defense Electronic Supply Center for replacement parts supplied to the military. To the extent required, the Company meets or exceeds all of these specifications.

Table of Contents

The Company is subject to numerous federal, state and local regulations relating to air and water quality, the disposal of hazardous waste materials, safety, and health. Compliance with applicable environmental regulations has not significantly changed the Company s competitive position, capital spending, or earnings in the past and the Company does not presently anticipate that compliance with such regulations will change its competitive position, capital spending, or earnings for the foreseeable future. The Company continuously monitors regulatory matters and believes that it is currently in compliance in all material respects with applicable environmental laws and regulations.

COMPETITION

The markets for the Company s products are intensely competitive and are characterized by price erosion, technological change, and product obsolescence. The principal competitors of our Signal Integrity Products Group include Amphenol Corporation, Conec Corporation, ITT Canon, an ITT Industries Company, and Tusonix, Inc. The primary competitors of our Power Integrity Products include Corcom, a Tyco Electronics company, Delta Group Electronics, Inc., Schaffner Holder AG, and Captor Technology Company Ltd. The major competitors of our Power Management Systems include Astec America, Inc., Peco II, Inc., Dataprobe, Inc., Western Telematic, Inc. and Dantel, Inc. Major competitors for our Frequency Control Products include K&L Microwave, a Dover company, Lorch Microwave, Cougar Components Corp., M/A Com, a Tyco Electronics Company, and Murata Manufacturing Company. Many of the Company s current and potential competitors have significantly greater financial, technical, manufacturing, and marketing resources than the Company. These competitors may be able to engage in sustained price reductions in the Company s primary markets to gain market share. Furthermore, the Company currently supplies control products and systems to large OEM customers that are continuously evaluating whether to manufacture their own products and systems or purchase them from outside sources.

The Company believes that its ability to compete in its current markets depends on factors both within and outside the Company s control, including the timing and success of new product introductions by the Company and its competitors, availability of ceramic and assembly manufacturing capability, the Company s ability to support decreases in selling price through operating cost reductions, adequate sources of raw materials, product quality, and general economic conditions. There can be no assurance that the Company will be able to compete successfully in the future.

RESEARCH AND DEVELOPMENT

The Company s position as a leading designer, developer and manufacturer of control products and systems is largely the result of a long history of technological innovation. The Company s research and development efforts are focused on expanding the Company s materials technology, improving existing product offerings, developing new product offerings such as our power management systems, and designing specialized production equipment to improve manufacturing efficiencies. As of November 30, 2004 the Company employed 101 individuals in engineering and product development. In addition to their design and development activities, the engineering staff participates with the Company s marketing department in proposal preparation and applications support for customers. Research and development expense was $1.7 million in 2004, $1.4 million in 2003, and $1.4 million in 2002.

WEBSITE ACCESS TO COMPANY REPORTS

The Company s annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports are available free of charge on the Company s website at www.spectrumcontrol.com as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission. Copies of the Company s annual report are also available, free of charge, upon written request.

OTHER MATTERS

The business of the Company is not subject to any significant seasonal fluctuations.

The Company does not believe that it has any special practices or special conditions affecting working capital items that are significant for an understanding of its business.

Table of Contents

ITEM 2. PROPERTIES

The Company s principal manufacturing and office facilities as of November 30, 2004 are as follows:

LOCATION	FUNCTION	APPROXIMATE SQUARE FEET OF FLOOR AREA	OWNERSHIP	PRINCIPAL BALANCE OUTSTANDING AT 11/30/04 ON RELATED MORTGAGE
8061 Avonia Road Fairview, PA	Manufacturing, EMI Testing	38,000	Owned	N/A
4100 Michoud Blvd. New Orleans, LA	Manufacturing	100,000	Owned	$ 700,000
6798 Oak Hall Lane Columbia, MD	Manufacturing	35,000	Rented	N/A
3053 Hwy. 51N Wesson, MS	Manufacturing	50,000	Owned	$ 820,000
38166 Old Stage Road Delmar, DE	Manufacturing	15,000	Owned	N/A
2144 Franklin Drive NE Palm Bay, FL	Manufacturing	53,000	Owned	N/A
Boulevard Zaragoza 2910 Ciudad Juarez, Mexico	Manufacturing	46,000	Rented	N/A
No. 37 South Gong Ye Da Dao Qiaotao Town Guangdong, China	Manufacturing	16,000	Rented	N/A
8031 Avonia Road Fairview, PA	Corporate Offices	10,000	Owned	$ 586,000

(1) The Company s manufacturing and office space is considered adequate for its existing requirements and its projected business needs.
(2) In addition to the facilities described above, the Company leases certain sales office and warehousing space.

ITEM 3. LEGAL PROCEEDINGS

The Company is subject to certain legal proceedings and claims arising in the ordinary course of business. In the opinion of management, the amount of any ultimate liability with respect to these actions will not materially affect the Company s consolidated financial position or results of operations.

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

No matters were submitted to a vote of security holders during the quarter ended November 30, 2004.

Table of Contents

PART II

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

The Company s Common Stock is traded on the NASDAQ Stock Market under the symbol SPEC. The high and low sales prices for the Common Stock for each quarter during fiscal years 2004 and 2003 are set forth below.

	High	Low
Fiscal 2004		
First quarter	$ 9.16	$ 6.41
Second quarter	9.09	6.86
Third quarter	8.52	7.36
Fourth quarter	7.95	6.45

	High	Low
Fiscal 2003		
First quarter	$ 6.52	$ 4.83
Second quarter	5.46	4.85
Third quarter	6.26	5.10
Fourth quarter	8.85	5.90

At January 31, 2005, the Company had 13,029,552 shares of Common Stock outstanding, which were held by approximately 1,600 registered stockholders. In recent years, the Company has not paid cash dividends on its Common Stock. While subject to periodic review, the current policy of the Board of Directors is to retain all earnings to provide funds for the future growth of the Company.

The following table sets forth information as of November 30, 2004 with respect to compensation plans under which equity securities of the Company are authorized for issuance.

Plan Category	(I) Number of securities to be issued upon exercise of outstanding options	(II) Weighted-average exercise price of outstanding options	(III) Number of securities remaining available for future issuance under plans (excluding securities listed in Column (I))

Equity compensation plans approved by security holders	1,185,617	$ 7.49	1,011,496
Equity compensation plans not approved by security holders			
Total	1,185,617	$ 7.49	1,011,496

From time to time, the Company repurchases shares of its Common Stock on the open market or through privately negotiated transactions. During the fourth quarter of fiscal 2004, however, the Company did not repurchase any of its outstanding shares.

Table of Contents

ITEM 6. Selected Financial Data

	Years Ended November 30				
	(Amounts in Thousands, Except Per Share Data)				
	2004	2003	2002	2001	2000
Operations					
Net sales	$ 80,477	$ 62,985	$ 57,213	$ 89,260	$ 132,639
Gross margin	22,549	13,899	9,922	13,415	37,932
Income (loss) from operations	6,705	1,230	(2,254)	(4,971)	16,450
Interest expense	112	136	140	209	1,788
Income (loss) before provision for income taxes	6,777	1,413	(1,203)	(4,707)	15,319
Net income (loss)	4,167	854	(737)	(2,918)	9,503
Earnings (loss) per common share :					
Basic	$ 0.32	$ 0.07	$ (0.06)	$ (0.22)	$ 0.81
Diluted	$ 0.32	$ 0.07	$ (0.06)	$ (0.22)	$ 0.79
Weighted average common shares outstanding :					
Basic	13,012	12,937	13,063	13,296	11,694
Diluted	13,162	13,004	13,063	13,296	11,980
Financial Position					
Working capital	$ 42,291	$ 46,542	$ 42,601	$ 42,100	$ 42,962
Total assets	91,349	83,371	81,824	83,351	95,223
Long-term debt	1,716	2,106	2,391	2,676	2,107
Stockholders equity	76,842	72,044	70,675	72,087	76,546

This table should be read in conjunction with the related consolidated financial statements, notes to consolidated financial statements, and management s discussion and analysis of financial condition and results of operations.

Table of Contents

ITEM 7. Management s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read in conjunction with, and is qualified in its entirety by reference to, the consolidated financial statements and related notes appearing elsewhere in this annual report. All references to we , us , our , or the Company in the following discussion and analysis mean Spectrum Control, Inc. and its Subsidiaries.

Overview

We were founded as a solutions-oriented company, designing and manufacturing products to suppress or eliminate electromagnetic interference (EMI). In recent years, we broadened our focus and product lines to become a control products and systems company, providing a wide range of components and systems used to condition, regulate, transmit, receive, or govern electronic performance. Although our components and systems are used in many industries worldwide, our largest markets are telecommunications equipment and military/aerospace which represented 43.0% and 36.0%, respectively, of our fiscal 2004 sales. In telecommunications, our products are used in numerous systems including wireless base stations, broadband switching equipment, global positioning systems, and optical networks. Military/aerospace applications for our products include missile defense systems, smart weapons and munitions, secure communications, simulation equipment, and avionic upgrades. Automotive represents an emerging market for our products, with significant applications in DC motors, telematics, and electronic safety controls. Other markets for our products include medical instrumentation, industrial equipment, computers, and storage devices.

Our operations are currently conducted in three reportable segments: signal integrity products; power integrity products and management systems; and frequency control products. Our Signal Integrity Products Group designs and manufactures a broad range of low pass EMI filters, surface mount EMI filters, filtered arrays, filtered connectors, gaskets, specialty ceramic capacitors, and our recently developed motor line feed-thru (MLFT) filters. Our Power Integrity Products and Management Systems Group designs and manufactures numerous power integrity products (power line filters, power entry modules, multisection filters, power terminal blocks, and custom power filter assemblies) and power management systems (power distribution units, remote power management and monitoring systems, fuse interface panels, breaker interface panels, and custom power distribution systems). Our Frequency Control Products Group designs and manufactures ceramic resonators and bandpass filters, ceramic patch antennas, duplexers, lumped element filters, cavity filters, waveguides, amplifiers, frequency mixers, oscillators, synthesizers, multiple channel filter banks, and related products and systems.

Acquisitions

On October 15, 2004, we acquired substantially all of the assets and assumed certain liabilities of the radio frequency (RF) and microwave Components Business Unit (CBU) of REMEC, Inc. CBU, based in Palm Bay, Florida, designs and manufactures RF and microwave components for military, aerospace and commercial wireless markets. These high-end components include amplifiers, frequency mixers, and various types of oscillators (voltage control, dielectric resonator, and digitally tuned). Major applications for these products include weapons systems, missiles, satellite systems, wireless base stations, and cable TV systems. The aggregate cash purchase price for CBU was $8.1 million.

On February 27, 2004, we acquired all of the outstanding common stock of Salisbury Engineering, Inc. (SEI). SEI, based in Delmar, Delaware, designs and manufactures a full line of RF and microwave components and systems used primarily in military and aerospace applications. SEI s products include complex systems such as microwave synthesizers, multiple channel filter banks and preselectors, and global positioning system noise amplifiers. The aggregate cash purchase price for SEI was $5.6 million.

On July 19, 2002, we acquired all of the outstanding common stock of FSY Microwave, Inc. (FSY). FSY, based in Columbia Maryland, designs and manufactures various microwave filters, including lumped element filters, cavity filters, waveguides, and related products and systems. The aggregate cash purchase price for FSY was $6.5 million.

Table of Contents

For each of these acquisitions, the purchase price was entirely funded through our available cash reserves. The results of operations of the acquired businesses have been included in the accompanying consolidated financial statements since their respective acquisition dates. Accordingly, CBU net sales of $1.5 million and SEI net sales of $3.3 million have been included in our consolidated net sales for the year ended November 30, 2004. For the years ended November 30, 2004, 2003 and 2002, FSY sales included in our consolidated net sales amounted to $6.0 million, $4.6 million, and $2.5 million, respectively. For operating segment purposes, all of these acquired businesses are reported within our Frequency Control Products Group.

Forward-Looking Information

The following discussion includes certain forward-looking statements within the meaning of the federal securities laws, including statements regarding: (1) our belief as to future market conditions, (2) our projected capital expenditures, (3) our anticipated research and development expenses, and (4) our expected future operating requirements and financing needs. The words believe , expect , anticipate and similar expressions identify forward-looking statements. These forward-looking statements are subject to certain risks and uncertainties which could cause actual results to differ materially from historical results or those anticipated. Factors that could cause or contribute to such differences include those discussed in Risk Factors That May Affect Future Results , as well as those discussed elsewhere herein. Readers are cautioned not to place undue reliance on these forward-looking statements.

Executive Summary

During fiscal 2004, our net sales increased by $17.5 million or 27.8% from 2003. In addition to CBU product sales of $1.5 million and SEI product sales of $3.3 million, our increased sales reflect additional shipment volume throughout all of our business segments and major product lines. This volume increase was primarily driven by improved market conditions throughout the telecommunications equipment industry and increased demand for our military-related products. Our gross margin also increased to 28.0% of sales in 2004, compared to 22.1% of sales a year ago, reflecting improved operating efficiencies and economies of scale realized with additional production and shipment volumes. As a result, our overall profitability improved with net income and earnings per share of $4.2 million