

AMERICAN SUPERCONDUCTOR CORP /DE/

Form 10-K

May 28, 2009

[Table of Contents](#)

**UNITED STATES**  
**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 March 31, 2009

OR

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

For the Transition Period from            to

Commission file number 000-19672

**American Superconductor Corporation**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction)

**04-2959321**  
(IRS Employer)

(of Incorporation or Organization)

(Identification Number)

**Sixty Four Jackson Road**

**Devens, Massachusetts**  
(Address of Principal Executive Offices)

**01434**  
(Zip Code)

**Registrant's telephone number, including area code: (978) 842-3000**

**Securities registered pursuant to Section 12(b) of the Act: Common Stock, \$0.01 par value, NASDAQ Global Market LLC**

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

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

The aggregate market value of the registrant's Common Stock held by non-affiliates of the registrant on September 30, 2008, based on the closing price of the shares of Common Stock on the Nasdaq Global Market on that date (\$23.57 per share) was \$1,000.4 million.

Number of shares outstanding of the registrant's Common Stock, as of May 22, 2009 was 43,412,651.

#### DOCUMENTS INCORPORATED BY REFERENCE

**Document**

Definitive Proxy Statement with respect to the Annual Meeting of Stockholders for the fiscal year ended March 31, 2009, to be filed with the Securities and Exchange Commission no later than June 26, 2009

**Form 10-K Part**

Part III

**Table of Contents****TABLE OF CONTENTS**

<b>Item</b>		<b>Page</b>
	<b><u>Part I</u></b>	
1.	<u>Business</u>	1
1A.	<u>Risk Factors</u>	21
1B.	<u>Unresolved staff comments</u>	30
2.	<u>Properties</u>	30
3.	<u>Legal Proceedings</u>	30
4.	<u>Submission of Matters to a Vote of Security Holders</u>	30
	<b><u>Part II</u></b>	
5.	<u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	31
6.	<u>Selected Financial Data</u>	33
7.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	35
7A.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	51
8.	<u>Financial Statements and Supplementary Data</u>	52
9.	<u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	83
9A.	<u>Controls and Procedures</u>	83
9B.	<u>Other Information</u>	84
	<b><u>Part III</u></b>	
10.	<u>Directors, Executive Officers and Corporate Governance</u>	85
11.	<u>Executive Compensation</u>	85
12.	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	85
13.	<u>Certain Relationships and Related Transactions and Director Independence</u>	85
14.	<u>Principal Accountant Fees and Services</u>	85
	<b><u>Part IV</u></b>	
15.	<u>Exhibits, Financial Statement Schedules.</u>	86

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. For this purpose, any statements contained herein that relate to future events or conditions, including without limitation, the statements under Item 1. Business, Item 1A. Risk Factors and Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and located elsewhere herein regarding industry prospects and the Company's prospective results of operations or financial position, may be deemed to be forward-looking statements. Without limiting the foregoing, the words believes, anticipates, plans, expects, and similar expressions are intended to identify forward-looking statements. Such forward-looking statements represent management's current expectations and are inherently uncertain. The important factors discussed below under the caption Risk Factors in Item 1A, among others, could cause actual results to differ materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. Any such forward-looking statements represent management's estimates as of the date of this Annual Report on Form 10-K. While the Company may elect to update such forward-looking statements at some point in the future, it disclaims any obligation to do so, even if subsequent events cause its views to change. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this Annual Report on Form 10-K.

**Table of Contents**

**PART I**

**Item 1. BUSINESS**

**Overview**

We are a leading energy technologies company, offering an array of proprietary technologies and solutions spanning the electric power infrastructure from generation to delivery to end use. We are a leader in alternative energy, providing proven, megawatt-scale wind turbine designs and electrical control systems. We also offer a host of Smart Grid infrastructure technologies for power grid operators that enhance the reliability, efficiency and capacity of the grid, and seamlessly integrate renewable energy sources into the power infrastructure. These include superconductor power cable systems, grid-level surge protectors and power electronics-based voltage stabilization systems. Our technologies are protected by a broad and deep intellectual property portfolio consisting of hundreds of patents and licenses worldwide.

Our company markets two primary, proprietary technologies: programmable power electronic converters and high temperature superconductor (HTS) wires. The programmability and scalability of our power electronic converters differentiates them from most competitive offerings. Our HTS wires carry 150 times the electrical current of comparably sized copper wire. The two primary markets we serve are the wind energy market and the power transmission and distribution or power grid market.

The demand for clean and renewable sources of electricity, such as wind energy, and the demand for modernized, smart grids are being driven globally by a variety of factors. These factors include increasing electricity usage, power grid capacity constraints, fossil fuel price volatility, and harmful levels of pollution and greenhouse gases. In addition, our growing digital-based economy demands better power reliability and quality. Concerns about these factors have led to increased spending by corporations and supportive government regulations and initiatives on local, state, national and global levels, including renewable portfolio standards, tax incentives and international treaties.

We conduct our operations through two business units:

*AMSC Power Systems.* AMSC Power Systems ( Power Systems ) produces a broad range of products to increase electrical grid capacity and reliability; supplies electrical systems used in wind turbines; sells power electronic products that regulate wind farm voltage to enable their interconnection to the power grid; licenses proprietary wind turbine designs to manufacturers of such systems; provides consulting services to the wind industry; and offers products that enhance power quality for industrial operations.

*AMSC Superconductors.* AMSC Superconductors ( Superconductors ) manufactures HTS wire and coils; designs and develops superconductor products, such as power cables, fault current limiters and motors; and manages large-scale superconductor projects. Our fiscal year begins on April 1 and ends on March 31. This document refers to fiscal 2008, which is the period beginning on April 1, 2008 and concluding on March 31, 2009. Likewise, fiscal 2007 began on April 1, 2007 and concluded on March 31, 2008. Other fiscal years follow similarly.

**Competitive Strengths**

Our competitive strengths position us well to execute on our growth plans in the markets we serve.

*Technology Leadership and Engineering Expertise.* We are a technology leader in the development of power electronics and HTS wire-based solutions for the wind energy and power grid markets. As of March 31, 2009, we owned more than 445 patents and patent applications worldwide, and had rights

## **Table of Contents**

through exclusive and non-exclusive licenses to more than 450 additional patents and patent applications. Our technology and manufacturing know-how, customer and product knowledge and patent portfolio provide us with a strong competitive position. We employ more than 20 years of development expertise toward the design and commercialization of new products and solutions and toward the implementation of proprietary manufacturing processes.

*Sophisticated, Flexible Product Design.* Our products are highly flexible, and their sophisticated design allows for a high degree of customization. These products leverage our proprietary software and hardware combinations that enable us to configure our power converters to efficiently and quickly meet the specific requirements of customers in a diverse range of markets. Furthermore, our proprietary HTS wire design and product engineering capabilities enable products with superior performance when compared to other market alternatives. Our wire design, for instance, allows us to tailor the lamination of our HTS wire to meet the electrical and mechanical performance requirements of widely varying end-use applications.

*Highly Scalable, Low Cost Manufacturing Platform.* Our proprietary manufacturing technique for 344 superconductors, which is our brand name for what is generically known as second generation (2G) HTS wire, is modular in nature, which we believe will allow us to readily expand manufacturing capacity at a relatively low incremental cost. All of the equipment we have installed for the 344 superconductors manufacturing line is designed with the capability to process either 40 millimeter (mm) or 100 mm wide strips, which will allow us to increase gross capacity by 2.5 times without significant additional capital expenditures when we migrate from 40 mm to 100 mm production in the future. We believe our capacity expansion on this manufacturing line will eventually enable us to manufacture this wire at approximately one-fifth the cost of our first generation (1G) HTS wire, which we no longer manufacture.

*Close Consultative Relationships with Customers.* We have built a team of skilled engineers with extensive experience in the design, structure and modeling of power transmission and distribution grids and in the operation of wind farms and industrial sites. We work closely with our customers to understand their needs and develop solutions to their unique operational challenges. By determining solutions, our team is able to identify applications for our technology. We are then able to customize and target our offerings to specific customers.

*Highly Experienced Management and Technical Team.* Senior management has over 150 years of cumulative energy technologies experience. This team is composed of veterans of the electrical equipment, utility and wind power markets and is backed by our 519 employees worldwide as of March 31, 2009, 23 of whom held Ph.D.s in materials science, physics, metallurgy, engineering or other fields.

## **Strategy**

Our strategy is to drive revenue growth and enhance operating results by increasing adoption of our products.

*Target High-Growth Segments with Commercial Products.* We target high-growth segments of the power and utility industry. Our Power Systems offerings are designed to meet the needs of the wind energy market, which is expected to more than double in size from 2008 to 2015, according to the latest forecasts from the Global Wind Energy Council (GWEC). Our HTS and grid-support solutions fill the needs of capacity-constrained transmission assets globally and address the demand for more reliable, secure and efficient transmission and distribution assets. The Brattle Group has reported that the U.S. transmission grid will require an investment of more than \$230 billion from 2010 to 2030 and that the U.S. distribution grid will require an additional \$675 billion of investment over this timeframe.

*Pursue Overseas Markets.* We are increasingly focusing our sales efforts on overseas markets and have been successful in targeting business in emerging economies, such as China, India and South Korea.

## **Table of Contents**

We also have built significant sales momentum in countries where dynamic voltage standards for wind farms have been put in place, such as Australia, Canada, New Zealand and the United Kingdom. In fiscal 2008, 84 percent of our revenues came from sales outside the United States compared with 74 percent in fiscal 2007. In support of this expansion, we maintain operations in Austria, China and the United States and sales and service support centers in Germany, Singapore and Australia.

*Anticipate Customer Needs in the Development of System-Level Solutions.* We develop close working relationships with our customers that enable us to provide customized solutions and identify opportunities to employ our products. Our Network Solutions team collects and analyzes data regarding our customers' systems from entire power grids to wind farms to manufacturing operations dependent on premium quality power. For example, our Network Solutions team carries out dynamic simulations for customers on the effects power grid disturbances may have on grid reliability under all operating conditions. They then can quantify how the incorporation of Flexible AC Transmission Systems (FACTS), such as static Volt Amp Reactive (VAR) compensators (SVCs) and dynamic VAR (Statcom) systems, and advanced technologies, such as superconductor cables and fault current limiters (FCLs), can improve power grid operations. The group performs similar analyses to determine the optimum power quality solutions for industrial manufacturing sites and wind farms.

*Strengthen Our Technology Leadership While Lowering Cost.* We work continuously to strengthen our leadership position in terms of reliability, cost and total product offering. We interact with our customers and suppliers not only to improve the performance and efficiency of our Power Systems solutions, but also to reduce material and manufacturing costs. In addition, we maintain a vigorous research and development effort that continues to yield increases in electrical and mechanical performance of our 344 superconductors, which has been demonstrated at levels that are comparable to or better than our 1G HTS wire. We continue to achieve productivity enhancements in our manufacturing of 344 superconductors, which we believe will eventually enable us to manufacture this wire at approximately one-fifth the cost of our 1G HTS wire.

*Pursue Targeted Strategic Acquisitions and Alliances.* We will continue to pursue strategic business relationships and acquisitions that complement our product portfolio and increase our rate of growth. We have built strategic alliances and close corporate relationships with many industry leaders including LS Cable, Nexans, Shanghai Electric Cable Research Institute (SECRI), Siemens, Southwire, TECO-Westinghouse Motor Company and Vestas to develop and commercialize our products and to bring them to market. We also have been successful in closing key acquisitions, including Windtec and Power Quality Systems, Inc. in calendar 2007. The Windtec acquisition has provided increased access to the growing wind market and has complemented sales of our dynamic VAR (D-VAR®) and PowerModule™ power electronics products in the wind market. The Power Quality Systems acquisition enhanced our reactive compensation product offerings for utility and industrial customers.

## **Market Opportunities**

Our products and services address two substantial global demands:

the demand for cleaner, renewable sources of electricity, such as wind power, and

the demand for a modernized, smart power grid infrastructure to alleviate capacity constraints and improve reliability, security, stability and efficiency of electricity.

## **Wind Energy**

The market for wind-generated, zero-emission electricity has been growing dramatically for more than a decade. According to the GWEC, nearly 28,000 megawatts (MW) of wind generation capacity was added worldwide in calendar 2008, increasing the global installed base by approximately 29 percent. Global wind power capacity is expected to more than double by 2015. This growth is being driven in part by the substantial

## **Table of Contents**

government incentives and mandates that have been established on local, state and national levels. Additionally, wind power costs have been declining rapidly. According to the GWEC, A modern wind turbine annually produces 180 times more electricity at less than half the cost per unit (kWh) than its equivalent twenty years ago. At good locations, wind can compete with the cost of both coal and gas-fired power. According to GWEC, more than \$47 billion was spent on wind power equipment globally in 2008. We offer our wind power solutions globally with a primary focus on emerging economies such as China and India.

Most of our wind-related revenues are generated in China. In China, the National Development and Reform Commission is promoting wind power concessions for large-scale commercial development. The program encourages local authorities to invite both local and international investors to develop 100 MW size wind farms at specific sites. In February 2005, a law was published requiring the creation of a national target for renewable development, a feed-in tariffs system for renewable energy power, a nation-wide cost sharing system, and a national fund for promoting renewable energy development. GWEC estimates the installed base of wind generated electricity in China grew more than 100 percent for the third consecutive year in 2008 to more than 12,200 MW. Recently, the Chinese government raised its official target for wind power capacity to 100 gigawatts by the end of 2020.

India's installed base of wind generated electricity increased approximately 23 percent in 2008 to more than 9,600 MW. The fiscal incentives provided by the government to the wind energy sector in India include direct taxes (80 percent depreciation in the first year of installation of a project), a tax holiday for 10 years and no income tax paid on power sales to utilities. The Ministry of New and Renewable Energy has also issued guidelines to all state governments to create an attractive environment for the export, purchase, wheeling and banking of electricity generated by wind power projects.

The United States surpassed Germany to become the world's largest wind power market in 2008. The country grew its wind power installed base by 50 percent to over 25,000 MW in 2008 according to GWEC. While growth in the U.S. market is expected to slow in 2009 due to the global economic downturn, the U.S. government is promoting more aggressive renewable energy initiatives and spending. A production tax credit (PTC) was approved through the end of calendar year 2012 in the American Recovery and Reinvestment Act of 2009. The PTC provides a \$0.021 per-kilowatt-hour tax credit for electricity generated with wind turbines over the first 10 years of a project's operations. In addition, at least half of the states in the U.S. have already adopted renewable portfolio standards (RPS) that require local utilities to obtain a specified percentage of their electricity from renewable energy sources.

In 2008, GWEC estimates that over 8,400 MW of wind generated electricity was installed in the European Union. Supporting the growth of the European wind market is strong policy support at the EU and national levels. In January 2007, the European Commission released a proposal intended to enable Europe to produce 20 percent of its energy needs from renewable sources by 2020. Various incentive programs have been established in Europe, including feed-in tariffs, fixed premiums, and green certificate systems, which are often complemented by tax incentives or environmental taxes.

### **Our Approach to the Wind Energy Market**

We address the wind energy market by providing services and designing, developing, manufacturing and selling critical components.

*Electrical Systems.* We provide core electrical systems and components to manufacturers of wind energy systems. These electrical systems and components incorporate our PowerModule power electronic converters and are installed inside the nacelle of wind turbines to regulate voltage and control power flows, among other functions.

*Wind Turbine-based Grid Interconnection Solutions.* Our new Dynamic VAR Ride Through (D-VAR RT) product enables individual wind turbines to continue operating smoothly by riding through



## **Table of Contents**

voltage disturbances on power grids that might otherwise interrupt their operation. The D-VAR RT product meets the world's most stringent grid interconnection requirements, including Spain's new Procedimiento de Operación 12.3 requirement for both existing and new wind turbines.

*Development Contracts.* Our AMSC Windtec subsidiary designs and develops entire state-of-the-art wind turbines for manufacturers who are in the business of producing wind turbines or who plan to enter the business of manufacturing wind turbines. These customers typically pay us a series of milestone payments for the development work and purchase from us the core electrical components or complete electrical systems needed to operate the wind turbines.

*Licensed Designs.* We license our proprietary wind turbine designs to companies that wish to manufacture such systems. Companies that license our designs typically pay us a series of milestone payments, pay royalties for each system they install up to a certain number of wind turbines produced or commissioned, and purchase from us the core electrical components or complete electrical systems needed to operate the wind turbines.

*Service Contracts.* We sell service contracts to our customers who purchase our core electrical systems and components as well as our D-VAR RT systems.

*Consulting Services.* We sell consulting services to customers who want to improve their wind energy system designs.

Our AMSC Windtec business primarily targets emerging markets outside the United States for its products and services. Our AMSC Windtec offerings are well-suited for economies where local manufacturers are needed to meet increasing domestic demands for wind turbines. AMSC Windtec is currently designing wind turbines for, or licensing wind turbines to, customers in China and India, among others. According to GWEC, wind power capacity in China and India grew at 107 percent and 23 percent, respectively, in 2008.

## **Power Grid Infrastructure Market**

Until the early part of this decade, transmission grid investment experienced a prolonged decline caused by uncertainties regarding the ownership of and return on transmission grid investments. This period of underinvestment resulted in an increasing number of grid disturbances and blackouts, including the Northeast Blackout of August 14, 2003, which was the largest such event in U.S. history, affecting over 50 million people and costing up to an estimated \$6 billion in lost business for U.S. companies. A study conducted by researchers at Lawrence Berkeley National Laboratory found that electric power outages and blackouts cost America approximately \$80 billion annually.

Events and statistics such as these were pivotal in prompting broad public recognition of the need for concerted action to modernize and enhance the security of the nation's power grid. A new government objective to generate 25 percent of the nation's energy from renewable sources and transmit that power to the coasts has added to the sense of urgency. At the federal level, the Department of Energy (DOE) is supporting the development and implementation of new Smart Grid technologies and programs to enhance grid capacity, efficiency and reliability. This includes promoting the adoption of infrastructure technologies that make the grid stronger, more resilient, more responsive and more fail-safe.

As these expenditures are being considered, power grid operators are increasingly confronting reliability issues arising from the capacity limitations of transmission and distribution lines (overhead) and cables (underground). Pushing too much power through a line or cable will heat it up to its thermal limit. At that point, more power flow through the line or cable will cause it to fault (forced to be taken out of service) or, in severe cases, fail. Thus, as demand for power increases, it is necessary to upgrade existing transmission and distribution corridors with additional or higher capacity lines or cables.

Traditional transmission lines and cables often reach their voltage stability limit well below their thermal threshold. Driving more power through a power grid when some of its lines and cables are operating above their

## **Table of Contents**

voltage stability limit at peak demand times causes either low voltage in the power grid (a brownout ) or risk of a sudden, uncontrollable voltage collapse (a blackout ). The Northeast Blackout of 2003 was ascribed to a voltage collapse owing to operation of the grid above its voltage stability limit.

The traditional way to increase power grid capacity and voltage stability is to install more overhead power lines and underground cables. This allows for redundancy of power flow pathways and allows power grid operators to safely run systems closer to the thermal limits of the weakest links in the power grid. However, as a result of rising public resistance to new overhead lines due to environmental, aesthetic and health concerns, permitting processes of five to 10 years or more have become common for new projects.

In urban and metropolitan areas, installing additional conventional underground copper cables is similarly challenging for two important reasons: many existing underground corridors carrying power distribution cables are already filled to their physical capacity and cannot accommodate any additional conventional cables; and adding new conduits requires expanding or securing new corridors and digging up streets to lay new conduit. These tasks are costly and impose significant disruptions.

### **Our Approach to the Power Grid Infrastructure Market**

We currently address the power grid infrastructure market opportunity by providing Smart Grid components and solutions designed to increase the power grid s capacity, reliability, security, stability and efficiency.

*Superconductor Cables.* Our Superconductors business manufactures HTS wire used in superconductor power cables, which are a class of high-capacity, environmentally benign and easy-to-install transmission and distribution cables that address power grid capacity issues by increasing the thermal limit of existing or new corridors. Power cables are cylindrically shaped systems that consist of HTS wires, which conduct electricity, surrounded by electrical insulation, which in turn is encased in a metal or polymeric jacket. Today, power cables are made primarily using copper wires. Because our HTS wire is able to carry 150 times the electrical current of comparably sized copper wire, power cables of the same diameter can use significantly less HTS wire than copper wire and yet conduct up to 10 times the current of copper cables of the same diameter. These new cable systems also bring efficiency advantages. Traditional cable systems heat up due to the electrical resistance of copper, and this heat causes electrical losses. It is estimated that, on average, eight percent of the electricity produced at generation sites is lost due to resistance in the power grid. Conversely, HTS materials carry direct current (DC) with 100 percent efficiency and alternating current (AC) with nearly 100 percent efficiency when they are cooled below a critical temperature. As a result, AC HTS power cables lose significantly less power to resistive heating than copper cables, and DC HTS power cables have no energy losses due to resistive heating. We believe the annual transmission and distribution power cable market worldwide today is at least \$2 billion.

*Flexible AC Transmission Systems (FACTS).* The power that flows through AC networks comprises both real power, measured in watts, and reactive power, measured in VARs. In simple terms, reactive power is required to support voltage in the power network. Voltage is the pressure that drives electrical current through the grid. Operators of AC power networks must closely and continuously balance real power and reactive power. Where reactive power support is inadequate, grids must be operated with heightened caution. Many lines within a power grid are rated well below their full thermal capacity because when grids are stressed, even brief voltage drops caused by transient events (e.g., line outages, plant trips, lightning strikes) can trigger instability and voltage collapse. Our Power Systems business offers FACTS solutions that rapidly inject precise amounts of reactive power into transmission grids to compensate for fluctuations in reactive power. These solutions also help to connect sources of renewable energy such as wind to the power grid. We expect the need for FACTS devices to support both steady-state and transient power grid operation will continue to rise as the demand for power increases and utilities increase their focus on alternative energies and energy efficiency. Reliability-must-run generators are used by utilities to support voltage during peak load

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## **Table of Contents**

timeframes. These systems, which consume significant amounts of fuel and emit greenhouse gases, can often be replaced by reactive compensation solutions. Global Industry Analysts, Inc. estimates that the global market for FACTS solutions was \$1.5 billion in 2008.

*Fault Current Limiters and Secure Super Grid™ Systems.* Our Superconductors business develops stand-alone fault current limiter devices and Secure Super Grid systems, which combine the advantages of HTS power cables with fault current limiting capability in one system. Fault current limiters are designed to protect the grid against power surges. As grids continue to expand, the frequency and magnitude of power surges or fault currents that arise from short circuits also increase. In some cities, power surges are approaching and surpassing the ratings of circuit breakers that have been used to protect the power grid, resulting in an increased risk of blackouts. We believe there is a need for a new Smart Grid infrastructure solution that will be able to limit fault currents and protect ancillary utility equipment. We estimate that the worldwide addressable market for fault current limiters and Secure Super Grid systems exceeds \$1 billion annually.

## **AMSC Power Systems**

Our Power Systems business unit designs, develops, manufactures and markets power electronic products, systems and solutions that generate and rapidly switch, control and modulate power. AMSC Power Systems offers products that service the needs of customers in a broad array of industries, including the transmission and distribution, wind power and manufacturing industries. AMSC Power Systems business unit accounted for 92%, 86% and 59% of our revenues for fiscal 2008, 2007 and 2006, respectively.

## **Core Technologies**

Power conversion and active grid management are enabled by power electronic devices that convert or condition electric power for specific electrical applications.

*PowerModule Power Converters.* Our family of PowerModule power electronic converters incorporates power semiconductor devices that switch, control and move large amounts of power faster and with far less disruption than the electromechanical switches that have historically been used. With power ratings from 60 to 1,000 kW per converter, these products utilize a proprietary printed circuit board design that incorporates a microprocessor, thereby making them programmable for many uses. Programmability is important because individual PowerModule converters and integrated stacks of PowerModule converters can be programmed to meet the needs of different customers to control and condition varying levels of power from tens of kilowatts to megawatts across a wide range of applications. Our primary commercial PowerModule product has been the PM1000. This product's flexible design can be applied in many market applications. In order to simplify the adoption of PowerModule products, we also offer the PowerModule PM1000 Product Developer Kit and PM1000 System Developer Kit to enable potential new customers to more easily integrate and adopt the product in their applications. In addition, we also design, manufacture and sell converters specifically designed for applications including grid reliability and wind energy systems, such as our new PowerModule PM3000W product. The PM3000W, which we introduced in fiscal 2008, is being used in wind turbine electrical systems and core components. In addition to PowerModule power converter hardware, our AMSC Power Systems business unit is responsible for software development for the family of PowerModule power converters, as well as for the software needed to integrate the PowerModule power converters into larger scale systems.

While our family of PowerModule systems today are used primarily in wind and power grid applications, they also have been incorporated into electric motor drives; distributed and dispersed generation devices (micro-turbines, fuel cells and photovoltaics) and power quality industrial voltage restorer (PQ-IVR®) solutions, battery and flywheel-based uninterruptible power supplies).

*Thyristor Switches.* At the heart of several of our grid reliability and power quality offerings is a thyristor switching technology that we obtained in April 2007 through the acquisition of Power Quality

**Table of Contents**

Systems, Inc. This is a modular solid-state switch, or valve, that can be configured in a variety of different ways for specific reactive compensation and power quality needs. Today, these products are solely used as a component in our static VAR compensator and power quality static VAR compensator offerings and are not sold as a stand-alone product.

**Grid Reliability, Power Quality and Grid Interconnection Systems**

Our grid reliability, power quality and grid interconnection systems consist of the following core reactive compensation and voltage regulation offerings:

<b>Product</b>	<b>Description</b>
<i>D-VAR</i>	Our D-VAR (Dynamic VAR) reactive compensation systems are Smart Grid infrastructure solutions that provide a powerful and cost-effective source of dynamic reactive compensation for a wide range of operational needs. Also known as STATCOMs, which are considered a Flexible AC-Transmission System (FACTS) device, our D-VAR solutions are customized to meet specific customer needs and include inherent flexibility to accommodate changing grid conditions. They can correct voltage instability problems on transmission networks, provide dynamic voltage and power factor control for regulating transmission and distribution networks, and support a stable point of interconnection for distributed generation facilities and wind farms. D-VAR systems utilize our proprietary and advanced control and monitoring system that detects and instantaneously compensates for voltage disturbances by injecting leading or lagging reactive power, precisely where it is needed on the grid. D-VAR systems are extremely flexible and scalable, ranging from 2 megaVAR (MVAR) to more than one hundred MVAR.
<i>SVC</i>	Our SVC (Static VAR Compensator) is a Smart Grid solution that utilizes thyristor switched capacitors and reactors to alleviate power flow restraints on stability limited lines, increase overall power grid reliability, and address power system disturbances for industrial facilities. Benefits of installing a transmission-level SVC include: stabilized voltages on weaker networks, reduced transmission losses, increased transmission capacity, reducing or delaying the need for new lines, voltage control and stability, power swing damping and higher transient stability limits. Benefits of installing a distribution-level SVC include allowing large electric loads to operate on the AC power system while minimizing the impacts of voltage sags and flicker problems.
<i>PQ-IVR</i>	Our PQ-IVR (Power Quality-Industrial Voltage Restorer) systems offer large industrial customers a superior solution to disruptive power quality problems. PQ-IVR systems are voltage protection solutions that can detect power quality problems within milliseconds, and counteract them before they turn into costly productivity problems. PQ-IVR systems incorporate our PowerModule power electronic converters and can be configured to meet a wide range of customer requirements. Our system engineers work with customers to find the optimum low-cost solution for any industrial application.

Our grid reliability, power quality and interconnection systems have been purchased by more than 100 customers worldwide in a variety of industries. Representative customers include:

grid operators, such as American Electric Power, Bonneville Power Authority and Northeast Utilities;

wind farm developers, owners, operators and vendors, such as Enbridge, Scottish Hydro and Suzlon; and

industrial customers, such as Bridgestone, Micron Technologies and Universal Compression.

**Wind Energy Systems and Solutions**

Through our AMSC Windtec subsidiary, AMSC Power Systems provides a wide range of wind turbine designs and services. To date, we have undertaken the design of turbines with power ratings ranging from 600

## **Table of Contents**

KW to 5 MW for use both on- and off-shore. We both license proprietary designs and develop custom designs based on specific customer needs. We offer these designs through development or licensing agreements. Customers then are able to begin manufacturing the wind turbines. In addition to the design and development work, we offer customer training and support services as well as wind turbine electrical systems and core components. Leveraging our PowerModule converters, our wind turbine electrical systems and core components perform various functions, including wind turbine power control and controlling the pitch and variable speed of the blades.

Representative customers include the following wind turbine manufacturers:

Sinovel in China;

Dongfang Steam Turbine Works in China;

Doosan Heavy Industries in South Korea;

Ghodawat Industries in India;

Hyundai Heavy Industries in South Korea; and

XJ Group in China.

In 2008, we introduced our D-VAR RT solution. This product enables individual wind turbines to continue operating smoothly by riding through voltage disturbances on power grids that might otherwise interrupt their operation. The D-VAR RT product meets the world's most stringent grid interconnection requirements, including Spain's Procedimiento de Operación 12.3 requirement for both existing and new wind turbines.

## **Facilities & Manufacturing**

Our Power Systems business unit currently operates out of facilities in New Berlin and Middleton, Wisconsin; West Mifflin, Pennsylvania; Klagenfurt, Austria; and Suzhou, China. In New Berlin, Wisconsin, we design, develop, assemble and test our PowerModule power electronic converters and D-VAR RT systems. We also manufacture and test our PowerModule family of products at our Suzhou, China manufacturing facility. We outsource the manufacture of components of our PowerModule power converters, allowing us to focus on our core competency of design and final assembly and test of PowerModule systems. This also provides Power Systems with the flexibility to utilize best-of-breed subcomponents in the assembly of our converters. We assemble and test components and PowerModule power converters for incorporation into our grid reliability, power quality and interconnection, products such as D-VAR and PQ-IVR systems in our Middleton, Wisconsin facility. Our West Mifflin, Pennsylvania facility is responsible for the design, manufacture, service and sale of our thyristor switch-based technology that we integrate into our SVC products. Our AMSC Windtec subsidiary operates out of Klagenfurt, Austria. This location is home to AMSC Windtec's core engineering, design and sales teams for wind turbine licensing and development activities.

## **AMSC Superconductors**

Our Superconductors business unit designs, develops, manufactures and sells HTS wire and products made with HTS wire. We sell wire to original equipment manufacturers (OEMs) that incorporate HTS wire into value-added products, which are, in turn, sold to electric utilities, ship integrators and industrial end-users, among others. We also develop power cable systems, fault current limiters and rotating machines (including electric motors, generators and synchronous condensers) based on our HTS wire. In addition, the business unit manages projects that demonstrate these value-added HTS products to create market demand for HTS wire. AMSC Superconductors business unit accounted for 8%, 14% and 41% of our revenues for fiscal 2008, 2007 and 2006, respectively.



## Table of Contents

### HTS Wire

We estimate that we have supplied approximately 80 percent of the 1G HTS wire used in HTS product development and system demonstrations worldwide. In fiscal 2007, we initiated volume production of our proprietary 2G HTS wire, which we have named 344 superconductors. Our 344 superconductors have been designed to be easily adopted by our customers who have been developing products based on our 1G HTS wire.

With the ability to carry more than 150 times the power of copper wires of the same dimensions, our 344 superconductors have demonstrated electrical and mechanical performance that is comparable to or better than our 1G HTS wire, and we expect to manufacture this wire at one fifth the cost our 1G HTS wire when gross production volumes reach approximately three to four million meters per year. The superconductor compound we utilize in our 2G HTS wire is  $\text{YBa}_2\text{Cu}_3\text{O}_7$ , commonly referred to as YBCO. We have an experienced R&D team which continues to develop even higher performance wire.

Our 344 superconductors are hair-thin, ribbon-shaped wires that are approximately 0.4 cm wide. The core of our 344 superconductors consists of multiple thin coatings of several materials, including HTS material, on a base metal or alloy. A graphic representation of the multiple coatings in our 344 superconductors is shown in the following figure:

Architecture of the core of 344 superconductors (un-laminated, not to scale)

Many different manufacturing techniques can be utilized to produce each of the thin coatings in a 2G HTS wire. We believe we have chosen the optimal high-volume, low-cost manufacturing processes for the production of each of the coatings in our proprietary 344 superconductors, which we believe gives us a competitive edge in the marketplace.

The final form of our 344 superconductors comprises a core ribbon-shaped wire that is laminated on both sides with a thin strip of a metal or alloy in the final step of manufacturing to tailor the mechanical properties of the product. Different end-use products require different mechanical and electrical properties; so the ability to tailor these properties in the final manufacturing step is important. We also believe our ability to cost-effectively laminate our wires provides us with a competitive advantage.

Because they have the same general dimensions, and because the electrical and mechanical performance of 344 superconductors has been demonstrated to equal or exceed that of 1G HTS wire, 344 superconductors can easily replace 1G HTS wire in applications that have already adopted 1G HTS wire. However, the two generations of HTS wire differ in the superconductor materials of which they are comprised, their internal architecture, how they are manufactured, and, in some instances, their end-use applications because 344 superconductors possess unique physical properties that enable a new class of superconductor products.

Our 344 superconductors are smart materials because they are able to switch from a superconducting state with zero resistance to the flow of electricity, to the resistive state when the current passing through the wire

## **Table of Contents**

exceeds a critical value. Because a high resistance reduces current in an electrical network, the smart switching feature of superconductor wire can be used to limit high fault currents that arise because of network short circuits. This is the basis of fault current limiting devices for utility and military applications. Our 344 superconductors are well suited for such applications because the resistance of the other layers in its structure can be kept high, thus decreasing the amount of wire required to achieve the required resistance. By contrast, the significant amount of silver in 1G HTS wire keeps the resistance low. Our lamination process also permits the economical addition of thick stabilizer to our 344 superconductors to minimize the temperature rise during a fault event. This lamination process is a further competitive advantage of our 344 superconductors and associated manufacturing process as it allows us to customize our product to meet the materials and performance needs of our customer s specific applications.

As of March 31, 2009, we had approximately 63,000 meters remaining of 1G HTS wire available for sale in inventory, most of which we believe we will sell. We are now manufacturing only 344 superconductors. Our manufacturing line in Devens, Massachusetts is designed for an initial gross capacity of 720,000 meters annually.

### **HTS Wire-Based Products and Applications**

Our HTS wire is now being used in the development and commercialization of a broad array of products and applications. The business is currently focused on the development and commercialization of four main product areas: superconductor power cables, Secure Super Grid systems, stand-alone fault current limiters and rotating machines.

*Superconductor Power Cables and Secure Super Grids Systems.* An important application for our HTS wire is high-capacity AC and DC power cables. Because of the high power capacity of HTS wire, superconductor power cables can carry up to 10 times more power (depending on the design and operating characteristics of the cable) than copper-based cables of the same diameter. The performance levels and mechanical properties of our HTS wire are sufficient today to meet the technical requirements for cables that can alleviate congestion in power transmission systems. We expect that the price for HTS wire for cable systems (as measured in dollars per kiloamp meter) will approach that of copper wire used in power cable systems in the years ahead.

There are several designs for superconductor power cables being developed and tested by cable manufacturers around the world. In all cases, the cryogenic coolant for the HTS wires in these cables is liquid nitrogen. Nitrogen, which comprises approximately 79 percent of the air we breathe, is an environmentally friendly, nonflammable material. When cooled by standard industrial refrigeration techniques, nitrogen gas turns into a relatively inexpensive liquid that is used in many applications, ranging from steel making and freezing of foods, to crushing of spices and cryogenic freezing of biological materials on farms.

*Key components of a co-axial, cold dielectric superconductor power cable.*



## Table of Contents

Among the advantages presented by superconductor cables over conventional copper cables are increased power density, ease of installation, reduced voltage for comparable power and increased reliability and security. In order for electric utilities and power grid operators to realize these advantages, they must first observe the successful testing and operation of superconductor cables in high voltage test facilities and in actual power grid installations. The first superconductor cable demonstration project was undertaken more than a decade ago. Over the past three years, three superconductor power cables have been energized in the live grid in the United States. One of these demonstrations was successfully completed. The other two of these systems are currently operating and are powered with our HTS wire.

The most recent of these superconductor power cable projects is located in Long Island, New York. In April 2008, we energized a half-mile-long, 574 MW, 138 kilo-Volt (kV) superconductor cable system in the power grid of the Long Island Power Authority (LIPA). This is the world's first in-grid deployment of a transmission-voltage superconductor cable system and is expected to remain as a permanent addition to the LIPA grid.

In addition to the U.S. superconductor cable projects, Korea is planning to install a cable outside Seoul in 2010. Additional demonstrations are underway in China, Japan, Korea, Russia and Spain. We estimate that we have supplied 80 percent of HTS wire for such projects worldwide.

Secure Super Grids systems increase the capacity of power grids while also being able to rapidly suppress fault currents. In May 2007, we announced that we had begun working with Consolidated Edison, Inc. to develop and deploy our Secure Super Grid technology in Manhattan. Under a contract finalized in January 2008, the Department of Homeland Security is investing up to \$24.9 million in the development of this technology. We believe this technology has the potential to significantly enhance the capacity, security and efficiency of electric power infrastructures in urban and metropolitan areas around the world, enabling Secure Super Grids.

*Fault Current Limiters.* The availability of 344 superconductors with their smart switching capability, coupled with our proprietary lamination technology, opens a path for stand-alone fault current limiting devices, which serve as surge suppressors for the electric power grid. Fault current limitation is becoming an increasingly critical issue for utilities with growing and highly meshed urban grids, and utility interest in finding a solution is high. Fault currents today are reaching levels that could exceed the safe operating levels of circuit breakers and other power equipment in numerous locations around the world. This results in millions of dollars in damaged utility equipment and is also a common cause of brownouts and blackouts.

Many different designs of FCLs have been proposed to address this problem. The most widely investigated class is called a resistive FCL in which a current exceeding the critical current of the HTS material causes it to switch into a resistive state. We have years of experience and a number of patents in this area. As the first long-length 344 superconductors became available, we established, in February 2005, a development agreement with Siemens Corporate Technology in Erlangen, Germany to develop 344 superconductors for a stand-alone FCL application. In January 2007, this collaboration succeeded in demonstrating a single phase, 13 kV-class, 2.25 MVA-rated fault current limiter using our 344 superconductors and a proprietary bifilar coil concept. This work led to a cooperative agreement award in fiscal 2007 from the Department of Energy on a project to develop and perform in-grid testing of a transmission-FCL for Southern California Edison's (SCE's) grid. The team for this project includes AMSC, Siemens, Nexans and SCE, and this collaboration continues with the goal of developing more advanced wire and a higher rated FCL system for commercial application.

*Rotating Machines.* The use of HTS wire in rotating machines provides significant competitive advantages by enabling dramatic reductions in size, weight and manufacturing costs relative to conventional machines. Because of the manufacturing cost reductions associated with the reduced size of our superconductor rotating machines, we expect the market price for rotating machines using our design to eventually be equivalent to that of copper-based machines at power ratings of 1 MW (1,333 horsepower) and above.

We have produced several such rotating machines in the past and have pursued patent protection on many aspects of these machines. In January 2009, we announced that the U.S. Navy had successfully completed full-

## **Table of Contents**

power testing of the world's first 36.5 MW (49,000 horsepower) superconductor ship propulsion motor designed and built by AMSC in collaboration with Northrop-Grumman. The motor is less than half the size of conventional motors used on the first two DDG-1000 hulls and can reduce ship weight by nearly 200 metric tons. It can help make new ships more fuel-efficient and free up space for additional war-fighting capability.

In February 2009, we announced a Cooperative Research and Development Agreement (CRADA) with the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) and its National Wind Technology Center (NWTC) to validate the economics of a full 10 MW class superconductor wind turbine. AMSC is separately developing full 10 MW-class wind turbine component and system designs and has an ongoing research joint venture with TECO-Westinghouse Motor Company, supported by the Advanced Technology Program of the Department of Commerce, to develop core technologies for superconductor generators that can power 10 MW-class wind turbines.

We plan to license designs for such superconductor rotating machines to companies that have the infrastructure to manufacture these systems. We believe contracts of this kind would yield license and consulting service fees from these companies and a growing stream of royalty payments and revenues from the sale of HTS wire and coils to licensees.

### **HTS Wire Manufacturing and Facilities**

We have investigated many different techniques for manufacturing each of the layers in our 344 superconductors. We have discovered and demonstrated a combination of high-volume, low-cost manufacturing steps that yield our proprietary 344 superconductors with very high electrical performance. The manufacturing steps we currently utilize to manufacture our proprietary 344 superconductors, are illustrated in the following figure.

*Ten individual steps are utilized in our reel-to-reel manufacturing process for 344 superconductors*

We believe the manufacturing steps we currently utilize will produce 344 superconductors at substantially lower costs than the 1G and generic 2G HTS wire manufacturing techniques being pursued by competitors. Our current estimates suggest we should be able to produce 344 superconductors at approximately one-fifth the cost at which we had been producing 1G wire once we reach a commercial level of capacity, representing approximately nine million meters of wire per year. We believe the performance and manufacturing costs inherent in our manufacturing process, composition and architecture for 344 superconductors will give us a competitive edge in the commercial market for HTS wires. We have also developed a strong portfolio of patents related to our fabrication methodology for 344 superconductors, with 130 worldwide patents and patent applications pending, and licenses to more than 60 worldwide patents and patent applications owned by others, as of March 31, 2009. However, we can make no assurances that we will be successful in fully scaling up our proprietary manufacturing process for 344 superconductors.

## **Table of Contents**

We now produce 40 mm wide strips of superconductor material by our proprietary manufacturing process. One of the last steps of manufacturing is to slit the 40 mm wide strips into the industry-standard width, which is approximately 4 mm. As shown below, the result is that we produce multiple, ribbon-shaped wires from one manufacturing operation, which reduces manufacturing costs.

*Multiple, ribbon-shaped HTS wires with industry-standard dimensions can be produced after first producing coatings on a wider strip. Shown is a partially slit 40 mm wide strip.*

The equipment for our 344 superconductors manufacturing line is designed with the capability to process either 40 mm wide or 100 mm wide strips. In November 2007, we initiated production of 344 superconductors on our new manufacturing line in Devens, Massachusetts, and we are now producing finished product at a rate of several hundred thousand meters per year. Because our proprietary wire manufacturing technique is modular, we expect to be able to expand the current operation at a rate dictated by market demand by commissioning additional production modules and by widening the process strip from 40 mm to 100 mm, yielding a 2.5x increase in output with the same manufacturing equipment once we complete the migration to 100 mm strips. We have incurred \$14.9 million in capital expenditures to date to purchase and install the equipment for the new manufacturing line. We estimate that an additional \$28 million to \$35 million of capital expenditures would be needed for a full commercial manufacturing operation with a gross capacity of approximately 9 million meters of wire per year.

## **Sales and Marketing**

We have a single, integrated sales force focused on accelerating revenue growth and better serving our target markets. Our sales force interacts closely with our Network Solutions Team, which is comprised of skilled engineers who were previously employed at electric utilities and who have extensive experience in the design and structure of transmission and distribution grids and in the operation of industrial sites and wind farms. This team plays a key role in our sales process, providing us with an in-depth understanding of customer needs. Using sophisticated software programs, which are common to the utility industry, the team performs analyses on the effects of disturbances in power grids to determine grid reliability under normal and peak loading conditions. This group also analyzes how the use of standard technologies, such as capacitors, and advanced technologies, such as superconductor cables, fault current limiters, D-VAR STATCOM systems and static VAR compensators (SVCs), will enable the reliable operation and improve the performance of power grids. This team performs

## **Table of Contents**

similar analyses to determine the optimum power quality solution for industrial manufacturing sites and the solution needed to meet grid interconnection standards for wind farms. We believe our Network Solutions Team is a competitive differentiator because it enables us to leverage a thorough understanding of customer needs to offer highly customized solutions.

Our products are sold directly by our sales force, which operates out of sales offices in the U.S., Germany, Austria, Singapore and China. We also utilize manufacturer's representatives for our AMSC Power Systems products as well as distributors, such as Suzuki Shokan in Japan for our HTS wire.

For fiscal 2008, Sinovel represented approximately 67 percent of our total revenue. For fiscal 2007, Sinovel represented approximately 51 percent of total revenue. For fiscal 2006, the U.S. Navy represented approximately 25 percent of total revenue and Sinovel represented approximately 11 percent of total revenue. These were the only customers exceeding 10 percent of total revenue for those fiscal years.

The portion of total revenue derived from customers located outside the United States was 84%, 74% and 47% for fiscal 2008, 2007 and 2006, respectively. Of the revenue derived from customers outside the United States, 86%, 55% and 11% were derived from customers in China in fiscal 2008, 2007 and 2006, respectively. For additional financial information, see the Notes to Consolidated Financial Statements included herein, including Note 17, entitled "Business Segment and Geographic Information," regarding our business segments.

## **Backlog**

We had backlog at March 31, 2009 (excluding amounts included in accounts receivable) of approximately \$557.7 million from government and commercial customers, compared to \$199.1 million at March 31, 2008. Backlog represents the value of contracts and purchase orders received, less the revenue recognized to date on those contracts and purchase orders. The increase in backlog is due primarily to a \$450 million order for wind turbine core electrical components that we received from Sinovel in June 2008. The contract calls for shipments to begin in January 2009 and increase in amount year-over-year through the contract's completion in December 2011. While the contract enables Sinovel to revise shipment schedules within this three-year timeframe, they are contractually bound to accept all deliveries by December 2011. We recognized more than \$31 million in revenue from this contract during the fiscal year ended March 31, 2009. In addition, the current backlog, including approximately \$22.9 million on U.S. government contracts, is subject to certain standard cancellation provisions. The current backlog includes approximately \$22.8 million related to DOE awards for a 2G cable installation with LIPA, a fault current limiter project with Southern California Edison, and Department of Homeland Security (DHS) funding for Project HYDRA. Additionally, several of our government contracts are being funded incrementally, and as such, are subject to the future authorization and appropriation of government funding on an annual basis. We have a history of successful performance under incrementally-funded contracts with the government.

Of the backlog amount of \$557.7 million as of March 31, 2009, more than 33% is billable to and potentially collectable from our customers within the next 12 months.

## **Competition**

### **Competition for AMSC Power Systems**

We face competition from companies offering power electronic converters for use in applications for which we expect to sell our PowerModule products. These companies include ABB, Inverpower, SatCon, Semikron and Xantrex.

We face competition from companies offering wind turbine electrical system components. These companies include ABB, Convertteam, Ingeteam, Mita-Teknik, The Switch and Xantrex.

## **Table of Contents**

We face competition from other companies offering FACTS systems similar to our D-VAR and SVC solutions. These include SVCs from ABB, Alstrom, AREVA, Mitsubishi Electric and Siemens; adaptive VAR compensators and STATCOMs produced by S&C Electric; DVRs (dynamic voltage restorers) produced by companies such as ABB and S&C Electric; and flywheels and battery-based UPS systems offered by various companies around the world.

Our AMSC Windtec subsidiary faces competition for the supply of wind turbine engineering design services from other design engineering firms such as Garrad Hassan and Wind2Energy. We also face competition for the licensing of wind turbine systems from companies such as Aerodyn, DeWind and Fuhrlander.

### **Competition for AMSC Superconductors**

We face competition both from vendors of traditional wires made from materials such as copper and from companies who are developing HTS wires. While we no longer manufacture 1G HTS wire, we continue to sell this wire from inventory and face competition from Bruker Advanced Supercon ( Bruker ) in Germany, Innova Superconductor Technologies (China) and Sumitomo Electric Industries (Japan).

We also face competition for our 344 superconductors from a number of companies in the U.S. and abroad who are developing 2G HTS wire technology. These include Superpower (a subsidiary of Royal Philips Electronics) and MetOx in the U.S.; Fujikura, Furukawa, Showa and Sumitomo in Japan; SuNAM in South Korea, and Bruker, evico GmbH, Nexans and Zenergy in Europe. We believe that the proprietary processes we have adopted will prove to be the best processes to provide not only high-performance wire, but also commercial quantities at the lowest cost. Six companies evico GmbH, Nexans, Furukawa, Showa, Sumitomo Electric and Zenergy Power have been focusing their research programs more recently on the development of 2G HTS wire made by the same or similar processes we have chosen to utilize to manufacture 2G HTS wire.

We are developing a stand-alone FCL in collaboration with Siemens and Nexans, and our Secure Super Grids technology, which incorporates fault-current-limiting capability in superconductor power cables. The industrial competition for stand-alone FCLs based on HTS includes Hypertech and SC Power (Zenergy Power) in the U.S.; Nexans and Rolls-Royce in Europe; Sumitomo Electric and Toshiba in Japan; Beijing Superconductor and Innopower in China; and Hyundai and LS Industrial Systems in Korea. Initial work on superconductor cables that incorporate fault current limiting characteristics was carried out several years ago by Bruker and Nexans using a different concept. The competition for stand-alone FCLs also includes non-HTS systems based on power electronics, including a system developed recently by Powell and Silicon Power. We believe we have a strong intellectual property position in Secure Super Grids technology and also a strong position on stand-alone FCLs in collaboration with Siemens.

Many of our competitors have substantially greater financial resources, research and development, manufacturing and marketing capabilities than we do. In addition, as our target markets develop, other large industrial companies may enter these fields and compete with us.

## **Patents, Licenses and Trade Secrets**

### **Patent Background**

An important part of our business strategy is to develop a strong worldwide patent position in all of our technology areas. Our intellectual property (IP) patent portfolio comprises both patents we own and patents we license from others. We devote substantial resources to building a strong patent position, and we believe that we have significantly strengthened our position in the past several years. As of March 31, 2009, we owned (either alone or jointly) 111 U.S. patents and had 49 U.S. patent applications on file. We also hold licenses from third parties covering 132 issued U.S. patents and 23 U.S. patent applications. Together with the international counterparts of each of these patents and patent applications, we own more than 445 patents and patent applications worldwide, and have rights through exclusive and non-exclusive licenses to more than 450 additional patents and patent applications.

## **Table of Contents**

We believe that our current patent position, together with our expected ability to obtain licenses from other parties to the extent necessary, will provide us with sufficient proprietary rights to develop and sell our products. However, for the reasons described below, there can be no assurance that this will be the case.

Despite the strength of our patent position, a number of U.S. and foreign patents and patent applications of third parties relate to our current products, to products we are developing, or to technology we are now using in the development or production of our products. We may need to acquire licenses to those patents, or to successfully contest the scope or validity of those patents, or to design around patented processes or applications.

If companies holding patents or patent applications that we need to license are competitors, we believe the strength of our patent portfolio will significantly improve our ability to enter into license or cross-license arrangements with these companies. We have already successfully negotiated cross-licenses with several competitors. However, there can be no assurance that we will be able to obtain all necessary licenses from competitors on commercially reasonable terms, or at all.

We may be required to obtain licenses to some patents and patent applications held by companies or other institutions, such as national laboratories or universities, not directly competing with us. Those organizations may not be interested in cross-licensing or, if willing to grant licenses, may charge unreasonable royalties. We have successfully obtained licenses related to HTS wire from a number of such organizations with royalties we consider reasonable. Based on past experience, we expect that we will be able to obtain other necessary licenses on commercially reasonable terms. However, there can be no assurance that we will be able to do so.

Failure to obtain all necessary licenses upon reasonable terms could significantly reduce the scope of our business and have a materially adverse effect on our results of operations. We do not now know the likelihood of successfully contesting the scope or validity of patents held by others. In any event, we could incur substantial costs in challenging the patents of other companies. Moreover, third parties could challenge some of our patents or patent applications, and we could incur substantial costs in defending the scope and validity of our own patents or patent applications whether or not a challenge is ultimately successful.

There are no patents that we own or license expiring in the next 12 months that we consider to be material to our business or competitiveness.

## **Power Systems Patents**

We have received patents and filed a significant number of additional patent applications on power quality and reliability systems, including D-VAR and PQ-IVR systems. Our Power Systems products are covered by more than 60 patents and patents pending worldwide on both our systems and power converter products. The patents and applications are directed to inventions that significantly improve product performance and reduce product costs, thereby providing a competitive advantage. One invention of note allows for a reduction in the number of power inverters required in the system by optimally running the inverters in overload mode, thereby significantly reducing overall system costs. Another important invention utilizes inverters to offset transients due to capacitor bank switching, which provides improved system performance.

Our Windtec subsidiary designs a variety of wind turbine systems and licenses these designs, including know-how and patent rights, to third parties for an upfront fee and royalty payments for each installation of a wind turbine system. Windtec's wind turbine designs are covered by 54 patents and patents pending worldwide on wind turbine technology. Windtec has patent coverage on the unique design features of its blade pitch control system, which ensures optimal aerodynamic flow conditions on the turbine blades and improves system efficiency and performance. The pitch system includes a patented SafetyLOCK feature that causes the blades to rotate to a feathered position to prevent the rotor blades from spinning during a fault. We have also focused our patent protection on Windtec's SuperGEAR<sup>RM</sup> drive train technology, which provides additional control over a wind turbine's electrical output and enhances its power quality.

## **Table of Contents**

With our Power Systems business growing rapidly now in China, we recognize the importance of IP protection in that region. It is our judgment that China is steadily moving in the direction of recognizing and acting on international norms for IP. As such, we have incorporated China in our patent strategy for all of our various products. Nevertheless, we recognize that the risk of IP piracy is still higher there than in most other developed countries, and so we are careful to limit the technology we provide through our product sales and other expansion plans in China. While we take the steps necessary to ensure the safety of our IP, there can be no assurance that that these measures will be fully successful.

### **HTS Patents**

Since the discovery of high temperature superconductors in 1986, the HTS industry has been characterized by rapid technical advances, which in turn have resulted in a large number of patents, including overlapping patents, relating to superconductivity being applied for and granted worldwide. As a result, the patent situation in the field of HTS technology and products is unusually complex.

We have obtained licenses to patents and patent applications covering some HTS materials. However, we may have to obtain additional licenses to HTS materials.

We are ramping up production of our 2G HTS wire, which we call 344 superconductors, and we intend to continue to obtain a proprietary position in 2G HTS wire through a combination of patents, licenses and proprietary know-how. In addition to our owned patents and patent applications in 2G HTS wire, we have obtained licenses from MIT for the MOD process we use to deposit the YBCO layer, Alcatel-Lucent on the YBCO material, and University of Tennessee/Battelle to the RABiTS<sup>®</sup> process we use for the substrate and buffer layers for this technology. If alternative processes become more promising in the future, we will also seek to develop a proprietary position in these alternative processes.

We have a significant number of patents and pending patents covering applications of HTS wire, such as HTS fault current limiters, Secure Super Grids technology, which includes both HTS power cables and fault current limiting capability, and HTS rotating machines. Since the superconductor rotating machine and Secure Super Grids fields are relatively new fields, we believe we are building a particularly strong patent position in these areas. At present, we believe we have the broadest and most fundamental patent position in superconductor rotating machines technology. We have also filed a series of patents on our concept for our proprietary Secure Super Grids technology. However, there can be no assurance that that these patents will be sufficient to assure our freedom of action in these fields without further licensing from others.

### **Trade Secrets**

Some of the important technology used in our operations and products is not covered by any patent or patent application owned by or licensed to us. However, we take steps to maintain the confidentiality of this technology by requiring all employees and all consultants to sign confidentiality agreements and by limiting access to confidential information. No assurance can be given that these measures will prevent the unauthorized disclosure or use of that information. In addition, there is no assurance that others, including our competitors, will not independently develop the same or comparable technology that is one of our trade secrets.

### **Employees**

As of March 31, 2009, we employed a total of 519 persons, 23 of whom have a Ph.D. in materials science, physics or other fields. None of our employees are represented by a labor union. Retaining our key employees is important for achieving our goals, and we are committed to developing a working environment that motivates and rewards our employees.

### **Corporate Information**

We file reports, proxy statements and other documents with the Securities and Exchange Commission. You may read and copy any document we file at the SEC Headquarters at Office of Investor Education and

**Table of Contents**

Assistance, 100 F Street, NE, Washington, D.C. 20549. You should call 1-800-SEC-0330 for more information on the public reference room. Our SEC filings are also available to you on the SEC's Internet site at [www.sec.gov](http://www.sec.gov).

American Superconductor Corporation was incorporated in Delaware in 1987.

Our internet address is [www.amsc.com](http://www.amsc.com). We are not including the information contained in our website as part of, or incorporating it by reference into, this annual report on Form 10-K. We make available free of charge through our web site our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, as soon as reasonably practicable after we electronically file such materials with, or furnish such materials to, the Securities and Exchange Commission.

We intend to disclose on our website any amendments to our code of business conduct and ethics that are required to be disclosed pursuant to the SEC rules.

American Superconductor and design, Revolutionizing the Way the World Uses Electricity, AMSC, Powered by AMSC, D-VAR, dSVC, PowerModule, PQ-IVR, Secure Super Grids, Windtec and SuperGEAR are trademarks or registered trademarks of American Superconductor Corporation or its subsidiaries. The Windtec logo and design is a registered European Union Community Trademark. All other brand names, product names, trademarks or service marks appearing in this Annual Report on Form 10-K are the property of their respective holders.

**EXECUTIVE OFFICERS OF THE REGISTRANT**

The table and biographical summaries set forth below contain information with respect to our executive officers:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Gregory J. Yurek	62	Chairman of the Board, Chief Executive Officer and President
Charles W. Stankiewicz	50	Executive Vice President and General Manager, AMSC Power Systems
David A. Henry	47	Senior Vice President, Chief Financial Officer and Treasurer
Daniel P. McGahn	37	Senior Vice President and General Manager, AMSC Superconductors
Timothy D. Poor	42	Senior Vice President, Global Sales and Business Development
Angelo R. Santamaria	46	Senior Vice President, Global Manufacturing Operations

*Gregory J. Yurek* co-founded American Superconductor in 1987 and has been chief executive officer since December 1989, chairman of the board of directors since October 1991 and president since June 2005. Dr. Yurek also served as president from March 1989 to February 2004, as vice president and chief technical officer from August 1988 until March 1989 and as chief operating officer from March 1989 until December 1989. Prior to joining American Superconductor, Dr. Yurek was a professor of Materials Science and Engineering at MIT for 12 years. Dr. Yurek has been a director of American Superconductor since 1987.

*Charles W. Stankiewicz* joined us in July 1998 as general manager of our Power Systems business unit based in Middleton and New Berlin, Wisconsin. In March 2006, he was appointed to senior vice president, AMSC Power Systems. He was promoted to executive vice president in June 2007. Prior to joining American Superconductor, Mr. Stankiewicz spent eighteen years in a variety of technical and business management positions at Westinghouse Electric Corporation and Asea Brown Boveri (ABB) where he most recently was the vice president of power development.



**Table of Contents**

*David A. Henry* joined us in July 2007 as senior vice president, chief financial officer and treasurer. He previously served as chief financial officer of AMIS Holdings, Inc., the parent company of AMI Semiconductor, from April 2004 to July 2007. For the previous seven years, Mr. Henry worked at Fairchild Semiconductor International as vice president finance, worldwide operations from November 2002 to April 2004 and as corporate controller from March 1997 to November 2002. He was appointed vice president, corporate controller in August 1999.

*Daniel P. McGahn* joined us in December 2006 and serves as senior vice president and general manager of AMSC Superconductors, to which he was promoted in May 2008. He served in this role as vice president from January 2008 to May 2008. Previously, Mr. McGahn was vice president of strategic planning and development from December 2006 to January 2008. From 2003 to 2006, Mr. McGahn served as executive vice president and chief marketing officer of Konarka Technologies. Prior to 2003, Mr. McGahn served as general manager and chief operating officer of Hyperion Catalysis. He also held managerial positions at IGEN International and Princeton Consultants.

*Timothy D. Poor* joined us in September 2001 and serves as senior vice president, global sales and business development, responsible for our global sales, business development and marketing. From May 2007 to March 2008, Mr. Poor was the vice president and deputy general manager, Power Systems. From September 2001 to May of 2007, Mr. Poor held the position of director, Power Systems sales & business development. He was promoted to managing director in March 2006. Prior to joining our company, Mr. Poor worked at General Electric (GE) in the GE Industrial Systems division for seven years in various sales, six sigma, and sales management positions. Prior to GE, Mr. Poor was an engineering consultant at Arthur Andersen & Company.

*Angelo R. Santamaria* joined us in April 2004 as vice president and general manager of the AMSC Superconductors business unit. In August 2007, he was named vice president of global manufacturing operations and was promoted to senior vice president in May 2009. Prior to joining us, Mr. Santamaria served as vice president and general manager at Microsemi Corporation, a semiconductor manufacturer. Mr. Santamaria had served in this role since 1997. Previously, Mr. Santamaria held various management positions in Operations and Engineering at Microsemi Corporation.

## **Table of Contents**

### **Item 1A. RISK FACTORS**

#### **I. Risks related to our financial results and our common stock.**

##### **We have a history of operating losses, and we may incur losses in the future.**

We have incurred net losses in each year since our inception, driven primarily by the research and development activities in our AMSC Superconductors business unit. Our net losses were \$16.6 million, \$25.4 million and \$34.7 million for fiscal 2008, 2007 and 2006, respectively. Our accumulated deficit at the end of the fiscal 2008 was \$427.1 million. While we achieved profitable results in the quarter ended March 31, 2009 and expect to achieve profitable results in the fiscal year ending March 31, 2010, we cannot be certain that we will sustain profitability.

We had cash and cash equivalents, marketable securities and restricted cash totaling \$117.2 million at the end of fiscal 2008. We believe our available cash, cash equivalents, marketable securities and restricted cash will be sufficient to fund our working capital, capital expenditures and other cash requirements for at least the next twelve months. However, we may need additional funds if our performance deviates significantly from our current business plan, if cash accumulates in foreign countries that we are unable or unwilling to repatriate, if there are significant changes in competitive or other market factors, or if unforeseen circumstances arise. Such funds may not be available, or may not be available under terms acceptable to us.

##### **A significant portion of our revenues are derived from a single customer.**

Revenue growth in fiscal 2008 and 2007 was driven largely by our AMSC Power Systems business unit, particularly our AMSC Windtec subsidiary. Our largest customer is Sinovel in China. Sinovel accounted for approximately 67% and 51% of our total revenues for fiscal 2008 and 2007, respectively. Revenues from Sinovel are supported by purchase orders and a contract for electrical system components as well as development contracts for the design of wind turbines. If Sinovel cancelled purchase orders or development contracts, or discontinued future purchases from us, we might be unable to replace the related revenues. This would have a serious negative impact on our operating results and financial position.

##### **Adverse changes in domestic and global economic conditions could adversely affect our operating results.**

As our business has grown, we have become increasingly subject to the risks arising from adverse changes in domestic and global economic conditions. The state of both the domestic and global economies has recently become increasingly uncertain due to a significant reduction in the availability of credit, rising interest rates and financial market volatility. If credit continues to become more difficult to obtain, some customers may delay or reduce purchases. This could result in reductions in sales of our products, longer sales cycles, slower adoption of new technologies, increased accounts receivable write-offs and increased price competition. Any of these events would likely harm our business, results of operations and financial condition.

##### **Changes in exchange rates could adversely affect our results from operations.**

We conduct business in a number of foreign currencies, including the Euro and Chinese renminbi (RMB). Sales of our products and purchases of goods and services are made using these currencies. Changes in global economic conditions, market factors and governmental actions can change the value of these currencies in relation to the U.S. dollar. During fiscal 2008, the value of the dollar fluctuated widely against the Euro. When the dollar increased in value compared to the Euro during the second half of fiscal 2008, our operating results were adversely affected. For fiscal 2008 as a whole, changes in the average value of foreign currencies resulted in an overall increase in revenue of \$2.3 million. Effective January 2009, we have commenced billing certain customers in China, including our largest customer, Sinovel, in RMB, increasing our exposure to that currency, as well as changing the nature of our exposure to the Euro to a net outflow position from a net inflow position. We cannot accurately predict the impact of future exchange rate fluctuations on our results of operations.

## **Table of Contents**

**Our common stock has declined significantly, and may experience extreme market price and volume fluctuations, which may prevent our stockholders from selling our common stock at a profit and could lead to costly litigation against us that could divert our management's attention.**

The market price of our common stock has historically experienced significant volatility and may continue to experience such volatility in the future. Factors such as technological achievements by us and our competitors, the establishment of development or strategic relationships with other companies, our introduction of commercial products, and our financial performance may have a significant effect on the market price of our common stock. In addition, the stock market in general, and the stock of high technology companies in particular, have in recent years experienced extreme price and volume fluctuations, which are often unrelated to the performance or condition of particular companies. Such broad market fluctuations could adversely affect the market price of our common stock. Due to these factors, the price of our common stock may decline and investors may be unable to resell their shares of our common stock for a profit. Following periods of volatility in the market price of a particular company's securities, securities class action litigation has often been brought against that company. If we become subject to this kind of litigation in the future, it could result in substantial litigation costs, a damages award against us and the diversion of our management's attention.

## **II. Risks related to our business and industry.**

### ***General***

**If we fail to implement our business strategy, our financial performance and our growth could be materially and adversely affected.**

Our future financial performance and success are dependent in large part upon our ability to implement our business strategy successfully. Our business strategy envisions several initiatives, including driving revenue growth and enhancing operating results by increasing adoption of our products by targeting high-growth segments with commercial products, pursuing overseas markets, anticipating customer needs in the development of system-level solutions, strengthening our technology leadership while lowering cost and pursuing targeted strategic acquisitions and alliances. We may not be able to implement our business strategy successfully or achieve the anticipated benefits of our business plan. If we are unable to do so, our long-term growth and profitability may be adversely affected. Even if we are able to implement some or all of the initiatives of our business plan successfully, our operating results may not improve to the extent we anticipate, or at all. Implementation of our business strategy could also be affected by a number of factors beyond our control, such as increased competition, legal developments, government regulation, general economic conditions or increased operating costs or expenses. In addition, to the extent we have misjudged the nature and extent of industry trends or our competition, we may have difficulty in achieving our strategic objectives. Any failure to implement our business strategy successfully may adversely affect our business, financial condition and results of operations. In addition, we may decide to alter or discontinue certain aspects of our business strategy at any time.

**We may not realize all of the sales expected from our backlog of orders and contracts.**

At March 31, 2009, we had approximately \$558 million of backlog. There can be no assurances that the revenue we expect to generate from our backlog will be realized in the periods we expect to realize such revenue, or at all. In addition, the backlog of orders, if realized, may not result in profitable revenue. Backlog represents the value of contracts and purchase orders received, less the revenue recognized to date on those contracts and purchase orders. Our customers have the right under some circumstances and with some penalties or consequences to terminate, reduce or defer firm orders that we have in backlog. In addition, our government contracts are subject to the risks described below. If our customers terminate, reduce or defer firm orders, we may be protected from certain costs and losses, but our sales will nevertheless be adversely affected and we may not generate the revenue we expect.

Although we strive to maintain ongoing relationships with our customers, there is an ongoing risk that orders may be cancelled or rescheduled due to fluctuations in our customers' business needs or purchasing budgets.

## **Table of Contents**

Our largest customer, Sinovel, accounts for a substantial portion of our backlog. In the event that we either fail to deliver product to Sinovel within 120 days after its specific delivery time, or become bankrupt or insolvent, Sinovel would have the right to terminate any remaining orders that we have in backlog. If Sinovel cancelled orders, it would have a material negative impact on our operating results and financial position.

### **Many of our revenue opportunities are dependent upon subcontractors and other business collaborators.**

Many of the revenue opportunities for our business involve projects, such as the installation of superconductor cables in power grids and electrical system hardware in wind turbines, in which we collaborate with other companies, including suppliers of cryogenic systems, manufacturers of electric power cables and manufacturers of wind turbines. In addition, a key element of our business strategy is the formation of business alliances with motor manufacturers and/or marine propulsion system integrators. As a result, most of our current and planned revenue-generating projects involve business collaborators on whose performance our revenue is dependent. If these business partners fail to deliver their products or perform their obligations on a timely basis or fail to generate sufficient demand for the systems they manufacture, our revenue from the project may be delayed or decreased, and we may not be successful in selling our products.

### **Our products face intense competition, which could limit our ability to acquire or retain customers.**

The market for superconductor products is intensely competitive. We face competition both from competitors in the superconductor field and from vendors of traditional products and new technologies. There are many companies in the United States, Europe, Japan, China and Korea engaged in the development of HTS wire, including Bruker, evico GmbH, Fujikura, Furukawa Electric, Innova Superconductor Technology, Nexans, MetOx, Showa, Sumitomo Electric Industries, SuperPower (a subsidiary of Royal Philips Electronics), Zenergy and SuNAM. The superconductor industry is characterized by rapidly changing and advancing technology. Our future success will depend in large part upon our ability to keep pace with advancing HTS technology and developing industry standards.

Our D-VAR and SVC power electronic products compete with a variety of other power reliability products such as dynamic voltage restorers, or DVRs, flywheels, battery-based power quality systems and competing power electronic converter systems. The manufacturers of products that compete with our power electronic products and PowerModule products include ABB, Alstom, Mitsubishi Electric, S&C Electric and Siemens.

Our AMSC Windtec business faces competition for the supply of wind turbine engineering design services from design engineering firms, such as Garrad Hassan, and from licensors of wind turbine systems, such as Aerodyn and DeWind. We also face indirect competition in the wind energy market from manufacturers of wind energy systems, such as Gamesa, General Electric, Suzlon and Vestas.

The stand-alone fault current limiter ( FCL ) products that we are developing in collaboration with Siemens face competition from several competitors developing alternative solutions, including Beijing Superconductor, Hypertech, Hyundai, Innopower, KEPRI, LS Industrial Systems, Nexans, Rolls-Royce, SC Power, SuperPower and Toshiba. The HTS motor and generator products that we are developing face competition from copper wire-based motors and generators, from permanent magnet motors that are being developed by companies such as DRS Technologies, and from companies developing HTS rotating machinery, including Baldor Electric, Convertteam, Doosan Heavy Industries & Construction, General Electric, Ishikawajima-Harima Heavy Industries Co. and Siemens. Research efforts and technological advances made by others in the superconductor field, in the wind energy market or in other areas with applications to the power quality and reliability markets may render our development efforts obsolete.

Many of our competitors have substantially greater financial resources, research and development, manufacturing and marketing capabilities than we have. In addition, as the HTS wire, superconductor electric motors and generators, and power electronic systems markets develop, other large industrial companies may enter those fields and compete with us. If we are unable to compete successfully, it may harm our business, which in turn may limit our ability to acquire or retain customers.

## **Table of Contents**

### **Our success is dependent upon attracting and retaining qualified personnel and our inability to do so could significantly damage our business and prospects.**

We have attracted a highly skilled management team and specialized workforce, including scientists, engineers, researchers, manufacturing, marketing and sales professionals. If we were to lose the services of any of our executive officers or key employees, our business could be materially and adversely impacted.

Finding and retaining good personnel for our business is challenging, and highly qualified technical personnel are likely to remain a limited resource for the foreseeable future despite current economic conditions and rising unemployment levels. We may not be able to hire the necessary personnel to implement our business strategy, or we may need to provide higher compensation or more training to our personnel than we currently anticipate. Moreover, any officer or employee can terminate his or her relationship with us at any time.

### **We may acquire additional complementary businesses or technologies, which may require us to incur substantial costs for which we may never realize the anticipated benefits.**

We may in the future acquire complementary businesses or technologies, although we currently have no commitments or agreements to do so. As a result of any acquisitions we pursue, management's attention and resources may be diverted from our other businesses. An acquisition may also involve a significant purchase price and significant transaction-related expenses.

Achieving the benefits of any acquisition involves additional risks, including:

difficulty assimilating acquired operations, technologies and personnel;

inability to retain management and other key personnel of the acquired business;

changes in management or other key personnel that may harm relationships with the acquired business's customers and employees; and

diversion of management attention as a result of the integration process.

We cannot ensure that we will realize any of the anticipated benefits of any acquisition, and if we fail to realize these anticipated benefits, our operating performance could suffer.

### **Our international operations are subject to risks that we do not face in the U.S., which could have an adverse effect on our operating results.**

We are expanding our sales and service operations in Europe and the Asia-Pacific region, including a new operation in China. We expect our revenue and operations outside the United States will continue to expand in the future. For fiscal years ended March 31, 2009 and 2008, 84% and 74%, respectively, of our consolidated revenues were derived from customers outside of the United States. Our international operations are subject to a variety of risks that we do not face in the U.S., including:

difficulties in staffing and managing our foreign offices and the increased travel, infrastructure and legal compliance costs associated with multiple international locations;

potentially longer payment cycles for sales in foreign countries and difficulties in collecting accounts receivable;

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additional withholding taxes or other taxes on our foreign income and repatriated cash, and tariffs or other restrictions on foreign trade or investment, including export duties and quotas, trade and employment restrictions;

imposition of, or unexpected adverse changes in, foreign laws or regulatory requirements;

increased exposure to foreign currency exchange rate risk;

## **Table of Contents**

reduced protection for intellectual property rights in some countries; and

political unrest, war or acts of terrorism.

Our overall success in international markets depends, in part, upon our ability to succeed in differing legal, regulatory, economic, social and political conditions. We may not be successful in developing and implementing policies and strategies that will be effective in managing these risks in each country where we do business or conduct operations. Our failure to manage these risks successfully could harm our international operations and reduce our international sales, thus adversely affecting our business, operating results and financial condition.

### ***AMSC Power Systems Business Unit***

#### **We have limited experience manufacturing our Power Systems products in commercial quantities overseas.**

We recently commenced production of our primary Power Systems products, the PM1000 and PM3000, at our new manufacturing facility in China. We do not have significant experience managing foreign manufacturing operations, and such operations are subject to complexities that we may not be able to adequately anticipate or manage. An inability to successfully manufacture our PM1000 and PM3000 products at acceptable cost and quality through our China facility may affect our future revenue and profit.

#### **We rely upon third party suppliers for the components and subassemblies of many of our products, making us vulnerable to supply shortages and price fluctuations, which could harm our business.**

Many of the Power Systems components and subassemblies are currently manufactured for us by a limited number of suppliers. Any interruption in the supply of components or subassemblies, or our inability to obtain substitute components or subassemblies from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our customers, which would have an adverse effect on our business and operating results.

We are ramping production of some Power Systems products in our manufacturing facility in China. In order to minimize costs and time to market, we will be identifying local suppliers that meet our quality standards to produce certain of our subassemblies and components. These efforts may not be successful. In addition, any event which negatively impacts our supply, including, among others, wars, terrorist activities, natural disasters and outbreaks of infectious disease, could delay or suspend shipments of products or the release of new products or could result in the delivery of inferior products. Our revenues from the affected products would decline or we could incur losses until such time as we are able to restore our production processes or put in place alternative contract manufacturers or suppliers. Even though we carry business interruption insurance policies, we may suffer losses as a result of business interruptions that exceed the coverage available under our insurance policies.

#### **We are becoming increasingly reliant on contracts that require the issuance of performance bonds.**

While we have been required to provide performance bonds in the form of surety bonds or letters of credit in the past, the size of the bonds was not material. Recently, we have entered into contracts that require us to post bonds of significant magnitude. In many instances, we are required to deposit cash in escrow accounts as collateral for these instruments, which is unavailable to us for general use for significant periods of time. At the end of fiscal 2008, \$7.3 million of our cash was classified as restricted, the majority of which is used as collateral for performance bonds. Should we be unable to issue performance bonds in the future, significant future potential revenue could become unavailable to us. Further, should our working capital situation deteriorate, we would not be able to access the escrowed cash to meet working capital requirements.

## **Table of Contents**

### **Problems with product quality or product performance may cause us to incur warranty expenses and may damage our market reputation and prevent us from achieving increased sales and market share.**

Consistent with customary practice in our industry, we warrant our products and/or services to be free from defects in material and workmanship under normal use and service. Warranties are generally for a duration of twelve months from the date the products and/or services are put into service or 18 months from the date of delivery, whichever occurs first. In some cases, the warranty can be extended to twenty four months from date of delivery and thirty six months from in-service activation. In rare cases warranties can be for as long as five years. The possibility of future product failures could cause us to incur substantial expenses to repair or replace defective products. Furthermore, widespread product failures may damage our market reputation and reduce our market share and cause sales to decline.

### **Our success in addressing the wind energy market is dependent on the manufacturers that license our designs.**

Because an important element of our strategy for addressing the wind energy market involves the license of our wind turbine designs to manufacturers of those systems, the financial benefits to us from our products for the wind energy market are dependent on the success of these manufacturers in selling wind turbines based on our designs. We may not be able to enter into marketing or distribution arrangements with third parties on financially acceptable terms, and third parties may not be successful in selling our products or applications incorporating our products.

### **Growth of the wind energy market depends largely on the availability and size of government subsidies and economic incentives.**

At present, the cost of wind energy exceeds the cost of conventional power generation in many locations around the world. Various governments have used different policy initiatives to encourage or accelerate the development and adoption of wind energy and other renewable energy sources. Renewable energy policies are in place in the European Union, most notably Germany and Spain, certain countries in Asia, including China, Japan and South Korea, and many of the states in Australia and the United States. Examples of government sponsored financial incentives include capital cost rebates, feed-in tariffs, tax credits, net metering and other incentives to end-users, distributors, system integrators and manufacturers of wind energy products to promote the use of wind energy and to reduce dependency on other forms of energy. Governments may decide to reduce or eliminate these economic incentives for political, financial or other reasons. Reductions in, or eliminations of, government subsidies and economic incentives before the wind energy industry reaches a sufficient scale to be cost-effective in a non-subsidized marketplace could reduce demand for our products and adversely affect our business prospects and results of operations.

### ***AMSC Superconductors Business Unit***

### **There are a number of technological challenges that must be successfully addressed before our superconductor products can gain widespread commercial acceptance, and our inability to address such technological challenges could adversely affect our ability to acquire customers for our products.**

Many of our superconductor products are in the early stages of commercialization, while others are still under development. There are a number of technological challenges that we must successfully address to complete our development and commercialization efforts for superconductor products. We also believe that several years of further demonstration in the cable, fault current limiter and motor industries will be necessary before a substantial commercial market could develop. We will also need to improve the performance and reduce the cost of our HTS wire to expand the number of commercial applications for it. We may be unable to meet such technological challenges or to sufficiently improve the performance and reduce the costs of our HTS wire. Delays in development, as a result of technological challenges or other factors, may result in the introduction or commercial acceptance of our superconductor products later than anticipated.



## **Table of Contents**

**We have not manufactured our 344 superconductors in commercial quantities, and a failure to manufacture our 344 superconductors in commercial quantities at acceptable cost and quality levels would substantially limit our future revenue and profit potential.**

We are developing commercial-scale manufacturing processes for our 344 superconductors, which are very different from our 1G HTS wire manufacturing processes and are complex and challenging. In November 2007, we started initial production of our 344 superconductors and completed installation of the manufacturing line, which is designed for an annual capacity of 720,000 meters. However, in order to be able to offer our wire at pricing that we believe will be commercially competitive, we estimate that we will need to develop the capacity to manufacture nine million meters of our 344 superconductors annually. We believe it will cost between approximately \$28 million and \$35 million to purchase and install the additional equipment to achieve this commercial-scale manufacturing capability. We may not be able to manufacture satisfactory commercial quantities of 344 superconductors of consistent quality with an acceptable yield and cost. Failure to successfully scale up manufacturing of our 344 superconductors would result in a significant limitation of the broad market acceptance of our HTS products and of our future revenue and profit potential.

**The commercial uses of superconductor products are limited today, and a widespread commercial market for our products may not develop.**

To date, there has been no widespread commercial use of HTS products. Even if the technological hurdles currently limiting commercial uses of HTS products are overcome, it is uncertain whether a robust commercial market for those new and unproven products will ever develop. To date, many projects to install superconductor cables and products in power grids have been funded or subsidized by the governmental authorities. If this funding is curtailed, grid operators may not continue to utilize superconductor cables and products in their projects.

In addition, we believe in-grid demonstrations of superconductor power cables are necessary to convince utilities and power grid operators of the benefits of this technology. Even if a project is funded, completion of projects can be delayed as a result of other factors. For example, a delay in the completion of project Hydra, which involves the development and deployment of our Secure Super Grids technology in Manhattan, may occur due to a delay in construction by Consolidated Edison of a substation the cable system would be connected to.

It is possible that the market demands we currently anticipate for our HTS products will not develop and that they will never achieve widespread commercial acceptance.

**We have limited experience in marketing and selling our superconductor products and system-level solutions, and our failure to effectively market and sell our products and solutions could adversely affect our revenue and cash flow.**

To date, we have limited experience marketing and selling our superconductor products and system-level solutions, and there are few people who have significant experience marketing or selling superconductor products and system-level solutions. Once our products and solutions are ready for widespread commercial use, we will have to develop a marketing and sales organization that will effectively demonstrate the advantages of our products over both more traditional products and competing superconductor products or other technologies. We may not be successful in our efforts to market this new technology, and we may not be able to establish an effective sales and distribution organization.

We may decide to enter into arrangements with third parties for the marketing or distribution of our products, including arrangements in which our products, such as HTS wire, are included as a component of a larger product, such as a power cable system or a motor. By entering into marketing and sales alliances, the financial benefits to us of commercializing our products are dependent on the efforts of others.

## **Table of Contents**

**Our contracts with the U.S. government are subject to audit, modification or termination by the U.S. government, and the continued funding of such contracts remains subject to annual congressional appropriation which, if not approved, could adversely affect our results of operations and financial condition.**

As a company that contracts with the U.S. government, we are subject to financial audits and other reviews by the U.S. government of our costs and performance, accounting and general business practices relating to these contracts. For the year ended March 31, 2009, 7% of our total revenues were derived from government contracts. Based on the results of these audits, the U.S. government may adjust our contract-related costs and fees. We cannot be certain that adjustments arising from government audits and reviews would not have a material adverse effect on our results of operations.

All of our U.S. government contracts can be terminated by the U.S. government for its convenience. Termination-for-convenience provisions provide only for our recovery of costs incurred or committed, and for settlement of expenses and profit on work completed prior to termination. In addition to the right of the U.S. government to terminate its contracts with us, U.S. government contracts are conditioned upon the continuing approval by Congress of the necessary spending to honor such contracts. Congress often appropriates funds for a program on a fiscal-year basis even though contract performance may take more than one year. Consequently, at the beginning of many major governmental programs, contracts often may not be fully funded, and additional monies are then committed to the contract only if, as and when appropriations are made by Congress for future fiscal years. We cannot be certain that our U.S. government contracts will not be terminated or suspended in the future. The U.S. government's termination of, or failure to fully fund, one or more of our contracts would have a negative impact on our operating results and financial condition. Further, in the event that any of our government contracts are terminated for cause, it could affect our ability to obtain future government contracts which could, in turn, seriously harm our ability to develop our technologies and products.

### **III. Risks related to our intellectual property and legal matters.**

**Our technology and products could infringe intellectual property rights of others, which may require costly litigation and, if we are not successful, could cause us to pay substantial damages and disrupt our business.**

In recent years, there has been significant litigation involving patents and other intellectual property rights in many technology-related industries. There may be patents or patent applications in the United States or other countries that are pertinent to our products or business of which we are not aware. The technology that we incorporate into and use to develop and manufacture our current and future products may be subject to claims that they infringe the patents or proprietary rights of others. The success of our business will also depend on our ability to develop new technologies without infringing or misappropriating the proprietary rights of others. Third parties may allege that we infringe patents, trademarks or copyrights, or that we misappropriated trade secrets. These allegations could result in significant costs and diversion of the attention of management. If a successful claim were brought against us and we are found to infringe a third party's intellectual property rights, we could be required to pay substantial damages, including treble damages if it is determined that we have willfully infringed such rights, or be enjoined from using the technology deemed to be infringing or using, making or selling products deemed to be infringing. If we have supplied infringing products or technology to third parties, we may be obligated to indemnify these third parties for damages they may be required to pay to the patent holder and for any losses they may sustain as a result of the infringement. In addition, we may need to attempt to license the intellectual property right from such third party or spend time and money to design around or avoid the intellectual property. Any such license may not be available on reasonable terms, or at all. An adverse determination may subject us to significant liabilities and/or disrupt our business.

## **Table of Contents**

### **Our patents may not provide meaningful protection for our technology, which could result in us losing some or all of our market position.**

We own or have licensing rights under many patents and pending patent applications. However, the patents that we own or license may not provide us with meaningful protection of our technologies and may not prevent our competitors from using similar technologies, for a variety of reasons, such as:

the patent applications that we or our licensors file may not result in patents being issued;

any patents issued may be challenged by third parties; and

others may independently develop similar technologies not protected by our patents or design around the patented aspects of any technologies we develop.

Moreover, we could incur substantial litigation costs in defending the validity of or enforcing our own patents. We also rely on trade secrets and proprietary know-how to protect our intellectual property. However, our non-disclosure agreements and other safeguards may not provide meaningful protection for our trade secrets and other proprietary information. If the patents that we own or license or our trade secrets and proprietary know-how fail to protect our technologies, our market position may be adversely affected.

### **Third parties have or may acquire patents that cover the materials, processes and technologies we use or may use in the future to manufacture our HTS products, and our success depends on our ability to license such patents or other proprietary rights.**

We expect that some or all of the HTS materials, processes and technologies we use in designing and manufacturing our products are or will become covered by patents issued to other parties, including our competitors. The owners of these patents may refuse to grant licenses to us, or may be willing to do so only on terms that we find commercially unreasonable. If we are unable to obtain these licenses, we may have to contest the validity or scope of those patents or re-engineer our products to avoid infringement claims by the owners of these patents. It is possible that we will not be successful in contesting the validity or scope of a patent, or that we will not prevail in a patent infringement claim brought against us. Even if we are successful in such a proceeding, we could incur substantial costs and diversion of management resources in prosecuting or defending such a proceeding.

**Table of Contents**

**Item 1B. UNRESOLVED STAFF COMMENTS**

Not applicable.

**Item 2. PROPERTIES**

Our corporate headquarters and HTS wire manufacturing operations are located in a 355,000-square-foot facility owned by us and located in Devens, Massachusetts. In December 2007, we completed the relocation of our corporate personnel and headquarters to this facility from leased space located in Westborough, Massachusetts. Our lease on the 102,000 square foot Westborough facility, which has been vacated, expires on May 31, 2009.

Our AMSC Power Systems business unit operates out of leased facilities located in Middleton and New Berlin, Wisconsin, West Mifflin, Pennsylvania, Suzhou, China and Klagenfurt, Austria with a combined total of approximately 190,000 square feet of space. The Middleton, Wisconsin facility comprises approximately 52,000 square feet of space in two buildings with leases expiring on December 31, 2010. The New Berlin, Wisconsin facility comprises approximately 50,000 square feet of space under a lease that expires on September 30, 2011. The West Mifflin, Pennsylvania facility comprises approximately 20,000 square feet of space under a lease that expires on December 31, 2010. Our Suzhou, China facility comprises approximately 54,000 square feet of space under a lease that expires on July 31, 2010. We operate our AMSC Windtec subsidiary out of approximately 14,000 square feet in three leased facilities in Klagenfurt, Austria. These leases can be terminated at our request after a six month advance notice.

**Item 3. LEGAL PROCEEDINGS**

We are not currently involved in any legal proceedings other than routine litigation or related proceedings incidental to our business that we do not consider material.

**Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

No matters were submitted to a vote of our security holders during the fourth quarter of fiscal 2008.

**Table of Contents****PART II****Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES****Market Information**

Our common stock has been quoted on the NASDAQ Global Market under the symbol "AMSC" since 1991. The following table sets forth the high and low price per share of our common stock as reported on the NASDAQ Global Market for the two most recent fiscal years:

	Common Stock Price	
	High	Low
<b>Fiscal year ended March 31, 2008:</b>		
First quarter	\$ 21.48	13.10
Second quarter	27.59	17.25
Third quarter	32.74	20.28
Fourth quarter	29.30	15.51
<b>Fiscal year ended March 31, 2009:</b>		
First quarter	47.53	23.03
Second quarter	40.00	15.94
Third quarter	24.16	8.22
Fourth quarter	19.58	11.66

**Holders**

The number of shareholders of record on May 22, 2009 was 43,412,651.

**Dividend Policy**

We have never paid cash dividends on our common stock. We currently intend to retain earnings, if any, to fund the development and growth of our business and do not anticipate paying cash dividends for the foreseeable future. Payment of future cash 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, current and anticipated cash needs and plans for expansion.

**Table of Contents****Securities Authorized for Issuance Under Our Equity Compensation Plans**

The following table provides information about the securities authorized for issuance under our equity compensation plans as of March 31, 2009.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	2,704,546	\$ 19.97	2,665,342(1)
Equity compensation plans not approved by security holders	1,000(2)	28.75	
<b>Total</b>	<b>2,705,546</b>	<b>\$ 19.97</b>	<b>2,665,342</b>

- (1) In addition to being available for future issuance upon exercise of options that may be granted after March 31, 2009, the 2,335,500 shares available for issuance under our 2007 Stock Incentive Plan may instead be issued in the form of restricted stock, unrestricted stock, stock appreciation rights, performance shares or other equity-based awards. The above amounts include 262,000 shares available under the 2007 Director Stock Option Plan and 67,842 shares available under the employee stock purchase plan on March 31, 2009.
- (2) Represents 1,000 shares subject to outstanding non-qualified stock options granted to the former employees of Integrated Electronics, LLC ( IE ) in connection with our purchase of substantially all the assets of IE in June 2000.

**Table of Contents****Item 6. SELECTED FINANCIAL DATA**

The following selected financial data reflects the results of operations and balance sheet data for the fiscal years ended March 31, 2005 to 2009. The information set forth below is not necessarily indicative of results of future operations and should be read in conjunction with Item 7,

Management's Discussion and Analysis of Financial Condition and Results of Operations, and the Consolidated Financial Statements and notes thereto included in Item 8, Financial Statements and Supplementary Data, of this Form 10-K, in order to understand further the factors that may affect the comparability of the financial data presented below.

	2009	Fiscal year ended March 31,			2005
		2008	2007	2006	
		(In thousands, except per share data)			
Revenues	\$ 182,755	\$ 112,396	\$ 52,183	\$ 50,872	\$ 58,283
Net loss	(16,635)	(25,447)	(34,675)	(30,876)	(19,660)
Net loss per share	(0.39)	(0.65)	(1.04)	(0.94)	(0.70)
Total assets	309,106	261,234	132,433	133,470	158,917
Working capital	131,187	124,334	34,942	66,220	77,272
Cash, cash equivalents, short and long-term marketable securities and restricted cash	117,207	119,404	35,324	65,669	87,581
Stockholders' equity	221,861	208,452	101,621	115,100	143,510

Included in fiscal year ended March 31, 2009 net loss was \$9.7 million in employee stock-based compensation expense, and a \$1.0 million charge primarily for restructuring related to our decision to consolidate our Massachusetts operations into one facility in Devens, Massachusetts. Fiscal year ended March 31, 2008 net loss included \$5.7 million in employee stock-based compensation expense, a \$6.7 million charge primarily for restructuring related to our decision to consolidate our Massachusetts operations into one facility in Devens, Massachusetts, and \$0.8 million for long-lived asset impairments. Fiscal year ended March 31, 2007 net loss included a \$3.7 million in employee stock-based compensation expense and a \$0.7 million charge for restructuring and long-lived asset impairments related to our decision to re-align the AMSC Wires and AMSC SuperMachines business units into the newly formed AMSC Superconductors business unit.

On January 5, 2007, we completed the acquisition of Windtec Consulting GmbH (Windtec). Windtec is an Austria-based designer and licensor of wind energy systems. Windtec is now a wholly-owned subsidiary and is operated by our AMSC Power Systems business unit. The Windtec purchase price was 1.3 million shares of our common stock, valued at approximately \$13.1 million based on a five-day average stock price of \$10.08 per share at the time of signing the definitive acquisition agreements and public announcement of the acquisition on November 28, 2006. The shares are subject to a lockup whereby the former sole owner and founder of Windtec may sell only a certain number of shares per year through January 2010. The all-stock transaction also includes an earn-out opportunity with the potential for the issuance of up to an additional 1.4 million shares of our common stock to be granted to the former owner and founder based on the achievement by Windtec of certain revenue growth targets for fiscal 2007 through 2010. As of March 31, 2009, an additional 700,000 shares were earned based on achieving the revenue growth targets for fiscal 2007 and fiscal 2008. These shares were valued at approximately \$17.9 million, and were recorded to goodwill. Beginning on January 5, 2007, Windtec's results of operations are included in our consolidated financial statements.

On April 27, 2007, we acquired Power Quality Systems, Inc. (PQS), a Pennsylvania corporation. Pursuant to the Merger Agreement, we acquired all of the issued and outstanding shares of PQS, for which we issued 295,329 shares of our common stock. We valued the acquisition at approximately \$4.3 million (excluding acquisition costs) using a value of \$14.73 per share, which represents the five-day average closing price of the common stock from the two trading days before through two trading days after the signing of the Merger Agreement and the public announcement of the acquisition. The shares are subject to a lockup agreement whereby the former owners of PQS may sell only a certain number of shares per year through April 2009. While the former owners have not been employed by us subsequent to the acquisition, all key PQS engineering

**Table of Contents**

personnel are employed by us. The all-stock transaction also includes an earn-out opportunity with the potential for up to an additional 475,000 shares of our common stock to be issued to PQS's former owners based on the achievement of certain order growth targets for existing PQS products for fiscal 2007 and 2008. As of March 31, 2009, an additional 150,000 shares were earned based on achieving the order growth targets for fiscal 2007 and fiscal 2008. These shares were valued at approximately \$3.0 million, and were recorded to goodwill. As a result of this transaction, PQS is operated by AMSC Power Systems. The results of PQS's operations are included in our consolidated results from the date of acquisition of April 27, 2007.

The impact of the above mentioned acquisitions is discussed further in Note 14 to the Consolidated Financial Statements included in Item 8 herein.



## **Table of Contents**

### **Item 7 MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

#### **Executive Overview**

American Superconductor Corporation was founded in 1987. We offer an array of proprietary technologies and solutions spanning the electric power infrastructure from generation to delivery to end use. Our company is a leader in alternative energy, providing proven, megawatt-scale wind turbine designs and electrical control systems. We also offer a host of Smart Grid technologies for power grid operators that enhance the reliability, efficiency and capacity of the grid, and seamlessly integrate renewable energy sources into the power infrastructure. These technologies include superconductor power cable systems, grid-level surge protectors and power electronics-based voltage stabilization systems. Our technologies are protected by a broad and deep intellectual property portfolio consisting of hundreds of patents and licenses worldwide.

Our company markets two primary, proprietary technologies: programmable power electronic converters and high temperature superconductor (HTS) wires. The programmability and scalability of our power electronic converters differentiates them from most competitive offerings. Our power electronic converters increase the quantity, quality and reliability of electric power that is produced by a renewable source, such as wind, transmitted by electric utilities or consumed by large industrial entities.

Our HTS wire can carry 150 times the electric current of comparatively sized copper wire and therefore increases the electric current carrying capacity of the transmission cables comprising these power grids and provides current limiting functionality in cables and stand-alone devices. In addition, our HTS wire, when incorporated into primary electrical equipment such as motors and generators, can provide increased manufacturing and operating savings due to a significant reduction in the size and weight of this equipment. Also, our power electronic converters increase the quantity, quality and reliability of electric power that is transmitted by electric utilities or consumed by large industrial entities.

Our products are in varying stages of commercialization. Our power electronic converters have been sold commercially, as part of integrated systems, to electric utilities, wind turbines and other manufacturers and wind farm developers, owners and operators since 1999. We began production of our first generation, or 1G, HTS wire in 2003, and ceased 1G production in 2007 in favor of second generation or 2G HTS wire, as discussed below. We started initial production of 344 superconductors, our brand name for 2G HTS wire, in November 2007. Our gross production capacity is approximately 720,000 meters of 344 superconductors per year. The principal applications for HTS wire (power cables, fault current limiters, rotating machines and specialty magnets) are currently in the prototype stage. Some of these prototypes are funded by U.S. government contracts, primarily with the Department of Defense ( DOD ), Department of Energy ( DOE ) and the Department of Homeland Security ( DHS ).

Our fiscal year begins on April 1 and ends on March 31. This document refers to fiscal 2008, which is defined as the period beginning on April 1, 2008 and concluding on March 31, 2009. Likewise, fiscal 2007 began on April 1, 2007 and concluded on March 31, 2008. Other fiscal years follow similarly.

Our cash requirements depend on numerous factors, including successful completion of our product development activities, ability to commercialize our product prototypes, rate of customer and market adoption of our products and the continued availability of U.S. government funding during the product development phase. Significant deviations to our business plan with regard to these factors, which are important drivers to our business, could have a material adverse effect on our operating performance, financial condition, and future business prospects. We expect to pursue the expansion of our operations through internal growth and potential strategic alliances and acquisitions.

#### **Critical Accounting Policies and Estimates**

The preparation of consolidated financial statements requires that we make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets

## Table of Contents

and liabilities. We base our estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ under different assumptions or conditions.

Our accounting policies that involve the most significant judgments and estimates are as follows:

Revenue;

Impairment of long-lived assets;

Inventory;

Income taxes;

Goodwill;

Acquisition accounting; and

Stock-based compensation.

*Revenue.* For certain arrangements, such as prototype development contracts and certain product sales, we record revenues using the percentage-of-completion method, measured by the relationship of costs incurred to total estimated contract costs. We use the percentage-of-completion revenue recognition method when a purchase arrangement meets all of the criteria in Statement of Position 81-1,

Accounting for Performance of Construction-Type and Certain Production-Type Contracts. Percentage-of-completion revenue recognition accounting is predominantly used on certain turnkey power systems installations for electric utilities and long-term prototype development contracts with the U.S. government. We follow this method since reasonably dependable estimates of the revenues and costs applicable to various stages of a contract can be made. However, the ability to reliably estimate total costs at completion is challenging, especially on long-term prototype development contracts, and could result in future changes in contract estimates. Since many contracts extend over a long period of time, revisions in scope and cost and funding estimates during the progress of work have the effect of adjusting earnings applicable to prior-period performance in the current period. Recognition of contract revenues and profit or loss are subject to revisions as the contract work progresses to completion. Revisions in profit or loss estimates are charged to income in the period in which the facts that give rise to the revision become known. For contracts where reasonably dependable estimates of the revenues and costs cannot be made, we follow the completed-contract method.

We recognize revenue for other product sales upon customer acceptance, which can occur at the time of delivery, installation, or post-installation, where applicable, provided persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable and collectibility is reasonably assured. For multiple-element arrangements, we use the residual method to allocate value to the delivered item. Under the residual method, each undelivered item is allocated value based on verifiable objective evidence of fair value for that item and the remainder of the total arrangement price is allocated to the delivered items. For a delivered item to be considered a separate unit of accounting, the delivered item must have value to the customer on a standalone basis, there must be objective and reliable evidence of fair value of the undelivered items in the arrangement and the delivery or performance of the undelivered items must be considered probable and substantially within our control. We do not provide our customers with contractual rights of return for any of our products. When other significant obligations remain after products are delivered, revenue is recognized only after such obligations are fulfilled. The determination of what constitutes a significant post-delivery performance obligation (if any post-delivery performance obligations exist) is the primary subjective consideration we systemically evaluate in the context of each product shipment in order to determine whether to recognize revenue on the order or to defer the revenue until all post-delivery performance obligations have been completed.

We occasionally enter into construction contracts that include a performance bond. As these contracts progress, we continually assess the probability of a payout from the performance bond. Should we determine that

## **Table of Contents**

such a payout is likely, we would record a liability. Under the guidance of Emerging Issues Task Force (EITF) 01-09, Accounting for Consideration Given to a Customer or a Retailer of the Vendor's Products, we would reduce revenue to the extent a liability is recorded.

We enter into certain arrangements to license our technologies and to provide training services. We have determined that the license has no stand alone value to the customer and is not separable from the training. Accordingly, we account for these arrangements as a single unit of accounting, following the revenue recognition pattern of the last deliverable of the arrangement and recognize revenue over the period of our performance.

We have elected to record taxes collected from customers on a net basis and do not include tax amounts in Revenue or Costs of revenue.

Customer deposits received in advance of revenue recognition are recorded as deferred revenue until customer acceptance is received. Deferred revenue also represents the amount billed to and/or collected from commercial and government customers on contracts which permit billings to occur in advance of contract performance/revenue recognition.

*Impairment of long-lived assets.* We periodically evaluate our long-lived assets consisting principally of fixed and intangible assets for potential impairment under Statement of Financial Accounting Standards (SFAS) No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. We perform these evaluations whenever events or circumstances suggest that the carrying amount of an asset or group of assets is not recoverable. Our judgments regarding the existence of impairment indicators are based on market and operational performance. Indicators of potential impairment include:

a significant change in the manner in which an asset is used;

a significant decrease in the market value of an asset;

a significant adverse change in its business or the industry in which it is sold;

a current period operating cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the asset; and

significant advances in our technologies that require changes in our manufacturing process.

If we believe an indicator of potential impairment exists, we test to determine whether impairment recognition criteria in Statement of Financial Accounting Standards ( SFAS ) No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, have been met. To analyze a potential impairment, we project undiscounted future cash flows expected to result from the use and eventual disposition of the asset or primary asset in the asset group over its remaining useful life. If these projected cash flows are less than the carrying amount, an impairment loss is recognized in the Consolidated Statements of Operations based on the difference between the carrying value of the asset or asset group and its fair value, less any disposition costs. Evaluating the impairment requires judgment by our management to estimate future operating results and cash flows. If different estimates were used, the amount and timing of asset impairments could be affected.

*Inventory.* We write down inventory for estimated obsolescence or unmarketable inventory in an amount equal to the difference between the cost of the inventory and the estimated realizable value based upon assumptions of future demand and market conditions. If actual market conditions are less favorable than those projected, additional inventory write-downs may be required. Program costs may be deferred and recorded as inventory on contracts on which costs are incurred in excess of approved contractual amounts and/or funding, if future recovery of the costs is deemed probable.

*Income taxes.* Our provision for income taxes is composed of a current and a deferred portion. The current income tax provision is calculated as the estimated taxes payable or refundable on tax returns for the current



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**Table of Contents**

year. The deferred income tax provision is calculated for the estimated future tax effects attributable to temporary differences and carryforwards using expected tax rates in effect in the years during which the differences are expected to reverse.

In accordance with applicable accounting standards, we regularly assess our ability to realize our deferred tax assets. Assessments of the realization of deferred tax assets require that management consider all available evidence, both positive and negative, make significant judgments about many factors, including the amount and likelihood of future taxable income. Based on all the available evidence, we have recorded a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realizable due to the taxable losses incurred by us since our inception.

Effective April 1, 2007, we adopted the provisions of the Financial Accounting Standards Board Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* an Interpretation of FASB Statement No. 109, or FIN 48. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes*, or SFAS No. 109, and prescribes a recognition threshold of more-likely-than-not to be sustained upon examination. Upon adoption of FIN 48, our policy to include interest and penalties related to gross unrecognized tax benefits within our provision for income taxes did not change. There was no net adjustment to retained earnings upon the adoption of FIN 48.

*Goodwill.* Goodwill represents the excess of cost over net assets of acquired businesses that are consolidated. In accordance with SFAS No. 142, *Goodwill and Other Intangible Assets*, goodwill is not amortized. We perform an impairment review of our goodwill at least annually in our fourth quarter or when events and changes in circumstances indicate the need for such a detailed impairment analysis. Goodwill is considered impaired when the carrying value of a reporting unit exceeds its estimated fair value. In assessing the recoverability of goodwill, we make assumptions regarding estimated future cash flows and other factors to determine the fair value of the reporting unit. To date, we have determined that goodwill is not impaired, but we could in the future determine that goodwill is impaired, which would result in a charge to earnings.

*Acquisition accounting.* We account for acquisitions under the purchase method of accounting in accordance with SFAS No. 141, *Business Combinations*. We allocate the purchase price to the assets acquired and liabilities assumed based on their estimated fair values as of the date of acquisition. The excess of the purchase price paid by us over the estimated fair value of identifiable net assets acquired is recorded as goodwill.

*Stock-based compensation.* We measure compensation cost arising from the grant of share-based payments to employees at fair value and recognize such cost over the period during which the employee is required to provide service in exchange for the award, usually the vesting period, in accordance with the provisions of Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment* (SFAS 123R). Total stock-based compensation expense recognized during the fiscal years ended March 31, 2009, 2008 and 2007 was \$9.7 million, \$5.7 million and \$3.7 million, respectively, and is reflected in our unallocated corporate expenses. For awards with service conditions only, we recognize compensation cost on a straight-line basis over the requisite service/vesting period. For awards with service and performance conditions and graded-vesting features (a certain percentage of stock awards vest each period), we recognize compensation costs on an accelerated, graded-vesting basis over the requisite service/vesting period. We use the Black-Scholes model to value market condition awards. For awards with market conditions with a single cliff vest feature, we recognize compensation costs on a straight-line basis over the requisite service period.

Determining the appropriate fair value model and calculating the fair value of share-based payment awards requires the input of highly subjective assumptions, including the expected life of the share-based payment awards and stock price volatility. Management determined that expected volatility rates should be estimated based on historical and implied volatilities of our common stock. The expected term represents the average time that the options that vest are expected to be outstanding based on the vesting provisions and our historical

**Table of Contents**

exercise, cancellation and expiration patterns. The assumptions used in calculating the fair value of share-based payment awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if circumstances change and we use different assumptions, our stock-based compensation expense could be materially different in the future. In addition, we are required to estimate an expected forfeiture rate and only recognize expense for those shares expected to vest. If our actual forfeiture rate is materially different from our estimate, the stock-based compensation expense could be significantly different from what we have recorded in the current period.

See Note 10 of our consolidated financial statements for further information regarding our stock-based compensation assumptions and expenses.

**Results of Operations**

We operate and report our financial results to the Chief Executive Officer in two reportable business segments: AMSC Power Systems and AMSC Superconductors.

AMSC Power Systems supplies power electronic systems used in wind turbines; produces products to increase electrical grid capacity and reliability and to regulate wind farm voltage for the electrical grid; licenses proprietary wind turbine designs to manufacturers of such systems; and provides consulting services to the wind industry.

AMSC Superconductors focuses on the manufacturing of HTS wire and coils; the design and development of HTS products, such as power cables, fault current limiters and motors; and the management of large-scale HTS projects, such as HTS power cable system design, manufacturing and installation.

**Years Ended March 31, 2009 and March 31, 2008***Revenues*

Total revenues increased by 63% to \$182.8 million in fiscal 2008, from \$112.4 million for fiscal 2007. Our revenues are summarized as follows (in thousands):

	Fiscal years ended March 31,	
	2009	2008
AMSC Power Systems	\$ 168,008	\$ 96,823
AMSC Superconductors	14,747	15,573
<b>Total</b>	<b>\$ 182,755</b>	<b>\$ 112,396</b>

Revenues in our AMSC Power Systems business unit consist of revenues from wind turbine electrical systems, wind turbine license and development contracts as well as D-VAR®, PQ-IVR®, SVC, and PowerModule product sales, service contracts, and consulting arrangements. We also offer to engineer, install and commission our products on a turnkey basis for our customers. Our Power Systems business unit accounted for 92% and 86% of total revenues for fiscal 2008 and 2007, respectively. Revenues in the Power Systems business unit increased 74% to \$168.0 million in fiscal 2008 from \$96.8 million in fiscal 2007. The increases in AMSC Power Systems revenues were primarily due to higher sales of wind electrical systems and core components, including our PowerModule product, primarily to customers in China. Based on the average Euro and renminbi exchange rates for fiscal 2008, revenue denominated in these foreign currencies translated into U.S. dollars was \$2.3 million higher compared to the translation of these revenues using the average exchange rates of these currencies for fiscal 2007.

**Table of Contents**

A substantial portion of our revenues are derived from one customer, Sinovel Wind Co., Ltd., a manufacturer of wind energy systems based in China. Sales to Sinovel represented 67% and 51% of our total revenues for fiscal 2008 and 2007, respectively.

Revenues in our AMSC Superconductors business unit consist of contract revenues, HTS wire sales, revenues under government-sponsored electric utility projects, and other prototype development contracts. AMSC Superconductors revenue is primarily recorded using the percentage-of-completion method. AMSC Superconductors accounted for 8% and 14% revenues for fiscal 2008 and 2007, respectively. AMSC Superconductors revenue decreased 5% to \$14.7 million in fiscal 2008 from \$15.6 million in fiscal 2007. Revenues from significant AMSC Superconductors government funded contract revenues are summarized as follows (in thousands):

Project Name	Expected Total Contract Value	Revenue Earned through March 31, 2009	Revenue Earned for the fiscal years ended March 31,	
			2009	2008
HYDRA	\$ 24,908	\$ 7,852	\$ 4,207	\$ 3,645
LIPA I	27,458	27,440	117	3,867
LIPA II	9,148	3,295	2,817	478
DOE-FCL	3,065	3,003	2,080	923
36.5 MW Motor	90,150	90,150		1,283
NAVSEA Motor Study	5,886	5,880	2,940	2,551

These significant projects represented 82% of AMSC Superconductors revenue for both fiscal 2008 and fiscal 2007, respectively.

The HYDRA project is discussed further below. LIPA I is a project to install an HTS power cable system at transmission voltage using our first generation HTS wire for the Long Island Power Authority. LIPA II is an installation of an HTS power cable utilizing our second generation HTS wire for the Long Island Power Authority. DOE-FCL is a development and in-grid demonstration of a transmission voltage SuperLimiter FCL. The 36.5 MW superconductor motor project is a superconductor motor developed for the U.S. Navy. The NAVSEA Motor Study is a project designed to test the superconductor motor.

The decrease in AMSC Superconductors revenue for fiscal 2008 was driven primarily by lower LIPA I and 36.5 MW motor project revenues due to the completion of these programs, partially offset by higher revenues from our LIPA II, DOE-FCL and HYDRA projects.

We recognized superconductor cable project revenues in fiscal 2008 from the Project HYDRA contract with Consolidated Edison, Inc., which is being funded by the U.S. Department of Homeland Security ( DHS ) and was signed on January 22, 2008. DHS is expected to invest up to a total of \$24.9 million in the development of a new high temperature superconductor power grid technology to enable Secure Super Grids . Secure Super Grids utilize customized HTS wires, superconductor power cables and ancillary controls to deliver more power through the grid while also being able to suppress power surges that can disrupt service. Of the total \$24.9 million in funding expected from DHS, it has committed funding of \$16.3 million to us through March 31, 2009. We recognized \$4.2 million in revenue related to the Project HYDRA during fiscal 2008, compared to \$3.6 million in fiscal 2007. Consolidated Edison and Southwire Company are subcontractors to us on this project.

*Cost-sharing funding*

In addition to reported revenues, we also received funding of \$2.1 million for fiscal 2008 under U.S. government cost-sharing agreements with the U.S. Air Force and DOE, compared to \$2.5 million for fiscal 2007. The decrease in cost-sharing funding is primarily due to the DOE Wire Initiative program nearing completion. All of our cost-sharing agreements provide funding in support of development work on 344 superconductors



**Table of Contents**

being done in our AMSC Superconductors business unit. We anticipate that a portion of our funding in the future will continue to come from cost-sharing agreements as we execute joint programs with government agencies. Funding from government cost-sharing agreements is recorded as an offset to research and development ( R&D ) and selling, general and administrative ( SG&A ) expenses, rather than as revenue. As of March 31, 2009, we anticipate recognizing an additional \$1.6 million offset to R&D and SG&A expenses related to these cost-sharing agreements over the next two years.

*Costs of Revenue and Gross Margin*

Costs of revenue increased by 63% to \$130.9 million for fiscal 2008, compared to \$80.4 million for fiscal 2007. Gross margin was 28.4% for fiscal 2008, compared to 28.5% for fiscal 2007. The slight decrease in gross margin in fiscal 2008 as compared to fiscal 2007 was due primarily to a loss recorded in fiscal 2008 on a turnkey SVC contract of \$1.3 million and higher warranty expenses in Power Systems of \$3.6 million, as well as higher expensed material costs and a full year of depreciation in our Superconductors manufacturing operations. This was partially offset by a higher percentage of higher-margin Power Systems sales as compared to Superconductor sales.

*Operating Expenses**Research and development*

A portion of our R&D expenditures related to externally funded development contracts has been classified as costs of revenue (rather than as R&D expenses). Additionally, a portion of R&D expenses was offset by cost-sharing funding. Our R&D expenditures are summarized as follows (in thousands):

	<b>Fiscal years ended</b>	
	<b>March 31,</b>	
	<b>2009</b>	<b>2008</b>
R&D expenses per Consolidated Statements of Operations	\$ 19,675	\$ 15,651
R&D expenditures reclassified as costs of revenue	18,720	16,218
R&D expenditures offset by cost-sharing funding	1,129	1,323
Aggregated R&D expenses	\$ 39,524	\$ 33,192

R&D expenses (exclusive of amounts classified as costs of revenue and amounts offset by cost-sharing funding) increased by 26% to \$19.7 million, or 11% of revenue, for fiscal 2008 from \$15.7 million, or 14% of revenue, for fiscal 2007. The increase in R&D expenses was driven primarily by internal product development costs in our AMSC Power Systems business unit to support future growth opportunities and our next-generation product offerings. The increase in R&D expenditures reclassified to costs of revenue were a result of increased efforts under license and development contracts for wind turbine designs in AMSC Windtec. Aggregated R&D expenses, which include amounts classified as costs of revenue and amounts offset by cost-sharing funding, increased 19% to \$39.5 million, or 22% of revenue, for fiscal 2008 compared to \$33.2 million, or 30% of revenue, for fiscal 2007. The increase in fiscal 2008 was driven primarily by the factors described above.

**Table of Contents***Selling, general, and administrative*

A portion of the SG&A expenditures related to externally funded development contracts has been classified as costs of revenue (rather than as SG&A expenses). Additionally, a portion of SG&A expenses was offset by cost-sharing funding. Our SG&A expenditures are summarized as follows (in thousands):

	Fiscal years ended March 31,	
	2009	2008
SG&A expenses per Consolidated Statements of Operations	\$ 37,516	\$ 28,752
SG&A expenditures reclassified as costs of revenue	617	1,014
SG&A expenditures offset by cost sharing funding	983	1,216
Aggregated SG&A expenses	\$ 39,116	\$ 30,982

SG&A expenses (exclusive of amounts classified as costs of revenue and amounts offset by cost-sharing funding) increased by 30% to \$37.5 million, or 21% of revenue, in fiscal 2008 from \$28.8 million, or 26% of revenue, for fiscal 2007. The increase in SG&A expenses were due primarily to higher bad debt expense of \$1.4 million and higher stock-based compensation expense of \$2.3 million. The balance of the SG&A increase was due primarily to higher labor and related costs driven by headcount growth. For these same reasons, Aggregated SG&A expenses, which include amounts classified as costs of revenue and amounts offset by cost sharing funding, increased 26% to \$39.1 million, or 21% of revenue, for fiscal 2008 from \$31.0 million, or 28% of revenue, for fiscal 2007.

We present Aggregated R&D and Aggregated SG&A expenses, which are non-GAAP measures, because we believe this presentation provides useful information on our aggregate R&D and SG&A spending and because R&D and SG&A expenses as reported on the Consolidated Statements of Operations have been, and may in the future be, subject to significant fluctuations solely as a result of changes in the level of externally funded contract development work, resulting in significant changes in the amount of the costs recorded as costs of revenue rather than as R&D and SG&A expenses, as discussed above.

*Amortization of acquisition related intangibles*

We recorded \$1.8 million and \$5.1 million in fiscal 2008 and 2007, respectively, in amortization related to our contractual relationships/backlog, customer relationships, core technology and know-how, trade names and trademark intangible assets. These intangible assets are a result of our Windtec and PQS acquisitions. The decrease was primarily driven by lower amortization related to Windtec's contractual relationships/backlog intangible asset, which was nearly fully amortized as of March 31, 2009.

*Restructuring and impairments*

On October 25, 2007, our Board of Directors approved a restructuring plan (the Fiscal 2007 Plan) to reduce operating costs through the closure of our last remaining facility in Westborough, Massachusetts and the consolidation of operations there, including our corporate headquarters, into our Devens, Massachusetts facility. No headcount reductions were associated with this plan.

Aggregate structuring charges associated with the Fiscal 2007 Plan were \$7.4 million, of which \$1.0 million was recorded in fiscal 2008 and \$6.4 million in fiscal 2007. All costs in both fiscal years were recorded to complete the closure of our Westborough, Massachusetts facility. This aggregate charge includes an assumption that the Westborough facility will not be subleased. The remaining \$0.9 million in restructuring and impairment charges in fiscal 2007 relates primarily to a separate impairment charge for certain 1G manufacturing assets associated with a prior restructuring plan. All restructuring charges associated with the Fiscal 2007 Plan are expected to result in the disbursement of cash. Cash payments under this plan in fiscal 2008 and 2007 were \$3.9 million and \$1.4 million, respectively.

**Table of Contents**

Excluding continuing restructuring charges associated with our Westborough, Massachusetts lease through May 2009, we began to realize annual cost savings from the Fiscal 2007 Plan at a rate of approximately \$2.5 million per year beginning in the fourth quarter of fiscal 2007.

*Operating income (loss)*

Our operating income (loss) is summarized as follows (in thousands):

	Fiscal years ended March 31,	
	2009	2008
AMSC Power Systems	\$ 26,492	\$ 10,865
AMSC Superconductors	(23,655)	(21,784)
Unallocated corporate expenses	(11,033)	(13,971)
 Total	 \$ (8,196)	 \$ (24,890)

AMSC Power Systems operating income increased to \$26.5 million in fiscal 2008 from \$10.9 million in fiscal 2007. The increase in fiscal 2008 was primarily the result of higher sales, partially offset by a loss recorded on a turnkey SVC project of \$1.3 million, higher warranty expenses of \$3.6 million and higher operating expenses, primarily resulting from higher bad debt costs of \$1.4 million and costs from increased headcount to support our growth.

AMSC Superconductors operating loss increased to \$23.7 million in fiscal 2008 from \$21.8 million in fiscal 2007. The increase in operating loss for the fiscal year ended March 31, 2009 is primarily due to lower sales, higher expensed material costs and a full year of depreciation on the 2G manufacturing assets, partially offset by an impairment charge of \$0.8 million for 1G assets and \$0.3 million related to our fiscal 2006 restructuring plan in the fiscal year ended March 31, 2008.

Unallocated corporate expenses include stock-based compensation expense of \$9.7 million for fiscal 2008 compared to \$5.7 million for fiscal 2007. Fiscal 2008 Unallocated corporate expenses also include \$1.0 million of restructuring charges related primarily to the closure of our facility in Westborough, Massachusetts. Unallocated corporate expenses for fiscal 2007 included rent and occupancy costs associated with the unoccupied portion of the Company's Westborough, Massachusetts headquarters facility of \$1.3 million.

*Non-operating expenses/Interest income*

Interest income decreased to \$2.8 million for fiscal 2008 from \$4.0 million in fiscal 2007, primarily due to lower interest rates, as we invested in less risky assets due to the deteriorating economic conditions in fiscal 2008.

Other expense, net, was \$2.5 million in fiscal 2008 compared to \$1.7 million in fiscal 2007. Other expense, net, for fiscal 2008 and 2007 included mark-to-market adjustments on the revaluation of a warrant issued in April 2005 related to a litigation settlement, which was held by Provident Premier Master Fund ( Provident ). In August 2008, Provident exercised the entire warrant in exchange for 148,387 shares of our common stock. Amounts charged to expense from mark-to-market adjustments on the warrant were \$1.3 million and \$1.6 million for fiscal 2008 and 2007, respectively. The remaining amounts charged to other expense, net, primarily relate to foreign currency transaction gains and losses and hedging impacts, particularly in fiscal 2008.

*Income Taxes*

During fiscal 2008 and 2007, we recorded income tax expense of \$8.7 million and \$2.9 million, respectively. Income tax expense in both periods was driven by income generated in foreign jurisdictions. We

**Table of Contents**

have provided a valuation allowance against all deferred tax assets in the U.S. as it is more likely than not that these deferred tax assets are not currently realizable due to the net operating losses we have incurred since inception.

Section 382 of the Internal Revenue Code of 1986, as amended (the IRC), limits the amount of NOL and general business tax credit carryforwards that a corporation may deduct from its income if the corporation has undergone an ownership change. Our utilization of NOL and general business tax credit carryforwards may be subject to annual limitations imposed by Section 382 of the IRC due to ownership changes that have occurred previously or that could occur in the future. Notwithstanding, we believe any past ownership changes would not have a material impact on the utilization of its tax attributes. We are currently performing a Section 382 Study.

Please refer to the Risk Factors section in Item 1A for a discussion of certain factors that may affect our future results of operations and financial condition.

**Years Ended March 31, 2008 and March 31, 2007***Revenues*

Total revenues increased by 115% to \$112.4 million in fiscal 2007, from \$52.2 million for fiscal 2006. Our revenues are summarized as follows (in thousands):

	Fiscal years ended March 31,	
	2008	2007
AMSC Power Systems	\$ 96,823	\$ 30,850
AMSC Superconductors	15,573	21,333
<b>Total</b>	<b>\$ 112,396</b>	<b>\$ 52,183</b>

Our Power Systems business unit accounted for 86% and 59% revenues for fiscal 2007 and 2006, respectively. Revenues in the Power Systems unit increased 214% to \$96.8 million in fiscal 2007 from \$30.9 million in fiscal 2006. The increase was driven primarily by the effect of our acquisitions of Windtec and PQS, which contributed \$50.8 million to revenues in fiscal 2007 in the aggregate. The remainder of the increase was primarily due to higher sales related to new turnkey power systems projects as well as additional sales of our PowerModules to support wind technology applications primarily in Asia-Pacific.

A substantial portion of our revenues are derived from one customer, Sinovel, a manufacturer of wind energy systems based in China. Sales to Sinovel represented 51% and 11% of our consolidated total revenues for fiscal 2007 and 2006, respectively.

AMSC Superconductors accounted for 14% and 41% revenues for fiscal 2007 and 2006, respectively. AMSC Superconductors revenue decreased 27% to \$15.6 million in fiscal 2007 from \$21.3 million in fiscal 2006. Revenues from significant AMSC Superconductors government funded contract revenues are summarized as follows (in thousands):

Project Name	Expected Contract Value	Revenue Earned through March 31, 2008	Revenue for the fiscal years ended March 31,	
			2008	2007
HYDRA	\$ 24,908	\$ 3,645	\$ 3,645	\$
LIPA I	27,458	27,323	3,867	4,144
LIPA II	9,000	478	478	
DOE-FCL	3,065	923	923	
36.5 MW Motor	90,150	90,150	1,283	12,061
NAVSEA Motor Study	5,254	2,940	2,551	389



**Table of Contents**

The decrease in AMSC Superconductors revenue for fiscal 2007 was driven primarily by lower revenues from the 36.5 MW motor program for the U.S. Navy as work has been substantially completed on this program. We also experienced a decrease in 1G wire sales, as this product line was discontinued. These decreases were partially offset by new project revenue, including the HYDRA project, which was announced on May 21, 2007. While the final contract was being negotiated, we had been working under letter contracts with DHS. On January 22, 2008, we executed the final contract with DHS, which contributed \$9.8 million toward the project as of March 31, 2008. We recognized \$3.6 million in revenue related to the HYDRA project during fiscal 2007. Consolidated Edison and Southwire Company are subcontractors to us on this project.

*Cost-sharing funding*

In addition to reported revenues, we also received funding of \$2.5 million for fiscal 2007 under U.S. government cost-sharing agreements with the U.S. Air Force and DOE, compared to \$2.9 million for fiscal 2006. The decrease in cost-sharing funding is primarily due to the DOE Wire Initiative program nearing completion. All of our cost-sharing agreements provide funding in support of development work on 344 superconductors being done in the AMSC Superconductors business unit.

*Costs of Revenue*

Costs of revenue increased by 53% to \$80.4 million for fiscal 2007, compared to \$52.5 million for fiscal 2006. Gross margin was 28.5% for fiscal 2007 compared to (0.6%) for fiscal 2006. The increase in gross margin was due primarily to a higher mix of Power Systems sales as compared to Superconductors sales. In addition, AMSC Superconductors costs of revenue in the prior fiscal year included a \$3.1 million charge for the 36.5MW motor program for additional losses in connection with technical issues that caused delays and additional costs on the project.

*Operating Expenses**Research and development*

A portion of our R&D expenditures related to externally funded development contracts has been classified as costs of revenue (rather than as R&D expenses). Additionally, a portion of R&D expenses was offset by cost-sharing funding. Our R&D expenditures are summarized as follows (in thousands):

	Fiscal years ended March 31,	
	2008	2007
R&D expenses per Consolidated Statements of Operations	\$ 15,651	\$ 17,453
R&D expenditures reclassified as costs of revenue	16,218	24,482
R&D expenditures offset by cost-sharing funding	1,323	1,505
Aggregated R&D expenses	\$ 33,192	\$ 43,440

R&D expenses (exclusive of amounts classified as costs of revenue and amounts offset by cost-sharing funding) decreased by 10% to \$15.7 million, or 14% of revenue for fiscal 2007, from \$17.5 million, or 33% of revenue, for fiscal 2006. The decrease in R&D expenses was driven by a reduction in workforce as a result of the re-alignment of the AMSC Wires and SuperMachines business units in March 2007, partially offset by the added costs from the acquisitions of Windtec and PQS and additional internal product development costs in our Power Systems business unit. The decrease in R&D expenditures reclassified as a cost of revenues is a result of less R&D reclassified into cost of revenues to support government funded programs, primarily related to completing and delivering the 36.5MW motor to the Navy in June 2007. Aggregated R&D expenses, which include amounts classified as costs of revenues and amounts offset by cost-sharing funding, decreased 24% to \$33.2 million, or 30% of revenue, for fiscal 2007 compared to \$43.4 million, or 83% of revenue, for fiscal 2006. The decrease in

**Table of Contents**

fiscal 2007 was driven primarily by a lower level of externally funded program costs on the 36.5 MW motor program, as well as the factors described above.

*Selling, general, and administrative*

A portion of the SG&A expenditures related to externally funded development contracts has been classified as costs of revenue (rather than as SG&A expenses). Additionally, a portion of SG&A expenses was offset by cost-sharing funding. Our SG&A expenditures are summarized as follows (in thousands):

	Fiscal years ended March 31,	
	2008	2007
SG&A expenses per Consolidated Statements of Operations	\$ 28,752	\$ 17,503
SG&A expenditures reclassified as costs of revenue	1,014	3,915
SG&A expenditures offset by cost sharing funding	1,216	1,415
Aggregated SG&A expenses	\$ 30,982	\$ 22,833

SG&A expenses (exclusive of amounts classified as costs of revenue and amounts offset by cost-sharing funding) increased by 64% to \$28.8 million, or 26% of revenue, in fiscal 2007 from \$17.5 million, or 34% of revenue, for fiscal 2006. The increase in SG&A expenses was due primarily to higher expenses associated with stock-based compensation, less absorption of SG&A costs into costs of revenue, higher payroll expenses due to headcount growth and variable compensation costs and the inclusion of the incremental SG&A from Windtec and PQS in the current year. Aggregated SG&A expenses, which include amounts classified as costs of revenue and amounts offset by cost sharing funding, increased 36% to \$31.0 million, or 28% of revenue, for fiscal 2007, from \$22.8 million, or 44% of revenue, for fiscal 2006. The increase was due primarily to the incremental SG&A from the Windtec and PQS acquisitions, increased stock compensation expense and higher payroll expenses due to headcount growth and variable compensation costs.

*Amortization of acquisition related intangibles*

We recorded \$5.1 million and \$0.6 million in fiscal 2007 and 2006, respectively, in amortization related to our contractual relationships/backlog, customer relationships, core technology and know-how, trade names and trademark intangible assets. These intangible assets are a result of our Windtec and PQS acquisitions.

*Restructuring and impairments*

On October 25, 2007, our Board of Directors approved a restructuring plan (the Fiscal 2007 Plan ) to reduce operating costs through the closure of our last remaining facility in Westborough, Massachusetts and the consolidation of operations there, including our corporate headquarters, into our Devens, Massachusetts facility. No headcount reductions were associated with this plan.

Aggregate restructuring charges associated with the Fiscal 2007 Plan were \$6.4 million, all of which was recorded in fiscal 2007. The charge primarily represents \$3.8 million in costs associated with the write-off of the present value of the remaining lease payments, \$2.2 million in unforeseen costs determined necessary to decontaminate, clean and return the building back to its original state to the landlord, and \$0.5 million in costs associated with the relocation of people and equipment to our Devens facility. The aggregate expected charge above assumes the facility will not be subleased. All restructuring charges associated with the Fiscal 2007 Plan are expected to result in the disbursement of cash.

On March 26, 2007, our Board of Directors approved a restructuring plan (the Fiscal 2006 Plan ) to reduce operating costs and to transition our high temperature superconductor products to the manufacturing stage by consolidating AMSC Wires, SuperMachines and Power Electronic Systems business segments into two operating

**Table of Contents**

segments: AMSC Superconductors and AMSC Power Systems. We consolidated our manufacturing operations by closing one of our two Westborough, Massachusetts facilities, moving operations from that facility into the Devens, Massachusetts plant, and reducing headcount by 37 employees.

Our aggregate restructuring charges associated with the Fiscal 2006 Plan were \$0.8 million. The restructuring charge was allocated to the AMSC Superconductors operating segment. Of this total, \$0.3 million of the restructuring charges were incurred in fiscal 2007 and \$0.5 million were incurred during fiscal 2006. As of March 31, 2008, the plan was completed.

As of March 31, 2007, we reclassified our previously impaired first generation wire manufacturing equipment from Property, Plant and Equipment to Assets held for sale. The estimated salvage value of these assets was \$2.2 million as of March 31, 2007 and was recorded as other assets in the consolidated balance sheet. A public auction for the sale of these assets was held in June 2007 and private sales were negotiated with interested parties for the remaining equipment. Based on the results of the auction and our recent work to sell through private sales, we determined that additional impairment charges of \$0.8 million were required during fiscal 2007 to write down the value of the assets to their net realizable value. There were no Assets held for sale at March 31, 2008.

*Operating income (loss)*

Our operating income (loss) is summarized as follows (in thousands):

	Fiscal years ended	
	March 31,	
	2008	2007
AMSC Power Systems	\$ 10,865	\$ 402
AMSC Superconductors	(21,784)	(31,419)
Unallocated corporate expenses	(13,971)	(5,515)
 Total	 \$ (24,890)	 \$ (36,532)

The operating income at AMSC Power Systems increased to \$10.9 million in fiscal 2007 from \$0.4 million in fiscal 2006. The increase was primarily the result of benefiting from the Windtec acquisition during all of fiscal 2007 compared to only one quarter in fiscal 2006. This was partially offset by higher SG&A and R&D costs resulting from the Windtec and PQS acquisitions, including amortization of acquisition related intangibles and higher operating expenses in support of the revenue growth in AMSC Power Systems.

The operating loss at AMSC Superconductors decreased to \$21.8 million in fiscal 2007 from \$31.4 million in fiscal 2006. The decrease in the operating loss was primarily a result of the contract losses in the prior year related to the 36.5MW motor program, a prior year write-off for a SuperVAR synchronous condenser, lower corporate allocations and lower operating expenses as a result of the re-alignment of the AMSC Wires and SuperMachines business units.

*Non-operating expenses/Interest income*

Interest income increased to \$4.0 million for fiscal 2007 from \$2.2 million in fiscal 2006. This increase in interest income reflects higher combined cash, cash equivalents and marketable securities balances available for investment, largely the result of the \$93.6 million in net proceeds we received in the stock offering completed on July 25, 2007.

Other expense, net, was \$1.7 million in fiscal 2007 compared to \$0.4 million in fiscal 2006. The increase was due primarily to higher mark to market expense on the revaluation of the stock warrant. The warrant was re-valued at \$3.0 million and \$1.4 million as of March 31, 2008 and 2007, respectively, resulting in a charge of \$1.6 million and \$0.4 million for fiscal 2007 and 2006, respectively.



**Table of Contents***Income Taxes*

During fiscal 2007 and 2006, we recorded income tax expense of \$2.9 million and an income tax benefit of \$0.1 million, respectively. We incurred losses in the U.S. and for fiscal 2007, China, but due to a history of operating losses, we do not record a tax benefit on those losses. Operations in foreign jurisdictions are profitable and associated income tax expense is recorded.

**Liquidity and Capital Resources**

At March 31, 2009, we had cash, cash equivalents, marketable securities and restricted cash of \$117.2 million compared to \$119.4 million at March 31, 2008, a decrease of \$2.2 million. Our cash, cash equivalents, marketable securities and restricted cash are summarized as follows (in thousands):

	March 31,	
	2009	2008
Cash and cash equivalents	\$ 70,674	\$ 67,834
Marketable securities	39,255	38,398
Restricted cash	7,278	13,172
Total cash, cash equivalents, marketable securities and restricted cash	\$ 117,207	\$ 119,404

The decrease in cash and cash equivalents, marketable securities and restricted cash was primarily the result of translation effects on cash balances denominated in foreign currency.

For fiscal 2008, net cash used by operating activities was \$2.4 million compared to a use of \$17.8 million in fiscal 2007. The decrease in cash used by operations is due primarily to a lower net loss of \$8.8 million, an increase in non-cash stock-based compensation expenses of \$4.0 million and a net increase in cash used for working capital.

For fiscal 2008, net cash used in investing activities was \$3.5 million compared to a use of \$40.5 million in fiscal 2007. The decrease in cash used in investing activities was driven primarily by the reduction in restricted cash and a net reduction in the marketable securities activity as a result of reducing purchases of commercial paper and investing in treasury money market funds, a cash equivalent.

As of March 31, 2009, we have invested in total approximately \$14.9 million in our 344 superconductors production line. These expenditures were made to enable us to achieve a gross production capacity of approximately 720,000 meters annually of 344 superconductors on our 40 mm manufacturing technology and to prepare to migrate to our 100 mm manufacturing technology. We estimate that an additional \$28.0 million to \$35.0 million of capital expenditures would be needed for a full commercial manufacturing operation with a gross capacity of approximately 9 million meters of wire per year.

For fiscal 2008, cash provided by financing activities was \$12.5 million compared to \$108.4 million in fiscal 2007. The decrease was due to proceeds received from our public stock offering during the second quarter of fiscal 2007 and a decrease in proceeds from the exercise of employee stock options.

Although our cash requirements fluctuate based on a variety of factors, including customer adoption of our products and our research and development efforts to commercialize our products, we believe that our available cash will be sufficient to fund our working capital, capital expenditures, and other cash requirements for at least the next twelve months and will enable us to withstand the current restrictive credit environment.

We also have unused lines of credit of 0.5 million (or approximately \$0.7 million), which is available until June 30, 2010, and CNY 8.9 million (or approximately \$1.3 million), which is available until June 5, 2009.

The possibility exists that we may pursue additional acquisition and joint venture opportunities in the future that may affect liquidity and capital resource requirements.



**Table of Contents****Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements, as defined under SEC rules, such as relationships with unconsolidated entities or financial partnerships, which are often referred to as structured finance or special purpose entities, established for the purpose of facilitating transactions that are not required to be reflected on our balance sheet except as discussed below.

We occasionally enter into construction contracts that include a performance bond. As these contracts progress, we continually assess the probability of a payout from the performance bond. Should we determine that such a payout is likely, we would record a liability. As of March 31, 2009, there were no recorded performance-based liabilities.

**Contractual Obligations**

As of March 31, 2009, we are committed to make the following payments under contractual obligations (in thousands):

	Total	Payments due by period			
		Less than 1 Year	1-3 years	3-5 years	More than 5 years
Operating leases (rent)	\$ 2,588	\$ 1,508	\$ 1,080	\$	\$
Operating leases (other)	132	39	59	29	5
Purchase obligations (subcontracts)	14,543	14,543			
Purchase obligations (purchase orders)	46,074	46,074			
<b>Total contractual cash obligations</b>	<b>\$ 63,337</b>	<b>\$ 62,164</b>	<b>\$ 1,139</b>	<b>\$ 29</b>	<b>\$ 5</b>

**New Accounting Pronouncements**

In April 2008, the FASB issued FASB staff position ( FSP FAS 142-3 ) Determination of the Useful Life of Intangible Assets. FSP FAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, Goodwill and Other Intangible Assets. The objective of this FSP is to improve the consistency between the useful life of a recognized intangible asset under SFAS No. 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS No. 141(R), and other U.S. GAAP. This FSP applies to all intangible assets, whether acquired in a business combination or otherwise, and shall be effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years and applied prospectively to intangible assets acquired after the effective date. Early adoption is prohibited. We are in the process of evaluating whether the adoption of this standard will have a material effect on our financial position, results of operations or cash flows.

In December 2007, the FASB issued SFAS No. 141(R), Business Combinations , which replaces SFAS No. 141. This revised standard requires assets, liabilities and non-controlling interests acquired to be measured at fair value and requires that costs incurred to effect the acquisition be recognized separately from the business combination. In addition, this statement expands the scope to include all transactions and other events in which one entity obtains control over one or more businesses. This statement is effective for all business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Although there are not any current plans for an acquisition, should there be an acquisition in the future, we will adopt this statement for acquisitions consummated after its effective date of April 1, 2009.

In December 2007, the FASB issued SFAS No. 160, Non-controlling Interests in Consolidated Financial Statements, and an Amendment of ARB No. 51. This statement establishes accounting and reporting standards

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**Table of Contents**

for the non-controlling interest in a subsidiary and for the deconsolidation of a subsidiary. This statement is effective for fiscal years beginning on or after December 15, 2008. Although there are not any current plans for an acquisition of a non-controlling interest, should there be such an acquisition in the future, we will adopt this statement for acquisitions consummated after its effective date.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*. SFAS No. 157 defines fair value, establishes a framework for measuring fair value in GAAP and establishes a hierarchy that categorizes and prioritizes the sources to be used to estimate fair value. SFAS No. 157 also expands financial statement disclosures about fair value measurements. On February 12, 2008, the FASB issued FSP FAS 157-2 which delays the effective date of SFAS No. 157 for one year for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). SFAS No. 157 and FSP 157-2 are effective for financial statements issued for fiscal years beginning after November 15, 2007. We elected a partial deferral of SFAS No. 157 under the provisions of FSP 157-2 related to the measurement of fair value used when evaluating goodwill, other intangible assets and other long-lived assets for impairment and valuing asset retirement obligations and liabilities for exit or disposal activities. The partial adoption of SFAS No. 157 on April 1, 2008 did not have a material impact on our condensed consolidated financial statements. In April 2009, the FASB issued FSP SFAS No. 157-4, *Determining Whether a Market Is Not Active and a Transaction Is Not Distressed* ( FSP SFAS No. 157-4 ). FSP SFAS No. 157-4 provides guidelines for making fair value measurements more consistent with principles presented in SFAS No. 157. FSP SFAS No. 157-4 provides additional authoritative guidance in determining whether a market is active or inactive, whether a transaction is distressed, is applicable to all assets and liabilities and will require enhanced disclosures. FSP SFAS No. 157-4 is effective for periods ending after June 15, 2009. We do not believe FSP SFAS No. 157-4 will be applicable to us.

In June 2008, the FASB issued FSP No. EITF 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities* ( FSP No. EITF 03-6-1 ). Under the provisions of this standard, unvested awards of share-based payments with non-forfeitable rights to receive dividends or dividend equivalents are considered participating securities for purposes of calculating earnings per share. FSP No. EITF 03-6-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those years. We are evaluating the impact of FSP EITF 03-6-1 on our financial statements.

In April 2009, the FASB issued FSP SFAS No. 115-2, SFAS 124-2 and EITF 99-20-2, *Recognition and Presentation of Other-Than-Temporary Impairments*. FSP SFAS No. 115-2, SFAS 124-2 and EITF 99-20-2 provides additional guidance to provide greater clarity about the credit and noncredit component of an other-than-temporary impairment event and to more effectively communicate when an other-than-temporary impairment event has occurred. FSP SFAS No. 115-2, SFAS 124-2 and EITF 99-20-2 are effective for periods ending after June 15, 2009. We are evaluating whether the adoption of FSP SFAS No. 115-2, SFAS 124-2 and EITF 99-20-2 will have a material impact on our financial statements.

In April 2009, the FASB issued FSP SFAS No. 107-1 and Accounting Principles Board ( APB ) Opinion 28-1, *Interim Disclosures About Fair Value of Financial Instruments*. FSP SFAS No. 107-1 and APB No. 28-1 amend SFAS No. 107, *Disclosures About Fair Value of Financial Instruments*, to require disclosures about the fair value of financials in interim as well as in annual financial statements, and APB No. 28, *Interim Financial Reporting*, to require those disclosures in all interim financial statements. FSP SFAS No. 107-1 and APB No. 28-1 are effective for periods ending after June 15, 2009. We are evaluating whether the adoption of FSP SFAS No. 107-1 and APB No. 28-1 will have a material impact on our financial statements.

**Table of Contents**

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

We face exposure to financial market risks, including adverse movements in foreign currency exchange rates and changes in interest rates. These exposures may change over time as our business practices evolve and could have a material adverse impact on our financial results.

*Cash and cash equivalents*

Our exposure to market risk through financial instruments, such as investments in marketable securities, is limited to interest rate risk and is not material. Our investments in marketable securities consist primarily of corporate debt instruments and are designed, in order of priority, to preserve principal, provide liquidity, and maximize income. Investments are monitored to limit exposure to mortgage-backed securities and similar instruments responsible for the recent turmoil in the credit markets. Interest rates are variable and fluctuate with current market conditions. We do not believe that a 10% change in interest rates would have a material impact on our financial position or results of operation.

*Foreign currency exchange risk*

Our earnings and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. Our most significant foreign currency exposures relate to Austria and China. We enter into various hedging transactions to manage this risk. We do not enter into or hold foreign currency derivative financial instruments for trading or speculative purposes.

The functional currency of all our foreign entities is the U.S. dollar, except for our wholly-owned Austrian subsidiary, AMSC Windtec GmbH, for which the local currency (Euro) is the functional currency, and our wholly-owned Chinese subsidiary, Suzhou AMSC Super Conductor Co., Ltd., for which the local currency (renminbi) is the functional currency. We monitor foreign currency exposures and hedge currency risk when deemed appropriate. Cumulative translation adjustments are excluded from net loss and reported as a separate component of stockholders' equity. Foreign currency transaction and translation losses were \$0.9 million for fiscal 2008. Future operating results could be impacted by material foreign currency fluctuations. In the future, should foreign currency fluctuations become material, management will review options to limit the financial impact to our operations.

Our foreign currency risk management strategy is principally designed to mitigate the potential financial impact of changes in the value of transactions and balances denominated in foreign currency, resulting from changes in foreign currency exchange rates. Our foreign currency hedging program uses currency options to manage the foreign currency exposures that exist as part of our ongoing business operations. The contracts primarily are denominated in the Euro and Chinese renminbi, and have maturities of less than three months. There were no hedging contracts outstanding as of March 31, 2009 or 2008.

Generally, we do not designate currency option contracts as hedges for accounting purposes, and changes in the fair value of these instruments are recognized immediately in earnings. Gains and losses on these contracts are included in other expense, net.

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**Table of Contents**

**Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

***Report of Independent Registered Public Accounting Firm***

To the Board of Directors and Stockholders of

American Superconductor Corporation:

In our opinion, the consolidated balance sheets and the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows present fairly, in all material respects, the financial position of American Superconductor Corporation and its subsidiaries at March 31, 2009 and 2008, and the results of their operations and their cash flows for each of the three years in the period ended March 31, 2009 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of March 31, 2009, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

May 28, 2009

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****CONSOLIDATED BALANCE SHEETS**

(In thousands)

	March 31, 2009	March 31, 2008
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 70,674	\$ 67,834
Marketable securities	39,255	38,398
Accounts receivable, net	50,103	37,108
Inventory	35,129	10,907
Restricted cash	5,872	12,312
Prepaid expenses and other current assets	10,313	4,467
Deferred tax assets, net	1,160	2,293
<b>Total current assets</b>	<b>212,506</b>	<b>173,319</b>
Property, plant and equipment, net	54,838	54,308
Goodwill	26,233	18,530
Intangibles, net	8,859	11,583
Restricted cash	1,406	860
Other assets	5,264	2,634
<b>Total assets</b>	<b>\$ 309,106</b>	<b>\$ 261,234</b>
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ 60,253	\$ 38,356
Deferred revenue	21,066	10,629
<b>Total current liabilities</b>	<b>81,319</b>	<b>48,985</b>
Non-current liabilities		
Deferred revenue	4,902	2,043
Deferred tax liabilities, net	840	1,244
Other	184	510
<b>Total liabilities</b>	<b>87,245</b>	<b>52,782</b>
Commitments and contingencies (Note 8)		
Stockholders' equity:		
Common stock, \$0.01 par value		
Authorized shares-100,000,000; shares issued and outstanding 43,297,635 and 41,541,597 at March 31, 2009 and 2008, respectively.	433	415
Additional paid-in capital	653,054	615,025
Deferred contract costs - warrant	(2)	(8)
Accumulated other comprehensive income (loss)	(4,487)	3,522
Accumulated deficit	(427,137)	(410,502)

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Total stockholders' equity	221,861	208,452
Total liabilities and stockholders' equity	\$ 309,106	\$ 261,234

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



**Table of Contents**

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**

(In thousands, except per share data)

	Year ended March 31,		
	2009	2008	2007
Revenues	\$ 182,755	\$ 112,396	\$ 52,183
Costs and expenses:			
Costs of revenue	130,882	80,363	52,502
Research and development	19,675	15,651	17,453
Selling, general and administrative	37,516	28,752	17,503
Amortization of acquisition related intangibles	1,848	5,058	590
Restructuring and impairments	1,030	7,462	667
Total costs and expenses	190,951	137,286	88,715
Operating loss	(8,196)	(24,890)	(36,532)
Interest income	2,785	3,977	2,179
Other expense, net	(2,489)	(1,654)	(424)
Loss before income tax expense	(7,900)	(22,567)	(34,777)
Income tax expense	8,735	2,880	(102)
Net loss	\$ (16,635)	\$ (25,447)	\$ (34,675)
Net loss per common share			
Basic and Diluted	\$ (0.39)	\$ (0.65)	\$ (1.04)
Weighted average number of common shares outstanding			
Basic and Diluted	42,718	39,137	33,261

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

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****CONSOLIDATED STATEMENTS OF CASH FLOWS****(In thousands)**

	Fiscal year ended March 31,		
	2009	2008	2007
<b>Cash flows from operating activities:</b>			
Net loss	\$ (16,635)	\$ (25,447)	\$ (34,675)
<b>Adjustments to reconcile net loss to net cash used in operations:</b>			
Depreciation and amortization	8,403	10,095	4,750
Stock-based compensation expense	9,672	5,665	3,680
Stock-based compensation expense non-employee	7	232	292
Impairment charges on long-lived assets		757	144
Inventory write-down charges		933	1,201
Allowance for doubtful accounts	1,495		5
Re-valuation of warrant	1,335	1,652	408
Deferred income taxes		(3,424)	(119)
Other non-cash items	826	697	386
<b>Changes in operating asset and liability accounts, excluding the effect of acquisition:</b>			
Accounts receivable	(18,845)	(20,330)	(6,281)
Inventory	(24,382)	(4,410)	1,072
Prepaid expenses and other current assets	(6,277)	(2,853)	140
Accounts payable and accrued expenses	27,210	11,635	3,595
Deferred revenue	14,765	6,975	2,641
<b>Net cash used in operating activities</b>	<b>(2,426)</b>	<b>(17,823)</b>	<b>(22,761)</b>
<b>Cash flows from investing activities:</b>			
Purchase of property, plant and equipment	(6,534)	(8,598)	(10,046)
Proceeds from the sale of property, plant and equipment	2	1,360	92
Purchase of marketable securities	(89,576)	(174,650)	(62,562)
Proceeds from the maturity of marketable securities	88,605	155,917	73,785
Change in restricted cash	5,699	(13,172)	
Acquisition costs, net of cash acquired in acquisitions		(102)	(387)
Purchase of intangible assets	(1,120)	(1,264)	(862)
Change in other assets	(566)	49	(29)
<b>Net cash used in investing activities</b>	<b>(3,490)</b>	<b>(40,460)</b>	<b>(9)</b>
<b>Cash flows from financing activities:</b>			
Proceeds from follow-on public offering, net		93,612	
Proceeds from exercise of employee stock options	12,463	14,820	3,524
<b>Net cash provided by financing activities</b>	<b>12,463</b>	<b>108,432</b>	<b>3,524</b>
Effect of exchange rate changes on cash and cash equivalents	(3,707)	1,760	
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>2,840</b>	<b>51,909</b>	<b>(19,246)</b>
Cash and cash equivalents at beginning of year	67,834	15,925	35,171

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Cash and cash equivalents at end of year	\$ 70,674	\$ 67,834	\$ 15,925
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Supplemental schedule of cash flow information:

Issuance of common stock in connection with acquisitions	\$	\$ 4,349	\$ 13,104
Noncash issuance of common stock	556	362	340
Noncash contingent consideration in connection with acquisitions	11,008	9,856	

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

**Table of Contents****AMERICAN SUPERCONDUCTOR CORPORATION****CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY**

(In thousands)

	Common Stock			Deferred Compensation	Deferred Contract Costs-Warrant	Accumulated Other Comprehensive Income		Total Stockholders Equity
	Number of Shares	Par Value	Additional Paid-in Capital			Accumulated Deficit	(Loss)	
Balance at March 31, 2006	32,890	\$ 329	\$ 466,605	\$ (1,330)	\$ (20)	\$ (104)	\$ (350,380)	\$ 115,100
Exercise of stock options	387	4	3,191					3,195
Acquisition of Windtec	1,300	13	13,091					13,104
Issuance of common stock ESPP	36		328					328
Issuance of common stock restricted shares	369	4	(3)					1
Reclassification of deferred compensation on adoption of FAS123R			(1,330)	1,330				
Stock-based compensation expense			3,680					3,680
Non-employee stock-based compensation expense			292					292
Issuance of stock for calendar 2006 401(k) match	34		340					340
Amortization of deferred warrant costs					6			6
Unrealized gains on investments						116		116
Cumulative translation adjustment						134		134
Net loss							(34,675)	(34,675)
Balance at March 31, 2007	35,016	350	486,194		(14)	146	(385,055)	101,621
Exercise of stock options	1,392	14	14,551					14,565
Exercise of warrants	26							
Public offering of common stock	4,700	47	93,565					93,612
Acquisition of Power Quality Systems	295	3	4,346					4,349
Issuance of common stock ESPP	14		254					254
Issuance of common stock restricted shares	79	1						1
Stock-based compensation expense			5,665					5,665
Non-employee stock-based compensation expense			232					232
Issuance of stock for calendar 2007 401(k) match	20		362					362
Contingent consideration			9,856					9,856
Amortization of deferred warrant costs					6			6
Unrealized gains on investments						264		264
Cumulative translation adjustment						3,112		3,112
Net loss							(25,447)	(25,447)
Balance at March 31, 2008	41,542	415	615,025		(8)	3,522	(410,502)	208,452
Exercise of stock options	738	7	12,167					12,174
Exercise of warrants	148	2	4,339					4,341
Issuance of common stock ESPP	17		289					289
Issuance of common stock restricted shares	404	4	(4)					
Stock-based compensation expense			9,672					9,672
Non-employee stock-based compensation expense			7					7
Issuance of stock for calendar 2008 401(k) match	25		556					556
Contingent consideration	424	5	11,003					11,008
Amortization of deferred warrant costs					6			6
Unrealized losses on investments						(113)		(113)
Cumulative translation adjustment						(7,896)		(7,896)
Net loss							(16,635)	(16,635)
Balance at March 31, 2009	43,298	\$ 433	\$ 653,054	\$	\$ (2)	\$ (4,487)	\$ (427,137)	\$ 221,861

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

Table of Contents

**AMERICAN SUPERCONDUCTOR CORPORATION**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**

(In thousands)

	Year ended March 31,		
	2009	2008	2007
Net loss	\$ (16,635)	\$ (25,447)	\$ (34,675)
Other comprehensive income (loss)			
Foreign currency translation	(7,896)	3,112	134
Unrealized gains (losses) on investments	(113)	264	116
Other comprehensive income (loss)	(8,009)	3,376	250
Comprehensive loss	\$ (24,644)	\$ (22,071)	\$ (34,425)

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

**Table of Contents**

**AMERICAN SUPERCONDUCTOR CORPORATION**

**NOTES TO AUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**

**1. Nature of the Business and Operations**

American Superconductor Corporation (the Company or AMSC ) was founded on April 9, 1987. The Company offers an array of proprietary technologies and solutions spanning the electric power infrastructure from generation to delivery to end use. The Company is a leader in alternative energy, providing proven, megawatt-scale wind turbine designs and electrical control systems. The Company also offers a host of Smart Grid technologies for power grid operators that enhance the reliability, efficiency and capacity of the power grid, and seamlessly integrate renewable energy sources into the power infrastructure. These technologies include superconductor power cable systems, grid-level surge protectors and power electronics-based voltage stabilization systems. The Company operates in two business segments: AMSC Power Systems and AMSC Superconductors.

**2. Summary of Significant Accounting Policies**

A summary of the Company's significant accounting policies follows:

***Basis of Consolidation***

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions are eliminated. Certain reclassifications of prior years' amounts have been made to conform to the current year presentation.

***Use of Estimates***

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. The Company bases its estimates on historical experience and various other factors believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Estimates are used when accounting for the collectability of receivables, realizability of finished goods inventory, estimated warranty costs, and deferred tax assets. Provisions for depreciation are based on their estimated useful lives using the straight-line method. Some of these estimates can be subjective and complex and, consequently, actual results may differ from these estimates under different assumptions or conditions. While for any given estimate or assumption made by the Company's management there may be other estimates or assumptions that are reasonable, the Company believes that, given the current facts and circumstances, it is unlikely that applying any such other reasonable estimate or assumption would materially impact the financial statements.

***Cash Equivalents***

The Company considers all highly liquid debt instruments with original maturities of three months or less to be cash equivalents. Cash equivalents consist principally of money market accounts and corporate debt instruments.

***Marketable Securities***

Short-term marketable securities, with current maturities of greater than 3 months from original purchase date but less than 12 months from the date of the balance sheet, consist primarily of corporate bonds and other debt securities. The Company determines the appropriate classification of its marketable securities at the time of purchase and re-evaluates such classification as of each balance sheet date, in accordance with Statement of

## **Table of Contents**

Financial Accounting Standards ( SFAS ) No. 115, Accounting for Certain Investments in Debt and Equity Securities. All marketable securities are considered available-for-sale and are carried at fair value. Fair values are based on quoted market prices. The unrealized gains and losses related to these securities are included in accumulated other comprehensive income (loss). When securities are sold, the cost is determined based on the specific identification method and realized gains and losses are included in interest income. The Company periodically reviews the realizability of each short and long-term marketable security when impairment indicators exist with respect to the security. If an other-than-temporary impairment of value of the security exists, the carrying value of the security is written down to its estimated fair value.

### ***Accounts Receivable***

The Company's accounts receivable are comprised of amounts owed by government agencies and commercial companies. The Company does not require collateral or other security to support customer receivables.

Due to scheduled billing requirements specified under certain contracts, a portion of the Company's accounts receivable balance at March 31, 2009 and 2008 was unbilled (see Note 4). As of March 31, 2009, the Company had one customer that represented approximately 48% of the total accounts receivable balance, and as of March 31, 2008, the Company had two customers that represented approximately 37% and 21% of the total accounts receivable balance.

### ***Inventories***

Inventories are stated at the lower of cost (determined on a first-in first-out basis) or market.

### ***Derivatives***

The Company applies SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, which sets forth accounting and reporting standards for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities. All derivatives, whether designated in a hedging relationship or not, are required to be recorded on the balance sheet at fair value. SFAS No. 133 also requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met, and that the Company formally document, designate, and assess the effectiveness of transactions that receive hedge accounting. The effectiveness of the derivative as a hedging instrument is based on changes in its market value being highly correlated with changes in the market value of the underlying hedged item.

Derivatives are financial instruments whose values are derived from one or more underlying financial instruments, such as foreign currency. The Company enters into derivative transactions, specifically foreign currency option contracts, to manage its exposure to fluctuations in foreign exchange rates that arise primarily from its foreign currency-denominated receivables and payables. The contracts entered into during the year ended March 31, 2009 were primarily denominated in Euro and typically had maturities of less than three months. The contracts were settled for U.S. dollars at maturity of the contracts at rates agreed to at inception of the contracts. The Company does not enter into or hold derivatives for trading or speculative purposes. Generally, the Company does not designate foreign currency forward contracts as hedges for accounting purposes, and changes in the fair value of these instruments are recognized immediately in earnings. Gains and losses on currency option contracts are included in other income (expense), net. Net realized gains and losses associated with exchange rate fluctuations on currency option contracts were immaterial for all periods presented.

As of March 31, 2009 and 2008, the Company had no outstanding currency option contracts.



## **Table of Contents**

### ***Property, Plant and Equipment***

Property, plant and equipment are carried at cost less accumulated depreciation and amortization. The Company accounts for depreciation and amortization using the straight-line method to allocate the cost of property, plant and equipment over their estimated useful lives as follows:

<b>Asset classification</b>	<b>Estimated useful life in years</b>
Building	40
Process upgrades to the building	10-40
Machinery and equipment	3-10
Furniture and fixtures	3-5
Leasehold improvements	Shorter of the estimated useful life or the remaining lease term

Expenditures for maintenance and repairs are expensed as incurred. Upon retirement or other disposition of assets, the costs and related accumulated depreciation are eliminated from the accounts and the resulting gain or loss is reflected in operating expenses.

### ***Goodwill and Other Intangible Assets***

In accordance with SFAS No. 142, Goodwill and Other Intangible Assets, the Company reviews its goodwill at least annually (in the Company's fiscal fourth quarter) or when events or changes in circumstances indicate that the carrying amount of such assets may not be fully recoverable. If the carrying amount of the net tangible and intangible assets in a given reporting unit exceeds the reporting unit's fair value, a detailed impairment loss analysis is performed to calculate the amount of impairment, if any.

The Company has intangible assets consisting of licenses, patents, contractual relationships/backlog, customer relationships, trade names and trademarks, core technology and know-how and goodwill.

The Company amortizes its licenses, patents, customer relationships, trade names and trademarks, and core technology and know-how, using the straight-line method over a period of 3 to 10 years, which approximates the expected economic consumption of these assets. The Company amortizes its contractual relationships/backlog using the economic consumption method over an estimated period of 2 years.

### ***Accounting for Impairment of Long-Lived Assets***

The Company periodically evaluates its long-lived assets for potential impairment under SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. The Company performs these evaluations whenever events or circumstances suggest that the carrying amount of an asset or group of assets is not recoverable. The Company's judgments regarding the existence of impairment indicators are based on market and operational performance. Indicators of potential impairment include:

a significant change in the manner in which an asset is used;

a significant decrease in the market value of an asset;

a significant adverse change in its business or the industry in which it is sold;

a current period operating cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the asset; and

significant advances in the Company's technologies that require changes in the manufacturing process.

If the Company believes an indicator of potential impairment exists, it tests to determine whether impairment recognition criteria in SFAS No. 144 have been met. To analyze a potential impairment, the

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**Table of Contents**

Company projects undiscounted future cash flows expected to result from the use and eventual disposition of the asset or primary asset in the asset group over its remaining useful life. If these projected cash flows are less than the carrying amount, an impairment loss is recognized in the Consolidated Statements of Operations based on the difference between the carrying value of the asset or asset group and its fair value, less any disposition costs. Evaluating the impairment requires judgment by the Company's management to estimate future operating results and cash flows. If different estimates were used, the amount and timing of asset impairments could be affected.

***Revenue Recognition***

For certain arrangements, such as contracts to perform research and development, prototype development contracts and certain product sales, the Company records revenues using the percentage-of-completion method, measured by the relationship of costs incurred to total estimated contract costs. The Company uses the percentage-of-completion revenue recognition method when a purchase arrangement meets all of the criteria in Statement of Position 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts*. Percentage-of-completion revenue recognition accounting is predominantly used on long-term prototype development contracts with the U.S. government, such as the HYDRA project with the Department of Homeland Security (DHS). The Company follows this method since reasonably dependable estimates of the revenues and costs applicable to various stages of a contract can be made. However, the ability to reliably estimate total costs at completion is challenging, especially on long-term prototype development contracts, and could result in future changes in contract estimates. Since many contracts extend over a long period of time, revisions in scope, cost and funding estimates during the progress of work have the effect of adjusting earnings applicable to prior-period performance in the current period. Recognition of contract revenues and profit or loss are subject to revisions as the work progresses to completion. Revisions in profit or loss estimates are charged to income in the period in which the facts that give rise to the revision become known. For the fiscal year ended March 31, 2009, the Company recorded a loss of \$1.3 million on a turnkey static VAR compensator ( SVC ) contract as a result of a cost overrun due to a change in design. For the fiscal year ended March 31, 2007, as a result of cost overruns and changes in estimates, the Company recorded a loss of \$3.1 million related to the Navy 36.5MW motor program. No such loss was recorded for the fiscal year ended March 31, 2008. For contracts where reasonably dependable estimates of the revenues and costs cannot be made, the Company follows the completed-contract method.

The Company recognizes revenue for other product sales upon customer acceptance, which can occur at the time of delivery, installation or post-installation, provided persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable and the collectibility is reasonably assured. For multiple-element arrangements, the Company uses the residual method to allocate value to each delivered item. Under the residual method, each undelivered item is allocated value based on verifiable objective evidence of fair value for that item and the remainder of the total arrangement price is allocated to the delivered items. For a delivered item to be considered a separate unit, the delivered item must have value to the customer on a standalone basis, there must be objective and reliable evidence of fair value of the undelivered items in the arrangement and the delivery or performance of the undelivered items must be considered probable and substantially within the Company's control. The Company does not provide its customers with contractual rights of return for any of its products. When other significant obligations remain after products are delivered, revenue is recognized only after such obligations are fulfilled. The determination of what constitutes a significant post-delivery performance obligation (if any post-delivery performance obligations exist) is the primary subjective consideration the Company systemically evaluates in the context of each product shipment in order to determine whether to recognize revenue on the order or to defer the revenue until all post-delivery performance obligations have been completed.

The Company occasionally enters into construction contracts that include a performance bond. As these contracts progress, the Company continually assesses the probability of a payout from the performance bond. Should the Company determine that such a payout is likely, the Company would record a liability. Under the guidance of Emerging Issues Task Force ( EITF ) 01-09, *Accounting for Consideration Given to a Customer or a Retailer of the Vendor's Products*, the Company would reduce revenue to the extent a liability is recorded.

## **Table of Contents**

The Company enters into certain arrangements to license its technologies and to provide training services. The Company has determined that the license has no stand alone value to the customer and is not separable from the training. Accordingly, the Company accounts for these arrangements as one unit of accounting and recognizes revenue over the period of the Company's performance.

The Company has elected to record taxes collected from customers on a net basis and does not include tax amounts in Revenue or Costs of revenue.

Customer deposits received in advance of revenue recognition are recorded as deferred revenue until customer acceptance is received. Deferred revenue also represents the amount billed to and/or collected from commercial and government customers on contracts which permit billings to occur in advance of contract performance/revenue recognition.

### ***Research and Development Costs***

Research and development costs are expensed as incurred.

### ***Income Taxes***

*Income taxes.* The Company's provision for income taxes is composed of a current and a deferred portion. The current income tax provision is calculated as the estimated taxes payable or refundable on tax returns for the current year. The deferred income tax provision is calculated for the estimated future tax effects attributable to temporary differences and carryforwards using expected tax rates in effect in the years during which the differences are expected to reverse.

The Company accounts for income taxes in accordance with SFAS No. 109, Accounting for Income Taxes. Deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each fiscal year end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce net deferred tax assets to the amount expected to be realized. The Company has provided a valuation allowance against its U.S. deferred income tax assets since the Company believes that it is more likely than not that its U.S. deferred tax assets are not currently realizable due to the net operating losses incurred by the Company since its inception. The Company has not provided a valuation allowance against its other foreign deferred income tax assets since the Company believes that it is more likely than not that those deferred tax assets will be realized.

Effective April 1, 2007, the Company adopted the provisions of the Financial Accounting Standards Board Interpretation No. 48, Accounting for Uncertainty in Income Taxes—an Interpretation of FASB Statement No. 109, or FIN 48. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109, Accounting for Income Taxes, or SFAS No. 109, and prescribes a recognition threshold of more-likely-than-not to be sustained upon examination. Upon adoption of FIN 48, the Company's policy to include interest and penalties related to gross unrecognized tax benefits within its provision for income taxes did not change. There was no net adjustment to retained earnings upon the adoption of FIN 48.

### ***Stock-Based Compensation and Pro Forma Stock-Based Compensation***

On April 1, 2006, the Company adopted SFAS No. 123(R), Share-Based Payment, which requires the Company to account for stock-based payment transactions using a fair value-based method and recognize the related expense in the results of operations. Prior to its adoption of SFAS No. 123(R), the Company accounted for stock-based payments to employees using the Accounting Principles Board (APB) Opinion No. 25, Accounting for Stock Issued to Employees, which required the Company to use the intrinsic value method and,

**Table of Contents**

therefore, the Company recognized compensation expense for restricted stock awards and did not recognize compensation cost for employee stock options where the exercise price of the stock option was equal to the market value of the underlying common stock on the date of grant.

Under the fair value recognition provisions of SFAS No. 123(R), stock-based compensation is estimated at the grant date based on the fair value of the award and is recognized as expense over the requisite service period of the award. The fair value of restricted stock awards is determined by reference to the fair market value of the Company's common stock on the date of grant. The Company uses the Black-Scholes option pricing model to estimate the fair value of awards with service and performance conditions under SFAS No. 123(R). For awards with service conditions, the Company recognizes compensation cost on a straight-line basis over the requisite service/vesting period. For awards with service and performance conditions and graded-vesting features (a certain percentage of stock awards vest each period), the Company recognizes compensation costs on an accelerated, graded-vesting basis over the requisite service/vesting period. The Company uses the lattice model to value market condition awards. For awards with market conditions with a single cliff vest feature, the Company recognizes compensation costs on a straight-line basis over the requisite service period.

Determining the appropriate fair value model and related assumptions requires judgment, including estimating stock price volatilities of the Company's common stock, forfeiture rates and expected terms. The expected volatility rates are estimated based on historical and implied volatilities of the Company's common stock. The expected term represents the average time that the options that vest are expected to be outstanding based on the vesting provisions and the Company's historical exercise, cancellation and expiration patterns.

The Company estimates pre-vesting forfeitures when recognizing compensation expense based on historical and forward-looking factors. Changes in estimated forfeiture rates and differences between estimated forfeiture rates and actual experience may result in significant, unanticipated increases or decreases in stock-based compensation expense from period to period. The termination of employment of certain employees who hold large numbers of stock-based awards may also have a significant, unanticipated impact on forfeiture experience and, therefore, on stock-based compensation expense. The Company will update these assumptions on at least an annual basis and on an interim basis if significant changes to the assumptions are warranted.

**Computation of Net Loss per Common Share**

Basic earnings per share (EPS) is computed by dividing net earnings (loss) by the weighted-average number of common shares outstanding for the period. Diluted EPS is computed by dividing the net earnings (loss) by the weighted average number of common shares and dilutive common equivalent shares outstanding during the period, calculated using the treasury stock method. Common equivalent shares include the effect of restricted stock, exercise of stock options and warrants, and contingently issuable shares. For the fiscal years ended March 31, 2009, 2008, and 2007, common equivalent shares of 3,316,629, 4,306,699 and 4,580,559, respectively, were not included in the calculation of diluted EPS as they were considered antidilutive.

The following table reconciles the numerators and denominators of the earnings per share calculation for the fiscal years ended March 31, 2009, 2008 and 2007 (in thousands except per share amounts):

	<b>For the fiscal year ended March 31,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Numerator:</b>			
Net Loss	\$ (16,635)	\$ (25,447)	\$ (34,675)
<b>Denominator:</b>			
Weighted-average shares of common stock outstanding	43,323	39,492	33,706
Weighted-average shares subject to repurchase	(605)	(355)	(445)
Shares used in per-share calculation basic and diluted	42,718	39,137	33,261
Net loss per share basic and diluted	\$ (0.39)	\$ (0.65)	\$ (1.04)

**Table of Contents****Foreign Currency Translation**

The functional currency of all the Company's foreign subsidiaries is the U.S. dollar, except for Windtec, for which the local currency (Euro) is the functional currency and China, for which the local currency (renminbi) is the functional currency. The assets and liabilities of Windtec, as well as those of the Company's China operation, are translated into U.S. dollars at the exchange rate in effect at the balance sheet date and income and expense items are translated at average rates for the period. Cumulative translation adjustments are excluded from net loss and shown as a separate component of stockholders' equity. Foreign currency transaction gains and losses are included in the net loss and have not been material to date.

**Risks and Uncertainties**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could materially differ from those estimates and would impact future results of operations and cash flows.

The Company invests its available cash with high-credit, quality financial institutions and invests primarily in investment grade-marketable securities, including, but not limited to, government obligations, money market funds and corporate debt instruments.

Several of the Company's government contracts are being funded incrementally, and as such, are subject to the future authorization, appropriation, and availability of government funding. The Company has a history of successfully obtaining financing under incrementally-funded contracts with the U.S. government and it expects to continue to receive additional contract modifications in the fiscal year ending March 31, 2010 and beyond as incremental funding is authorized and appropriated by the government.

**Disclosure of Fair Value of Financial Instruments**

The Company's financial instruments consist principally of cash and cash equivalents, marketable securities, accounts receivable, accounts payable and accrued expenses. The carrying amounts of its cash equivalents and marketable securities, accounts receivable, accounts payable and accrued expenses approximate fair value due to the short-term nature of these instruments.

**3. Marketable Securities**

The following is a summary of marketable securities at March 31, 2009 and 2008 (in thousands):

	Cost at March 31, 2009	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value at March 31, 2009
Commercial paper	\$ 39,099	\$ 157	\$ (1)	\$ 39,255
	Cost at March 31, 2008	Gross Unrealized Gains	Gross Unrealized Losses	Fair Market Value at March 31, 2008
Commercial paper	\$ 38,119	\$ 269	\$	\$ 38,388
Certificates of deposit	10			10
Total marketable securities	\$ 38,129	\$ 269	\$	\$ 38,398

**Table of Contents**

The Company's marketable securities are classified as available-for-sale securities and, accordingly, are recorded at fair value. The difference between amortized cost and fair value is included in stockholders' equity. At March 31, 2009, there was an investment with an immaterial gross unrealized loss and at March 31, 2008, there were no investments with gross unrealized losses.

The Company partially adopted SFAS No. 157, Fair Value Measurements, as of April 1, 2008, with the exception of the application of the statement to non-recurring nonfinancial assets and nonfinancial liabilities as allowed under FASB Staff Positions ( FSP ) 157-2. The Company has determined that cash equivalents and short-term marketable securities are the only assets affected by the adoption of SFAS No. 157 at this time.

*Valuation Hierarchy*

SFAS No. 157 establishes a valuation hierarchy for disclosure of the inputs to valuation used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1 -** Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- Level 2 -** Inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability, and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).
- Level 3 -** Unobservable inputs that reflect the Company's assumptions that market participants would use in pricing the asset or liability. The Company develops these inputs based on the best information available, including its own data.

A financial asset's or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

The following table provides the assets carried at fair value, measured as of March 31, 2009 (in thousands):

	Total Carrying Value	Quoted Prices in Active Markets (Level 1)	Using Significant Other Observable Inputs (Level 2)	Using Significant Unobservable Inputs (Level 3)
March 31, 2009:				
Cash equivalents	\$ 30,483	\$ 30,483	\$	\$
Marketable securities	39,255		39,255	

*Valuation Techniques*

Cash equivalents consist of highly liquid instruments with maturities of three months or less that are regarded as high quality, low risk investments, are measured using such inputs as quoted prices and inputs that are derived principally from or corroborated by observable market data by correlation or other means, and are classified within Level 1 of the valuation hierarchy.

Marketable securities are measured using such inputs as quoted prices for identical or similar assets in markets that are not active, inputs other than quoted prices that are observable for the asset (for example, interest rates and yield curves observable at commonly quoted intervals), and inputs that are derived principally from or corroborated by observable market data by correlation or other means, and are classified within Level 2 of the valuation hierarchy.

**Table of Contents****4. Accounts Receivable**

Accounts receivable at March 31, 2009 and 2008 consisted of the following (in thousands):

	March 31,	
	2009	2008
Accounts receivable (billed)	\$ 42,205	\$ 21,645
Accounts receivable (unbilled)	9,241	15,468
Less: Allowance for doubtful accounts	(1,343)	(5)
Accounts receivable, net	\$ 50,103	\$ 37,108

The Company recorded an allowance for doubtful accounts provision of \$1.4 million in the fiscal year ended March 31, 2009 primarily due to customer disputes and the unfavorable economic impact to several of the Company's customers.

The Company also recorded long-term receivables of \$4.1 million in the fiscal year ended March 31, 2009 that are also classified within long-term deferred revenue.

**5. Inventory**

Inventory at March 31, 2009 and 2008 consisted of the following (in thousands):

	March 31,	
	2009	2008
Raw materials	\$ 16,098	\$ 2,209
Work-in-progress	6,522	4,380
Finished goods	8,150	3,474
Deferred program costs	4,359	844
Inventory	\$ 35,129	\$ 10,907

Finished goods inventory of \$3.5 million as of March 31, 2008 includes the cost of products shipped to customers on contracts for which revenue was deferred until final customer acceptance.

Deferred program costs of \$4.4 million as of March 31, 2009 and \$0.8 million as of March 31, 2008 represent costs incurred primarily on a long-term turnkey project, which will be recognized ratably over the service period of the contract, as well as costs incurred on wind turbine development programs where the Company needs to achieve certain milestones or complete development programs before revenue and costs will be recognized.

**6. Property, Plant and Equipment**

The cost and accumulated depreciation of property and equipment at March 31, 2009 and 2008 are as follows (in thousands):

	March 31,	
	2009	2008
Land	\$ 4,022	\$ 4,022
Construction in progress equipment	1,463	2,037
Buildings	36,587	35,143



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Equipment	32,372	32,106
Furniture and fixtures	1,453	3,816
Leasehold improvements	3,097	1,554
Property, Plant and equipment, gross	78,994	78,678
Less accumulated depreciation	(24,156)	(24,370)
Property, plant and equipment, net	\$ 54,838	\$ 54,308

**Table of Contents**

Depreciation expense was \$5.6 million, \$4.1 million and \$3.3 million for the fiscal years ended March 31, 2009, 2008 and 2007, respectively.

**7. Intangible Assets**

Intangible assets at March 31, 2009 and 2008 consisted of the following (in thousands):

	2009		For the year ended March 31, 2008		2008		Estimated useful life
	Gross Amount	Accumulated Amortization	Net Book Value	Gross Amount	Accumulated Amortization	Net Book Value	
Licenses	\$ 1,734	\$ (1,666)	\$ 68	\$ 1,698	\$ (1,646)	\$ 52	7
Patents	6,743	(3,602)	3,141	7,946	(4,891)	3,055	7
Contractual relationships/ backlog	3,401	(3,353)	48	4,049	(3,980)	69	2
Customer relationships	2,601	(1,284)	1,317	2,993	(782)	2,211	3 - 5
Trade names and trademarks	1,200	(385)	815	1,436	(256)	1,180	7
Core technology and know-how	5,572	(2,102)	3,470	6,357	(1,341)	5,016	5 - 10
Intangible assets, net	\$ 21,251	\$ (12,392)	\$ 8,859	\$ 24,479	\$ (12,896)	\$ 11,583	

The Company recorded intangible amortization expense of \$2.8 million, \$6.0 million and \$1.5 million for the fiscal years ended March 31, 2009, 2008 and 2007, respectively.

Amortization expense for the next five years is expected to be as follows (in thousands):

Amortization expense	For the fiscal years ended March 31,				
	2010	2011	2012	2013	2014
	\$ 2,541	\$ 2,211	\$ 1,819	\$ 794	\$ 553

Goodwill of \$26.2 million and \$18.5 million at March 31, 2009 and 2008, respectively, represents the excess of the purchase price paid for the calendar year 2007 acquisitions of Windtec Consulting, GmbH and Power Quality Systems, Inc. over the estimated fair value of the net assets acquired, as well as the purchase price paid for the June 2000 acquisition of substantially all of the assets of Integrated Electronics, LLC (IE) over the fair value of IE's assets acquired, less amortization recorded prior to the adoption of SFAS No. 142. Goodwill also includes \$11.0 million and \$9.8 million, representing the fair value of common shares earned as contingent consideration as of March 31, 2009 and 2008, respectively, for the Windtec and Power Quality Systems acquisitions. The goodwill is associated with the Power Systems segment. The geographic composition of goodwill and intangible assets is as follows (in thousands):

	March 31,	
	2009	2008
Goodwill by geography:		
U.S.	\$ 6,862	\$ 5,638
Europe	19,371	12,892
Total	\$ 26,233	\$ 18,530
	March 31,	
	2009	2008
Intangible assets by geography:		
U.S.	\$ 4,444	\$ 4,761
Europe	4,415	6,822

Total	\$ 8,859	\$ 11,583
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**Table of Contents**

During the Company's annual testing for impairment, the Company assessed Goodwill and concluded that Goodwill was not impaired as of March 31, 2009 and 2008.

**8. Accounts Payable and Accrued Expenses**

Accounts payable and accrued expenses at March 31, 2009 and 2008 consisted of the following (in thousands):

	March 31,	
	2009	2008
Accounts payable	\$ 23,881	\$ 10,044
Accrued miscellaneous expenses	7,920	5,122
Accrued subcontractor program costs	6,370	3,392
Accrued litigation costs (including warrants)		3,007
Accrued compensation	6,399	4,119
Income taxes payable	8,824	6,330
Accrued restructuring	2,110	4,567
Accrued warranty	4,749	1,775
<b>Total</b>	<b>\$ 60,253</b>	<b>\$ 38,356</b>

**Product Warranty**

The Company generally provides a one to two year warranty on its products, commencing upon installation. A provision is recorded upon revenue recognition to Cost of revenue product sales and prototype development for estimated warranty expense based on historical experience. The following is a summary of accrued warranty activity (in thousands):

	For the fiscal year ended March 31,	
	2009	2008
Beginning balance	\$ 1,775	\$ 1,582
Accruals for warranties during the period	6,531	2,867
Settlements during the period	(3,443)	(2,713)
Adjustments relating to preexisting warranties	(114)	39
<b>Ending balance</b>	<b>\$ 4,749</b>	<b>\$ 1,775</b>

**9. Income Taxes**

Net income/(loss) before income taxes for the fiscal years ended March 31, 2009, 2008 and 2007 are provided in the table as follows (in thousands):

	For the fiscal years ended March 31,		
	2009	2008	2007
Net income/(loss) before income tax expense:			
U.S.	\$ (38,802)	\$ (32,242)	\$ (34,185)
Foreign	30,902	9,675	(592)
<b>Total</b>	<b>\$ (7,900)</b>	<b>\$ (22,567)</b>	<b>\$ (34,777)</b>



**Table of Contents**

The components of income tax expense (benefit) attributable to continuing operations consist of the following (in thousands):

	For the fiscal years ended March 31,		
	2009	2008	2007
<b>Current</b>			
Federal	\$	\$	\$
State			
Foreign	8,589	5,998	(6)
<b>Total current</b>	<b>8,589</b>	<b>5,998</b>	<b>(6)</b>
<b>Deferred</b>			
Federal	30	161	
State	6	29	
Foreign	110	(3,308)	(96)
<b>Total deferred</b>	<b>146</b>	<b>(3,118)</b>	<b>(96)</b>
<b>Income tax expense/(benefit)</b>	<b>\$ 8,735</b>	<b>\$ 2,880</b>	<b>\$ (102)</b>

The reconciliation between the statutory federal income tax rate and the Company's effective income tax rate is shown below.

	For the fiscal year ended March 31,		
	2009	2008	2007
Statutory federal income tax rate	(34)%	(34)%	(34)%
State income taxes, net of federal benefit	(24)	(9)	(8)
State rate change	36		
Foreign income tax rate	(38)	(3)	
Stock options	5	2	2
Research and development credit	(7)	(1)	(2)
Valuation allowance	173	58	42
<b>Effective income tax rate</b>	<b>111%</b>	<b>13%</b>	<b>%</b>

**Table of Contents**

The principal components of the Company's deferred tax assets and liabilities were the following (in thousands):

	For the year ended March 31,	
	2009	2008
Deferred tax assets:		
Net operating loss carryforwards	\$ 164,886	\$ 151,941
Research and development and other credits	6,501	6,461
Accruals and reserves	6,353	7,737
Fixed assets and intangibles	22	6,209
Other	5,301	2,063
<b>Gross deferred tax assets</b>	<b>183,063</b>	<b>174,411</b>
Valuation allowance	(174,695)	(171,664)
<b>Total deferred tax assets</b>	<b>8,368</b>	<b>2,747</b>
Deferred tax liabilities:		
Intangibles from acquisitions	(1,040)	(1,658)
Fixed assets and intangibles	(6,482)	(40)
<b>Total deferred tax liabilities</b>	<b>(7,522)</b>	<b>(1,698)</b>
<b>Net deferred tax assets</b>	<b>\$ 846</b>	<b>\$ 1,049</b>

The Company has provided a valuation allowance against its U.S. current and deferred income tax assets since the Company believes that it is more likely than not that its deferred tax assets are not currently realizable due to the net operating losses incurred by the Company since its inception. The Company has not provided a valuation allowance against its foreign current or deferred income tax assets since the Company believes that it is more likely than not that its deferred tax assets will be realized.

At March 31, 2009, the Company has aggregate net operating loss carryforwards for its U.S. operations for federal and state income tax purposes of approximately \$473.9 million and \$298.8 million, respectively, which expire in the years ending March 31, 2010 through 2029. Also included in the U.S. net operating losses are approximately \$5.7 million and \$3.7 million of acquired losses from Superconductivity, Inc. and Power Quality Systems, Inc., respectively. Of the U.S. net operating loss carryforwards, \$30.6 million resulting from excess tax deductions from stock options exercised in 2006 through 2009. Pursuant to SFAS No. 123R, the deferred tax asset relating to excess tax benefits from these exercises was not recognized for financial statement purposes. The future benefit from these deductions will be recorded as a credit to additional paid-in capital when realized.

Section 382 of the Internal Revenue Code of 1986, as amended (the IRC), limits the amount of NOL and general business tax credit carryforwards that a corporation may deduct from its income if the corporation has undergone an ownership change. The Company's utilization of NOL and general business tax credit carryforwards may be subject to annual limitations imposed by Section 382 of the IRC due to ownership changes that have occurred previously or that could occur in the future. Notwithstanding, the Company believes any past ownership changes would not have a material impact on the utilization of its tax attributes. The Company is currently performing a Section 382 study to measure the impact, if any, due to ownership changes.

At March 31, 2009, the Company had net operating losses carryforwards for its foreign operations of \$0.1 million, which can be carried forward indefinitely.

The Company has recorded a deferred tax asset of approximately \$14.9 million reflecting the benefit of deductions from the exercise of stock options prior to the adoption of SFAS No. 123R. This deferred tax asset has been fully reserved since it is more likely than not that the tax benefit from the exercise of stock options will





**Table of Contents**

not be realized. The benefit from this \$14.9 million will be recorded as a credit to additional paid-in capital when realized. Research and development and other tax credit carryforwards amounting to approximately \$5.1 million and \$2.2 million are available to offset federal and state income taxes, respectively, and will expire in the years ending March 31, 2010 through 2029.

SFAS 141-R, Business Combinations, will be adopted on April 1, 2009 which requires the reduction of a valuation allowance that pertains to the acquired companies is generally recorded to reduce its income tax expense. At March 31, 2009, the Company had \$0.9 million of deferred tax assets that pertain to acquired companies.

A portion of the deferred tax liabilities are created by goodwill as a result of an U.S. acquisition. These deferred tax liabilities are not allowed as an offset to deferred tax assets for purposes of determining the amount of valuation allowance required. As a result, a deferred tax provision is required to increase the Company's valuation allowance. The deferred tax liability associated with goodwill as of March 31, 2009 was approximately \$0.2 million.

The estimated amount of undistributed earnings of the Company's foreign subsidiaries is approximately \$35.4 million at March 31, 2009. No amount for U.S. income tax has been provided on undistributed earnings of our foreign subsidiaries because we consider such earnings to be indefinitely reinvested. In the event of distribution of those earnings in the form of dividends or otherwise, the Company would be subject to both U.S. income taxes, subject to an adjustment, if any, for foreign tax credits, and foreign withholding taxes payable to certain foreign tax authorities. Determination of the amount of U.S. income tax liability that would be incurred is not practicable because of the complexities associated with this hypothetical calculation, however, unrecognized foreign tax credit carryforwards may be available to reduce some portion of the U.S. tax liability, if any.

The company adopted Financial Interpretation Number 48, Accounting for Uncertain Tax Positions on April 1, 2007. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, Accounting for Income Taxes. FIN 48 prescribes a recognition threshold and measurement of a tax position taken or expected to be taken in a tax return. The Company did not establish any additional reserves for uncertain tax positions upon the adoption of FIN 48, and any reserves for uncertain tax positions are immaterial to the Consolidated Financial Statements as of March 31, 2009.

The Company performed a comprehensive review of its tax positions in accordance with recognition standards established by FIN 48. As a result of this review, the Company does not believe that it has any material uncertain tax positions in its federal tax return or any of the state or foreign income tax returns it is currently filing or has filed. As of March 31, 2009, the Company did not have any material unrecognized tax benefits. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of March 31, 2009 and 2008, the Company had no material amounts of accrued interest related to uncertain tax positions. The Company files federal, state and foreign income tax returns. Major tax jurisdictions include the U.S., China and Austria. All U.S. income tax filings for years ending March 31, 1994 through 2009 remain open and subject to examination and all years from calendar year 2003 through fiscal 2008 remain open and subject to examination in Austria. The Company's Chinese subsidiary has yet to file its first Chinese tax return which will cover calendar 2008.

The Company has not recognized any interest and penalties in the statement of operations because of its net operating losses and tax credits that are available to be carried forward. The Company will account for interest and penalties related to uncertain tax positions as part of its provision for federal and state income taxes.

The Company does not expect the amounts of unrecognized benefits will change significantly within the next 12 months.

**Table of Contents****10. Stockholders Equity****Public Offering**

In July 2007 the Company completed a public offering of 4,700,000 shares of its common stock and received net proceeds (after the underwriters discount and offering expenses) of \$93.6 million.

**Stock-Based Compensation**

The components of stock-based compensation for the fiscal years ended March 31, 2009, 2008 and 2007 were as follows (in thousands):

	For the fiscal year ended March 31,		
	2009	2008	2007
Stock options	\$ 3,599	\$ 3,139	\$ 1,851
Restricted stock and stock awards	6,022	2,481	1,771
Employee stock purchase plan	51	45	58
Total stock-based compensation expense	\$ 9,672	\$ 5,665	\$ 3,680

The estimated fair value of the Company's stock-based awards, less expected annual forfeitures, is amortized over the awards' service period. The total unrecognized compensation cost for unvested outstanding stock-based compensation awards was \$12.2 million for the fiscal year ended March 31, 2009. This expense will be recognized over a weighted average expense period of approximately 1.6 years.

The Company's consolidated statement of operations for the fiscal years ended March 31, 2009, 2008 and 2007 include the following stock-based compensation expense (in thousands):

Stock-based compensation in the	For the fiscal years ended March 31,		
	2009	2008	2007
<b>Statement of Operations by line item</b>			
Costs of revenue	\$ 1,350	\$ 515	\$ 391
Research and development	1,934	1,046	908
Selling, general and administrative	6,388	4,104	2,381
Total stock-based compensation expense	\$ 9,672	\$ 5,665	\$ 3,680

The following table summarizes the information concerning currently outstanding and exercisable employee and non-employee options and warrants:

	Options/ Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (thousands)
Outstanding at March 31, 2008	3,535,257	\$ 18.39		
Granted at fair value	143,000	26.03		
Exercised	(938,117)	15.00		
Canceled/Forfeited	(34,594)	18.92		

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Outstanding at March 31, 2009	2,705,546	\$ 19.97	5.2	\$ 8,587
Fully vested at March 31, 2009	1,794,157		3.6	

**Table of Contents**

The weighted-average grant-date fair value of stock option awards granted during the fiscal years ended March 31, 2009, 2008 and 2007 was \$13.85 per share, \$9.10 per share and \$6.41 per share, respectively. Intrinsic value represents the amount by which the market price of the common stock exceeds the exercise price of the options. The aggregate intrinsic value of exercisable options at March 31, 2009, 2008 and 2007 was \$6.4 million, \$15.2 million and \$1.5 million, respectively. The aggregate intrinsic value of options exercised at March 31, 2009, 2008 and 2007 was \$20.5 million, \$15.8 million and \$1.5 million, respectively. The total fair value of options vested during the fiscal years ended March 31, 2009, 2008 and 2007 was \$3.3 million, \$1.9 million and \$2.9 million, respectively.

The restricted stock grant includes approximately 140,000 shares of performance-based restricted stock, which will vest upon achievement of certain financial performance measurements. The remaining shares granted vest upon the passage of time. For awards that vest upon the passage of time, expense is being recorded over the vesting period. At March 31, 2009, the Company determined that achievement of the performance measures is probable and as such, is recognizing the fair value of the performance-based awards over the estimated performance period.

The weighted average assumptions used in the Black-Scholes valuation model for stock options granted during the fiscal years ended March 31, 2009, 2008 and 2007 are as follows:

	For the fiscal years ended		
	March 31,		
	2009	2008	2007
Dividend yield	None	None	None
Expected volatility	61.5%	58.9%	61.6%
Risk-free interest rate	3.0%	4.7%	4.6%
Expected life (years)	4.9	5.3	5.8

The expected volatility rate was estimated based on an equal weighting of the historical volatility of the Company's common stock and the implied volatility of the Company's traded options. The expected term was estimated based on an analysis of the Company's historical experience of exercise, cancellation, and expiration patterns. The risk-free interest rate is based on five-year U.S. Treasury rates.

The following table summarizes the employee and non-employee restricted stock activity for the fiscal year ended March 31, 2009:

	Shares	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term	Intrinsic Aggregate Value (thousands)
Outstanding at March 31, 2008	346,442	\$ 12.46	8.24	
Granted	417,900	28.71		
Vested	(138,277)	13.21		
Forfeited	(14,982)	26.05		
Outstanding at March 31, 2009	611,083	\$ 23.17	7.82	\$ 10,577

The total fair value of time-based restricted stock that was granted during the fiscal years ended March 31, 2009, 2008 and 2007 was \$12.0 million, \$8.1 million and \$2.1 million, respectively. The total fair value of time-based restricted stock that vested during the fiscal years ended March 31, 2009, 2008 and 2007 was \$1.8 million, \$2.2 million and \$1.4 million, respectively.

## **Table of Contents**

### ***Stock-Based Compensation Plans***

As of March 31, 2009, the Company had two active stock plans: the 2007 Stock Incentive Plan (the 2007 Plan ) and the 2007 Director Stock Option Plan (the 2007 Director Plan ). The 2007 Plan replaced the Company's 2004 Stock Incentive Plan upon the approval by the Company's stockholders on August 3, 2007. The 2007 Director Plan replaced the Second Amended and Restated 1997 Director Stock Option Plan, which expired pursuant to its terms on May 2, 2007.

The Plans provide for the issuance of restricted stock, incentive stock options and non-qualified stock options to purchase the Company's common stock. In the case of incentive stock options, the exercise price shall be equal to at least the fair market value of the common stock, as determined by the Board of Directors, on the date of grant. The contractual life of options is generally 10 years. Options generally vest over a 3-5 year period while restricted stock generally vests over a 2-5 year period. The 2007 Director Plan is for members of the Board of Directors who are not also employees of the Company (outside directors). Effective August 8, 2007, under the 2007 Director Plan, certain outside directors were entitled to receive an annual award of 5,000 fully-vested shares of common stock. For the year ended March 31, 2009, the outside directors elected to voluntarily reduce their annual award to 3,000 shares.

As of March 31, 2009, the 2007 Plan had 2,335,500 shares and the 2007 Director Plan had 262,000 shares available for future issuance.

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

The Company has an employee stock purchase plan (ESPP) which provides employees with the opportunity to purchase shares of common stock at a price equal to the market value of the common stock at the end of the offering period, less a 15% purchase discount. The Company recognized compensation expense of \$0.1 million for the fiscal year ended March 31, 2009 related to the ESPP. The Company issued 17,136 shares of common stock related to the ESPP during the year ended March 31, 2009. As of March 31, 2009, the ESPP had 67,842 shares available for future issuance.

### ***Stock Purchase Warrants***

At March 31, 2009, there are outstanding warrants held by UT-Battelle, LLC (UT-Battelle) for 5,000 shares of common stock at an exercise price of \$13.68 per share which become exercisable over a five-year period following the date of grant. These warrants were granted in exchange for a reduction in annual minimum royalty payments to UT-Battelle, which manages the Oak Ridge National Laboratory under a contract from the U.S. Department of Energy, vested over a five year period and expire on June 23, 2014. Expense related to these warrants was immaterial to the consolidated statement of operations for the fiscal years ended March 31, 2009, 2008 and 2007. As of March 31, 2009, no warrants have been exercised.

In March 1998, the Company entered into a strategic alliance with EPRI to develop and commercialize a coated conductor composite HTS wire. In connection with this agreement, the Company granted warrants to EPRI for 110,000 shares of common stock (67,068 of which have been exercised to date and the remaining 42,932 were forfeited to cover the cost to exercise 25,818 shares during the fiscal year ended March 31, 2008) at \$13.94 per share.

In addition, the Company also granted a warrant to TM Capital in April 2005. See Note 11.

## **11. Commitments and Contingencies**

In April 2005, the Company issued to TM Capital (which subsequently assigned it to Provident Premier Master Fund, Ltd. ( Provident )) a common stock purchase warrant for 200,000 shares of the Company's common stock, exercisable for a five-year term, with an exercise price of \$9.50 per share (the Warrant ). The

**Table of Contents**

accrued warrant cost was classified as a current liability in accordance with Emerging Issues Task Force (EITF) Issue No. 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock", until such time as the Warrant was exercised or forfeited, and was marked-to-market based primarily on the then current price and expected volatility of the Company's common stock as of the end of each reporting period. In August 2008, Provident utilized the cashless exercise provision and exercised the entire Warrant in exchange for 148,387 shares of the Company's common stock. The Warrant was re-valued at \$4.3 million at the time of exercise, resulting in a charge of \$1.3 million for the year ended March 31, 2009 (reported in Other income (expense) in the Consolidated Statements of Operations). Accordingly, the liability of \$4.3 million was reclassified to equity upon exercise of the Warrant. The Warrant was valued at \$3.0 million as of March 31, 2008, and a loss of \$1.7 million was recorded in Other income (expense) in the Consolidated Statements of Operations, reflecting the change in value for the year ended March 31, 2008.

The Company leases two operating facilities in Middleton, Wisconsin, under leases which expire on December 31, 2010, one facility in New Berlin, Wisconsin, under a lease which expires on September 30, 2011, and one facility in West Mifflin, Pennsylvania, under a lease which expires on December 31, 2010. The Company also leases three facilities in Klagenfurt, Austria, all of which the Company has the option to cancel with a six months advance notice. The Company also rents a facility in Suzhou, China, under a lease that expires on July 31, 2010.

The Company also has an operating lease for a facility in Westborough, Massachusetts, its former corporate headquarters, which expires on May 31, 2009. In October 2007, the Company entered into a restructuring plan to consolidate its headquarters into its Devens, Massachusetts facility (see Note 15). In December 2007, the Company vacated this facility and recorded a lease restructuring charge of \$3.8 million and facility closing costs of \$2.6 million in the fiscal year ended March 31, 2008 in connection with the restructuring. During the year ended March 31, 2009, the Company recorded \$1.0 million of additional facility closing costs.

Rent expense under the operating leases mentioned above was as follows (in thousands):

	For the fiscal years ended		
	March 31,		
	2009	2008	2007
Rent expense	\$ 1,777	\$ 2,819	\$ 3,122

Minimum future lease commitments at March 31, 2009 were as follows (in thousands):

For the fiscal years ended March 31,	Total
2010	\$ 1,508
2011	752
2012	329
2013	
2014 and beyond	
Total	\$ 2,589

In September 2001, the Company entered into a standby letter of credit arrangement with a financial institution to provide a guarantee for rent of \$1.0 million for the Two Technology Drive facility in Westborough, Massachusetts. The letter of credit amount was reduced to \$0.8 million at June 1, 2005 and was reduced to \$0.5 million at June 1, 2007. This letter of credit will expire on July 31, 2009.

On June 26, 2008, the Company entered into a performance bond for CNY 1.1 million (approximately \$0.2 million) with a Chinese customer to guarantee supply of core components and software, which expires June 30, 2012. The performance bond was issued utilizing a Bank of China CNY 10.0 million (approximately \$1.5 million) unsecured line of credit.

**Table of Contents**

From time to time, the Company enters into long-term construction contracts with customers that require the Company to obtain performance bonds. The Company is required to deposit an amount equivalent to some or all the face amount of the performance bonds into an escrow account until the termination of the bond. When the performance conditions are met, amounts deposited as collateral for the performance bonds are returned to the Company.

As of March 31, 2009, the Company had outstanding performance bond issued on behalf of the Company's wholly-owned Austrian subsidiary, AMSC Windtec GmbH (Windtec), for 2.3 million (approximately \$3.1 million) in connection with three contracts to provide power electronics for three customers. The first two performance bonds for 2.2 million (approximately \$3.0 million) will expire October 31, 2009 and the third performance bond for 0.1 million (approximately \$0.1 million) will expire February 6, 2010. In the event that the payment is made in accordance with the requirements of any of these performance bonds, the Company would record the payment as an offset to revenue. The performance bonds are secured with restricted cash, included in current assets.

At March 31, 2009 and 2008, the Company had \$5.9 million and \$12.3 million, respectively, of restricted cash included in current assets, which includes the restricted cash securing the Windtec bonds noted above, and \$1.4 million and \$0.9 million of long-term restricted cash, respectively. Restricted cash as of March 31, 2009 and 2008 was \$7.3 million and \$13.2 million, respectively.

The Company also has unused, unsecured lines of credit of 0.5 million (or approximately \$0.7 million) that are available until June 30, 2010 and CNY 8.9 million (or approximately \$1.3 million) that is available until June 5, 2009.

**12. Cost-Sharing Arrangements**

The Company has entered into several cost-sharing arrangements with various agencies of the United States government. Funds paid to the Company under these agreements are not reported as revenues but are used to directly offset the Company's research and development (R&D) and selling, general and administrative (SG&A) expenses, and to purchase capital equipment.

Costs incurred and R&D and SG&A expenditures offset by cost sharing funding received under these contracts is as follows (in thousands):

	<b>For the fiscal years ended March 31,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
Costs incurred	\$ 4,478	\$ 6,066	\$ 7,063
R&D expenditures offset by cost sharing funding received	1,129	1,323	1,505
SG&A expenditures offset by cost sharing funding received	983	1,216	1,415

At March 31, 2009, total funding received to date under these agreements was \$27.8 million.

**13. Employee Benefit Plans**

The Company has implemented a deferred compensation plan (the Plan) under Section 401(k) of the Internal Revenue Code. Any contributions made by the Company to the Plan are discretionary. The Company has a stock match program under which the Company matched, in the form of Company common stock, 35% of the first 6% of eligible contributions. Effective October 1, 2007 this contribution increased to 50% of the first 6% of eligible contributions. The Company recorded expense of \$0.6 million, \$0.4 million and \$0.3 million for the fiscal years ended March 31, 2009, 2008 and 2007, respectively, and corresponding charges to additional paid-in capital related to this program.

## **Table of Contents**

### **14. Acquisitions**

#### ***Acquisition of Power Quality Systems, Inc.***

On April 27, 2007, the Company acquired Power Quality Systems, Inc. ( PQS ), a Pennsylvania corporation, for \$4.5 million in stock. PQS offers reactive compensation products known as Static VAR Compensators, or SVCs, based on its proprietary thyristor switch technology. These products enhance the reliability of power transmission and distribution grids and improve the quality of power for manufacturing operations.

The acquisition agreement included an earn-out provision for the issuance of up to an additional 0.5 million shares of common stock based on the achievement of certain order growth targets for existing PQS products for the fiscal years ending March 31, 2008 and 2009. During the fiscal year ended March 31, 2008, the Company recorded contingent consideration related to the acquisition of PQS of \$1.7 million to Goodwill and Additional paid-in capital, representing 75,000 shares earned. These shares were issued during the first quarter of the fiscal year ended March 31, 2009. In addition, the Company recorded contingent consideration of \$1.2 million to Goodwill and additional paid-in capital, representing 75,000 shares earned for the fiscal year ended March 31, 2009. These shares will be issued in the first quarter of fiscal year ending March 31, 2010.

The results of PQS's operations are included in the Company's consolidated results from the date of acquisition of April 27, 2007. Assuming the acquisition of PQS had occurred on April 1, 2007 and 2006, the impact on the consolidated results of the Company would not have been significant.

#### ***Acquisition of Windtec Consulting GmbH***

On January 5, 2007, the Company acquired Windtec Consulting GmbH ( Windtec ), a corporation incorporated according to the laws of Austria. Windtec develops and sells electrical systems for wind turbines. Windtec also provides technology transfer for the manufacturing of wind turbines; documentation services; and training and support regarding the assembly, installation, commissioning, and service of wind turbines.

The fair value of shares of the Company's common stock issued on the acquisition date was determined using a value of \$10.08 per share, which represents the five-day average closing price of the common stock from the two trading days before through two trading days after the signing of the Stock Purchase Agreement and the public announcement of the acquisition. Transaction costs include accounting and legal fees and other external costs directly related to the acquisition. The total purchase price of approximately \$13.6 million includes the fair value of shares of the Company's common stock issued and transaction costs.

The acquisition agreement included an earn-out provision for the issuance of up to an additional 1,400,000 shares of common stock upon Windtec's achievement of specified revenue objectives during the first four fiscal years following closing of the acquisition. During the fiscal year ended March 31, 2008, the Company recorded contingent consideration of \$8.1 million to Goodwill and Additional paid-in capital, representing 350,000 shares earned. These shares were issued during the first quarter of the fiscal year ended March 31, 2009. In addition, the Company recorded contingent consideration of \$9.8 million to Goodwill and Additional paid-in capital during the fiscal year ended March 31, 2009, representing 350,000 shares earned. The 350,000 shares earned are the maximum amount of contingent consideration that can be earned in a fiscal year. These shares will be issued in the first quarter of the fiscal year ending March 31, 2010.



**Table of Contents**

*Unaudited Pro Forma Operating Results* The following table presents the unaudited pro forma consolidated results of operations of the Company for the fiscal year ended March 31, 2007 as if the acquisition of Windtec Consulting GmbH was completed as of April 1, 2006 as shown below (in thousands).

	<b>For the fiscal year ended March 31, 2007</b>	
Revenue	\$	64,161
Net loss		(35,314)
<b>Basic and diluted loss per common share amounts:</b>		
Net loss	\$	(1.06)

The pro forma amounts include the historical operating results of the Company and Windtec Consulting GmbH with appropriate adjustments that give effect to depreciation, amortization and accretion, interest expense, income taxes, and certain conforming accounting policies of the Company. The pro forma amounts are not necessarily indicative of the operating results that would have occurred if the acquisition and related transactions had been completed at the beginning of the applicable periods presented. In addition, the pro forma amounts are not necessarily indicative of operating results in future periods.

The results of Windtec's operations are included in the Company's consolidated results from the date of acquisition of January 5, 2007.

**15. Restructuring**

The Company's restructuring charges for the fiscal years ended March 31, 2009, 2008 and 2007 were \$1.0 million, \$6.7 million and \$0.5 million, respectively.

On March 26, 2007, the Company's Board of Directors approved a restructuring plan (the Fiscal 2006 Plan) to reduce future operating costs and to transition its high temperature superconductor products to the manufacturing stage by consolidating the Company's AMSC Wires, SuperMachines and Power Electronic Systems business segments into two operating segments: AMSC Superconductors and AMSC Power Systems.

The Company's aggregate restructuring charges associated with the Fiscal 2006 Plan were \$0.8 million, of which \$0.3 million was expensed in the fiscal year ended March 31, 2008 and \$0.5 million in the fiscal year ended March 31, 2007. These charges consisted of severance, relocation and lease termination costs. The restructuring charge was allocated to the AMSC Superconductors operating segment. As of March 31, 2008, the plan was substantially completed.

On October 25, 2007, the Company's Board of Directors approved a restructuring plan (the Fiscal 2007 Plan) to reduce operating costs through the closure its last remaining facility in Westborough, Massachusetts, and the consolidation of operations there, including its corporate headquarters, into its Devens, Massachusetts, facility. No headcount reductions were associated with this plan.

Aggregate restructuring charges associated with the Fiscal 2007 Plan were \$7.4 million, of which \$1.0 million and \$6.4 million were recorded in the fiscal years ended March 31, 2009 and 2008, respectively. The charge primarily represents \$3.8 million in costs associated with the write-off of the present value of the remaining lease payments, \$3.1 million in unforeseen costs determined necessary to return the building back to its original state to the landlord, and \$0.5 million in costs associated with the relocation of people and equipment to its Devens facility. The aggregate expected charge above assumes the facility is not subleased. All restructuring charges associated with the Fiscal 2007 Plan are expected to result in cash disbursements and were included in unallocated corporate expenses.

**Table of Contents**

The following table presents the restructuring expense and cash disbursements for the fiscal years ended March 31, 2009, 2008 and 2007 (in thousands).

	Lease Termination Costs	Decontamination and Other Facility Closing Costs	Employee Severance & Related Benefits	Total
Balance April 1, 2006	\$	\$	\$	\$
Charges to operations	94	49	381	524
Cash disbursements		(49)	(11)	(60)
Balance March 31, 2007	94	0	370	464
Charges to operations	3,765	2,723	217	6,705
Cash disbursements	(759)	(814)	(587)	(2,160)
Balance March 31, 2008	3,100	1,909		5,009
Charges to operations	222	808		1,030
Cash disbursements	(2,860)	(1,069)		(3,929)
Balance March 31, 2009	\$ 462	\$ 1,648	\$	\$ 2,110

**16. Business Segment and Geographic Information**

The Company reports its financial results in two reportable business segments: AMSC Power Systems and AMSC Superconductors.

AMSC Power Systems business unit produces a broad range of products to increase electrical grid capacity and reliability; supplies electrical systems used in wind turbines; sells power electronic products that regulate wind farm voltage to enable their interconnection to the power grid; licenses proprietary wind turbine designs to manufacturers of such systems; provides consulting services to the wind industry; and offers products that enhance power quality for industrial operations.

AMSC Superconductors business unit focuses on the manufacturing HTS wire and coils; designs and develops superconductor products, such as power cables, fault current limiters and motors; and manages large-scale superconductor projects.

The operating results for the two business segments are as follows (in thousands):

Revenues	For the fiscal years ended March 31,		
	2009	2008	2007
AMSC Power Systems	\$ 168,008	\$ 96,823	\$ 30,850
AMSC Superconductors	14,747	15,573	21,333
Total	\$ 182,755	\$ 112,396	\$ 52,183

Operating income (loss)	For the fiscal years ended March 31,		
	2009	2008	2007
AMSC Power Systems	\$ 26,492	\$ 10,865	\$ 402
AMSC Superconductors	(23,655)	(21,784)	(31,419)
Unallocated corporate expenses	(11,033)	(13,971)	(5,515)
Total	\$ (8,196)	\$ (24,890)	\$ (36,532)



**Table of Contents**

Total assets for the two business segments are as follows (in thousands):

	March 31,	
	2009	2008
AMSC Power Systems	\$ 136,777	\$ 80,844
AMSC Superconductors	55,122	60,986
Cash and cash equivalents, marketable securities and restricted cash	117,207	119,404
 Total	 \$ 309,106	 \$ 261,234

The accounting policies of the business segments are the same as those for the consolidated Company, except that certain corporate expenses which the Company does not believe are specifically attributable or allocable to either of the two business segments have been excluded from the segment operating income (loss). Unallocated corporate expenses include stock-based compensation expense of \$9.7 million, \$5.7 million and \$3.7 million for the fiscal years ended March 31, 2009, 2008 and 2007, respectively. For the fiscal year ended March 31, 2009, unallocated corporate expenses also include \$1.0 million of restructuring charges related primarily to the closure of the Company's Westborough, Massachusetts facility. For the fiscal years ended March 31, 2009, 2008 and 2007, unallocated corporate expenses also include rent and occupancy costs associated with the unoccupied portion of the Company's former corporate headquarters facility located in Westborough, Massachusetts.

Geographic information about revenue, based on shipments to customers by region is as follows (in thousands):

	For the fiscal years ended March 31,		
	2009	2008	2007
U.S.	\$ 29,826	\$ 29,671	\$ 27,731
Other North America	6,256	3,531	4,876
Europe	5,123	4,838	7,440
Asia-Pacific	141,550	74,356	12,136
 Total	 \$ 182,755	 \$ 112,396	 \$ 52,183

In the fiscal year ended March 31, 2009, 84% of the Company's revenues came from sales outside the United States compared with 74% in the fiscal year ended March 31, 2008 and 47% in the fiscal year ended March 31, 2007. Of the revenue derived from customers outside the United States, 86%, 55% and 11% were derived from customers in China in the fiscal years ended March 31, 2009, 2008 and 2007, respectively. The Company maintains operations in Austria, China and the United States and sales and service support centers in Germany and Singapore in support of its expansion.

For the fiscal years ended March 31, 2009 and 2008, the Company had one customer, Sinovel, which represented approximately 67% and 51% of total revenue, respectively. For fiscal year ended March 31, 2007, the U.S. Navy represented approximately 25% of total revenue and Sinovel represented approximately 11%.

Geographic information about property, plant and equipment associated with particular regions is as follows (in thousands):

	March 31,	
	2009	2008
U.S.	\$ 50,597	\$ 52,287
Europe	2,421	1,392
Asia-Pacific	1,820	629
 Total	 \$ 54,838	 \$ 54,308



**Table of Contents****17. Quarterly Financial Data (Unaudited)**

(In thousands, except per share amount)

Three Months Ended	For the fiscal year ended March 31, 2009:			
	June 30, 2008	September 30, 2008	December 31, 2008	March 31, 2009
Total revenue	\$ 39,817	\$ 40,375	\$ 41,334	\$ 61,229
Operating income (loss)	(2,688)	(3,813)	(5,736)	4,041
Net income (loss)	(6,103)	(4,068)	(7,772)	1,308
Net income (loss) per common share Basic	(0.15)	(0.10)	(0.18)	0.03
Net income (loss) per common share Diluted	(0.15)	(0.10)	(0.18)	0.03

Three Months Ended	For the fiscal year ended March 31, 2008:			
	June 30, 2007	September 30, 2007	December 31, 2007	March 31, 2008
Total revenue	\$ 19,770	\$ 21,623	\$ 32,624	\$ 38,379
Operating loss	(8,730)	(7,189)	(6,150)	(2,821)
Net loss	(9,653)	(6,673)	(7,309)	(1,812)
Net loss per common share Basic and Diluted	(0.26)	(0.17)	(0.18)	(0.04)

**18. New Accounting Pronouncements**

In April 2008, the FASB issued FASB staff position ( FSP FAS 142-3 ) Determination of the Useful Life of Intangible Assets. FSP FAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, Goodwill and Other Intangible Assets. The objective of this FSP is to improve the consistency between the useful life of a recognized intangible asset under SFAS No. 142 and the period of expected cash flows used to measure the fair value of the asset under SFAS No. 141(R), and other U.S. GAAP. This FSP applies to all intangible assets, whether acquired in a business combination or otherwise, and shall be effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years and applied prospectively to intangible assets acquired after the effective date. Early adoption is prohibited. The Company is in the process of evaluating whether the adoption of this standard will have a material effect on its financial position, results of operations or cash flows.

In December 2007, the FASB issued SFAS No. 141(R), Business Combinations , which replaces SFAS No. 141. This revised standard requires assets, liabilities and non-controlling interests acquired to be measured at fair value and requires that costs incurred to effect the acquisition be recognized separately from the business combination. In addition, this statement expands the scope to include all transactions and other events in which one entity obtains control over one or more businesses. This statement is effective for all business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. Although there are not any current plans for an acquisition, should there be an acquisition in the future, the Company will adopt this statement for acquisitions consummated after its effective date of April 1, 2009.

In December 2007, the FASB issued SFAS No. 160, Non-controlling Interests in Consolidated Financial Statements, and an Amendment of ARB No. 51. This statement establishes accounting and reporting standards for the non-controlling interest in a subsidiary and for the deconsolidation of a subsidiary. This statement is effective for fiscal years beginning on or after December 15, 2008. Although there are not any current plans for an acquisition of a non-controlling interest, should there be such an acquisition in the future, the Company will adopt this statement for acquisitions consummated after its effective date.

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements. SFAS No. 157 defines fair value, establishes a framework for measuring fair value in GAAP and establishes a hierarchy that categorizes and prioritizes the sources to be used to estimate fair value. SFAS No. 157 also expands financial statement

## **Table of Contents**

disclosures about fair value measurements. On February 12, 2008, the FASB issued FSP FAS 157-2 which delays the effective date of SFAS No. 157 for one year for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). SFAS No. 157 and FSP 157-2 are effective for financial statements issued for fiscal years beginning after November 15, 2007. The Company has elected a partial deferral of SFAS No. 157 under the provisions of FSP 157-2 related to the measurement of fair value used when evaluating goodwill, other intangible assets and other long-lived assets for impairment and valuing asset retirement obligations and liabilities for exit or disposal activities. The partial adoption of SFAS No. 157 on April 1, 2008 did not have a material impact on the Company's condensed consolidated financial statements. In April 2009, the FASB issued FSP SFAS No. 157-4, *Determining Whether a Market Is Not Active and a Transaction Is Not Distressed* ( FSP SFAS No. 157-4 ). FSP SFAS No. 157-4 provides guidelines for making fair value measurements more consistent with principles presented in SFAS No. 157. FSP SFAS No. 157-4 provides additional authoritative guidance in determining whether a market is active or inactive, whether a transaction is distressed, is applicable to all assets and liabilities and will require enhanced disclosures. FSP SFAS No. 157-4 is effective for periods ending after June 15, 2009. The Company does not believe FSP SFAS No. 157-4 will be applicable to it.

In June 2008, the FASB issued FSP No. EITF 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities* ( FSP No. EITF 03-6-1 ). Under the provisions of this standard, unvested awards of share-based payments with non-forfeitable rights to receive dividends or dividend equivalents are considered participating securities for purposes of calculating earnings per share. FSP No. EITF 03-6-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those years. The Company is evaluating the impact of FSP No. EITF 03-6-1 on its financial statements.

In April 2009, the FASB issued FSP SFAS No. 115-2, SFAS 124-2 and EITF 99-20-2, *Recognition and Presentation of Other-Than-Temporary Impairments*. FSP SFAS No. 115-2, SFAS 124-2 and EITF 99-20-2 provides additional guidance to provide greater clarity about the credit and noncredit component of an other-than-temporary impairment event and to more effectively communicate when an other-than-temporary impairment event has occurred. FSP SFAS No. 115-2, SFAS 124-2 and EITF 99-20-2 are effective for periods ending after June 15, 2009. The Company is evaluating if the adoption of FSP SFAS No. 115-2, SFAS 124-2 and EITF 99-20-2 will have a material impact on its financial statements.

In April 2009, the FASB issued FSP SFAS No. 107-1 and Accounting Principles Board ( APB ) Opinion 28-1, *Interim Disclosures About Fair Value of Financial Instruments*. FSP SFAS No. 107-1 and APB No. 28-1 amend SFAS No. 107, *Disclosures About Fair Value of Financial Instruments*, to require disclosures about the fair value of financials in interim as well as in annual financial statements, and APB No. 28, *Interim Financial Reporting*, to require those disclosures in all interim financial statements. FSP SFAS No. 107-1 and APB No. 28-1 are effective for periods ending after June 15, 2009. The Company is evaluating if the adoption of FSP SFAS No. 107-1 and APB No. 28-1 will have a material impact on its financial statements.

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**Table of Contents**

**Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**  
Not Applicable.

**Item 9A. CONTROLS AND PROCEDURES**  
*Evaluation of Disclosure Controls and Procedures*

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2009. The term disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the Exchange Act), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2009, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

***Management's Report on Internal Control over Financial Reporting***

Management is responsible for establishing and maintaining adequate internal control over our financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act as a process designed by, or under the supervision of, a company's chief executive officer and chief financial officer, and effected by the board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

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

Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, an evaluation was conducted of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of March 31, 2009.

The effectiveness of our internal control over financial reporting as of March 31, 2009 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.



**Table of Contents**

***Changes in Internal Control Over Financial Reporting***

There was no change in our internal control over financial reporting that occurred during the fiscal quarter ended March 31, 2009 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. OTHER INFORMATION**

None.

**Table of Contents**

**PART III**

**Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The response to this item is contained in part under the caption "Executive Officers" in Part I of this Annual Report on Form 10-K, and in part in our Proxy Statement for the Annual Meeting of Stockholders for the fiscal year ended March 31, 2009 (the "2009 Proxy Statement") in the sections "Corporate Governance - Members of the Board," "Other Matters - Section 16(a) Beneficial Ownership Reporting Compliance," "Corporate Governance - Code of Business Conduct and Ethics," "Corporate Governance - Board Committees" and "Corporate Governance - Board Committees - Audit Committee," which sections are incorporated herein by reference.

**Item 11. EXECUTIVE COMPENSATION**

The sections of the 2009 Proxy Statement titled "Information About Executive and Director Compensation," "Compensation Committee Interlocks and Insider Participation" and "Compensation Committee Report" are incorporated herein by reference.

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

The sections of the 2009 Proxy Statement titled "Stock Ownership of Certain Beneficial Owners and Management" and "Information about Executive Officer and Director Compensation - Securities Authorized for Issuance Under our Equity Compensation Plans" are incorporated herein by reference.

**Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The sections of the 2009 Proxy Statement titled "Certain Relationships and Related Transactions" and "Corporate Governance - Board Determination of Independence" and "Corporate Governance - Board Committees" are incorporated herein by reference.

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

The section of the 2009 Proxy Statement titled "Ratification of Selection of Registered Independent Public Accounting Firm (Proposal 4)" is incorporated herein by reference.

**Table of Contents**

**PART IV**

**Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

(a) Document filed as part of this Annual Report on Form 10-K:

1. Financial Statements

The financial statements required by this item are included in Item 8, Financial Statements and Supplementary Data herein.

2. Financial Statement Schedules

See Schedule II Valuation and Qualifying Accounts for the fiscal years ended March 31, 2009, 2008 and 2007. All other schedules are omitted because they are not applicable, not required or the required information is shown in the consolidated financial statements or notes thereto.

3. Exhibits

The list of Exhibits filed as a part of this Annual Report on Form 10-K is set forth on the Exhibit Index immediately preceding such Exhibits, and is incorporated herein by reference.

**Table of Contents****American Superconductor Corporation****Schedule II Valuation and Qualifying Accounts**

(In thousands)

Description	Balance, Beginning of Year	Additions Charged to Costs and Expenses	Deductions		Balance, End of Year
			Actual Write-Off	Less Recoveries	
Allowance for doubtful notes and accounts receivable:					
Fiscal year ended March 31, 2009	\$ 5	\$ 1,652	\$ 203	\$ 111	\$ 1,343
Fiscal year ended March 31, 2008	5				5
Fiscal year ended March 31, 2007		5			5
	<b>Balance, Beginning of Year</b>	<b>Additions</b>	<b>Deletions</b>	<b>Adjustments</b>	<b>Balance, End of Year</b>
Deferred Tax Asset Valuation Allowance:					
Fiscal year ended March 31, 2009	\$ 171,664	\$ 7,055	\$	\$ (4,024)	\$ 174,695
Fiscal year ended March 31, 2008	162,703	8,961			171,664
Fiscal year ended March 31, 2007	146,616	16,087			162,703

87

**Table of Contents**

**EXHIBIT INDEX**

<b>Exhibit No.</b>	<b>Description</b>
3.1a	Restated Certificate of Incorporation of the Registrant (1)
3.1b	Certificate of Amendment of Restated Certificate of Incorporation of the Registrant (2)
3.2	Amended and Restated By-laws, as amended, of the Registrant (3)
*10.1	1993 Stock Option Plan (4)
*10.2	Amended and Restated 1996 Stock Incentive Plan (5)
*10.3	Form of incentive stock option agreement under Amended and Restated 1996 Stock Incentive Plan
*10.4	Form of non-statutory stock option agreement under Amended and Restated 1996 Stock Incentive Plan
*10.5	Second Amended and Restated 1997 Director Stock Option Plan, as amended (6)
*10.6	Form of Stock Option Agreement under Second Amended and Restated 1997 Director Stock Option Plan, as amended (7)
*10.7	2004 Stock Incentive Plan, as amended (6)
*10.8	Form of incentive stock option agreement under 2004 Stock Incentive Plan, as amended (7)
*10.9	Form of non-statutory stock option agreement under 2004 Stock Incentive Plan, as amended (7)
*10.10	Form of restricted stock agreement under 2004 Stock Incentive Plan, as amended (7)
*10.11	2007 Stock Incentive Plan, as amended (6)
*10.12	Form of Incentive Stock Option Agreement under 2007 Stock Incentive Plan, as amended (8)
*10.13	Form of Nonstatutory Stock Option Agreement under 2007 Stock Option Plan, as amended (8)
*10.14	Form of Restricted Stock Agreement Regarding Awards to Executive Officers under 2007 Stock Option Plan, as amended (8)
*10.15	Form of Restricted Stock Agreement Regarding Awards to Employees, under 2007 Stock Option Plan, as amended (8)
*10.16	Form of Restricted Stock Agreement (regarding performance-based awards to executive officers and employees) under 2007 Stock Incentive Plan, as amended (9)
*10.17	2007 Director Stock Plan, as amended (6)
*10.18	Form of Nonstatutory Stock Option Agreement Under 2007 Director Stock Plan, as amended (8)
*10.19	Executive Incentive Plan for the fiscal year ended March 31, 2009 (9)
*10.20	Executive Incentive Plan for the fiscal year ending March 31, 2010
*10.21	Employment Agreement dated as of December 4, 1991 between the Registrant and Gregory J. Yurek (10)
10.22	Form of Employee Nondisclosure and Developments Agreement (10)
*10.23	Employee Nondisclosure and Developments Agreement dated as of December 26, 1990 between the Registrant and Alexis P. Malozemoff (10)
*10.24	Noncompetition Agreement dated as of July 10, 1987 between the Registrant and John Vander Sande (10)
*10.25	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Gregory J. Yurek (6)
*10.26	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and David A. Henry (6)

**Table of Contents**

<b>Exhibit No.</b>	<b>Description</b>
*10.27	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Charles W. Stankiewicz (6)
*10.28	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Angelo R. Santamaria (6)
*10.29	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Daniel P. McGahn (6)
*10.30	Amended and Restated Executive Severance Agreement dated as of December 23, 2008 between the Registrant and Timothy D. Poor (6)
*10.31	Employment Transition and Release of Claims Agreement dated as of April 29, 2009 between the Registrant and Alexis P. Malozemoff
10.32	Lease dated March 9, 1993 between CGLIC on Behalf of its Separate Account R, as Landlord, and the Registrant (11)
10.33	First Amendment to Lease between CGLIC, on Behalf of its Separate Account R, as Landlord, and the Registrant, as Tenant dated October 27, 1993 (12)
10.34	Third Amendment to Lease for 2 Technology Drive, Westborough, MA between Gateway Sherwood, Inc. (successor in interest to CGLIC, on behalf of its Separate Account R, as Landlord), and the Registrant, dated as of August 24, 2001 (13)
10.35	Stock Purchase Agreement, dated November 28, 2006, between the Registrant and Gerald Hehenberger Privatstiftung (14)
10.36	Purchase Contract No. 06.7IC014 for the Core Components of the Electrical Control System of FL 1500 Wind Turbine, dated as of December 15, 2006, between Sinovel Wind Co., Ltd and Windtec Systemtechnik Handels GmbH (9)
10.37	Purchase Contract No. 06.7IC015 for the Software of FL 1500 Wind Turbine, dated as of December 15, 2006, between Sinovel Wind Co., Ltd and Windtec Systemtechnik Handels GmbH (9)
10.38	Contract Amendment to the Purchase Contract No. 06.7IC014 for the Core Components of the Electrical Control System of FL 1500 Wind Turbine, dated as of March 6, 2007, between Sinovel Wind Co., Ltd and Windtec Systemtechnik Handels GmbH (9)
10.39	Contract Amendment to the Purchase Contract No. 06.7IC015 for the Software of FL 1500 Wind Turbine, dated as of March 6, 2007, between Sinovel Wind Co., Ltd and Windtec Systemtechnik Handels GmbH (9)
10.40	Purchase Contract No. FDCG07060 for the Core Components of the Electrical Control System of SL 1500 Wind Turbine, dated as of December 24, 2007, between Sinovel Wind Co., Ltd, China National Machinery & Equipment Import & Export Corporation and Windtec Systemtechnik Handels GmbH (9)
10.41	Purchase Contract No. FDCG07061 for the Software of SL 1500 Wind Turbine, dated as of December 24, 2007, between Sinovel Wind Co., Ltd, China National Machinery & Equipment Import & Export Corporation and Windtec Systemtechnik Handels GmbH (9)
10.42	Purchase Contract No. FDCG08050 for the Electrical System of SL 3000 Wind Turbine, dated as of March 7, 2008, between Sinovel Wind Co., Ltd, China National Machinery & Equipment Import & Export Corporation and Windtec Systemtechnik Handels GmbH (9)
10.43	Purchase Contract No. FDCG08051 for the Core Components of the Electrical Control System of SL 3000 Wind Turbine, dated as of March 7, 2008, between Sinovel Wind Co., Ltd, China National Machinery & Equipment Import & Export Corporation and Windtec Systemtechnik Handels GmbH (9)

**Table of Contents**

<b>Exhibit No.</b>	<b>Description</b>
10.44	Purchase Contract No. FDCG08045-01 for the Core Components of the Electrical Control System and Software of SL 1500 Wind Turbine, effective as of June 5, 2008, between Sinovel Wind Co., Ltd and Suzhou AMSC Superconductor Co., Ltd. (15)
21.1	Subsidiaries
23.1	Consent of PricewaterhouseCoopers LLP
31.1	Chief Executive Officer Certification pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Chief Financial Officer Certification pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Chief Executive Officer Certification pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Chief Financial Officer Certification pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

- (1) Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-3, filed with the Commission on January 24, 2000 (File No. 333-95261).
- (2) Incorporated by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q filed with the Commission on August 9, 2004 (File No. 000-19672).
- (3) Incorporated by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q filed with the Commission on February 7, 2008 (File No. 000-19672).
- (4) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K filed with the Commission on June 29, 1993 (Commission File No. 000-19672).
- (5) Incorporated by reference to Exhibit 10.21 to the Registrant's Annual Report on Form 10-K filed with the Commission on June 27, 2001 (Commission File No. 000-19672).
- (6) Incorporated by reference to Exhibits to the Registrant's Current Report on Form 10-Q filed with the Commission on February 5, 2009 (Commission File No. 000-19672).
- (7) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on November 9, 2004 (Commission File No. 000-19672).
- (8) Incorporated by reference to Exhibits to the Registrant's Current Report on Form 10-Q filed with the Commission on November 9, 2007 (Commission File No. 000-19672).
- (9) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K filed with the Commission on May 29, 2008 (Commission File No. 000-19672).
- (10) Incorporated by reference to Exhibits to the Registrant's Registration Statement on Form S-1, filed with the Commission on December 13, 1991 (File No. 333-43647).
- (11) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K filed with the Commission on June 29, 1993 (Commission File No. 000-19672).
- (12) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on January 26, 1994 (Commission File No. 000-19672).
- (13) Incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K filed with the Commission on June 25, 2002 (Commission File No. 000-19672).
- (14) Incorporated by reference to Exhibit 10.01 to the Registrant's Current Report on Form 8-K filed with the Commission on November 29, 2006 (Commission File No. 000-19672).
- (15) Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on June 11, 2008 (Commission File No. 000-19672).

Confidential treatment previously requested and granted with respect to certain portions, which portions were omitted and filed separately with the Commission.

\* Management contract or compensatory plan or arrangement required to be filed as an Exhibit to this Form 10-K.

Table of Contents**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AMERICAN SUPERCONDUCTOR CORPORATION

By: */s/* GREGORY J. YUREK  
**Gregory J. Yurek**  
**Chairman of the Board and**  
  
**Chief Executive Officer**

Date: May 28, 2009

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

Name	Title	Date
<i>/s/</i> GREGORY J. YUREK  <b>Gregory J. Yurek</b>	Director, Chairman of the Board and Chief Executive Officer  (Principal Executive Officer)	May 28, 2009
<i>/s/</i> DAVID A. HENRY  <b>David A. Henry</b>	Senior Vice President and Chief Financial Officer  (Principal Financial and Accounting Officer)	May 28, 2009
<i>/s/</i> VIKRAM S. BUDHRAJA  <b>Vikram S. Budhraja</b>	Director	May 28, 2009
<i>/s/</i> PETER O. CRISP  <b>Peter O. Crisp</b>	Director	May 28, 2009
<i>/s/</i> RICHARD DROUIN  <b>Richard Drouin</b>	Director	May 28, 2009
<i>/s/</i> DAVID R. OLIVER, JR.  <b>David R. Oliver, Jr.</b>	Director	May 28, 2009
<i>/s/</i> JOHN B. VANDER SANDE  <b>John B. Vander Sande</b>	Director	May 28, 2009
<i>/s/</i> JOHN W. WOOD, JR.	Director	May 28, 2009



**John W. Wood, Jr.**