

The information in this preliminary prospectus supplement and the accompanying prospectus is not complete and may be changed. This prospectus supplement and the accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Filed Pursuant to Rule 424(b)(5)
File No. 333-170455

Subject to Completion, Dated November 8, 2010

PROSPECTUS SUPPLEMENT
(To Prospectus dated November 8, 2010)

4,600,000 Shares



Common Stock

\$ per share

American Superconductor Corporation is offering 4,600,000 shares of its common stock in the offering. Our common stock is listed on the NASDAQ Global Select Market under the symbol "AMSC." On November 5, 2010, the last sale price of our common stock as reported on the NASDAQ Global Select Market was \$36.99.

Investing in our common stock involves risks. See "Risk Factors" beginning on page S-3 of this prospectus supplement.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	<u>Per Share</u>	<u>Total</u>
Public offering price	\$	\$
Underwriting discounts and commissions	\$	\$
Proceeds, before expenses, to us	\$	\$

We have granted the underwriters the right to purchase up to an additional 690,000 shares to cover over-allotments.

The underwriters expect to deliver the shares to purchasers on November , 2010.

MORGAN STANLEY

DEUTSCHE BANK SECURITIES

JEFFERIES & COMPANY

PACIFIC CREST SECURITIES

The date of this prospectus supplement is November , 2010

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ABOUT THIS PROSPECTUS SUPPLEMENT

On November 8, 2010, we filed with the SEC a registration statement on Form S-3 (File No. 333-170455) utilizing a shelf registration process relating to the securities described in this prospectus supplement. The registration statement became effective immediately. Under this shelf registration process, we may, from time to time, sell shares of our common stock.

We are providing information to you about this offering of our common stock in two separate documents: (1) this prospectus supplement, which describes the specific details regarding this offering; and (2) the accompanying prospectus, which provides general information, some of which may not apply to this offering. Generally, when we refer to this “prospectus,” we are referring to both documents combined. If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. This prospectus supplement and the accompanying prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless the context otherwise indicates, references in this prospectus to “we,” “our” and “us” refer, collectively, to American Superconductor Corporation, a Delaware corporation, and its consolidated subsidiaries.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights only some of the information included or incorporated by reference in this prospectus supplement and the accompanying prospectus. You should carefully read the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference, including the section entitled “Risk Factors” beginning on page S-3 of this prospectus supplement, regarding our company and the common stock being sold in this offering.

Our Company

We are a leading power 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 renewable 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 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 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 more than 100 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.

Our principal executive offices are located at 64 Jackson Road, Devens, Massachusetts 01434 and our telephone number at that address is (978) 842-3000.

THE OFFERING

Common stock offered by us	4,600,000 shares
Common stock to be outstanding after this offering	50,651,793 shares
Over-allotment option	690,000 shares
Net proceeds	We estimate that the net proceeds from this offering will be approximately \$161.6 million, assuming a public offering price of \$36.99 per share, the last reported sale price of our common stock on November 5, 2010, and after deducting the estimated underwriting discounts and commissions and offering expenses payable by us.
Use of proceeds	We expect to use the net proceeds of this offering to expand our superconductor wire manufacturing capacity, to pursue strategic business relationships for the purpose of executing our growth and diversification strategies, including minority investments and acquisitions, and for other general corporate purposes. See "Use of Proceeds."
Risk Factors	See "Risk Factors" on page S-3 for a discussion of factors you should consider carefully before deciding to invest in our common stock.
Nasdaq Global Select Market symbol	AMSC

Our common stock to be outstanding after this offering is based on 46,051,793 shares outstanding as of November 1, 2010 and excludes the following as of that date:

- 2,035,675 shares of common stock issuable upon the exercise of options outstanding at a weighted average exercise price of \$22.20 per share;
- 3,559,061 shares of common stock reserved for future issuance under our stock incentive plans;
- 292,697 shares of common stock reserved for future issuance under our stock purchase plan; and
- 5,000 shares of common stock reserved for future issuance upon exercise of warrants.

Except as otherwise indicated, all information in this prospectus supplement assumes no exercise by the underwriters of their over-allotment option.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Please see the risk factors under the heading “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended March 31, 2010, as filed with the SEC on May 27, 2010. Before making an investment decision, you should carefully consider these risks as well as other information we include or incorporate by reference in this prospectus supplement and the accompanying prospectus. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem to be immaterial may also affect our company.

Risk Relating to this Offering

We have Broad Discretion in the Use of the Net Proceeds from this Offering and may not Use Them Effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and hurt our future business prospects. Pending their use, we may invest our net proceeds from this offering in a manner that does not produce income or that loses value.

You will Experience Immediate Dilution in the Book Value Per Share of the Common Stock You Purchase.

Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. After giving effect to the sale of 4,600,000 shares of common stock in this offering, and based on an assumed public offering price of \$36.99 per share, the last sale price of our common stock on November 5, 2010, as reported on the NASDAQ Global Select Market, and net tangible book value per share of our common stock of \$5.87 as of September 30, 2010, if you purchase shares in this offering, you will suffer immediate and substantial dilution of \$28.47 per share in the net tangible book value of the common stock purchased.

Future Sales of Additional Shares of Our Common Stock could Cause the Price of Our Common Stock to Decline.

Sales of substantial amounts of our common stock in the public market following this offering, or the perception by the market that those sales could occur, may lower our stock price or make it difficult for us to raise additional equity capital in the future. In addition, the issuance of common stock upon exercise of outstanding options could be dilutive, and may cause the market price for a share of our common stock to decline. As of November 1, 2010, we had 46,051,793 shares of common stock issued and outstanding, together with outstanding options to purchase 2,035,675 shares of common stock with a weighted average exercise price of \$22.20 per share and outstanding warrants to purchase 5,000 shares of common stock with an exercise price of \$13.68 per share. In connection with this offering, we and each of our directors and executive officers have entered into lock-up agreements with the underwriters. As a result of these lock-up agreements, approximately 860,343 shares are subject to a contractual restriction on resale through the date that is 90 days after the date of this prospectus supplement. The market price for shares of our common stock may decline if stockholders subject to the lock-up agreements sell a substantial number of shares when the restrictions on resale lapse, or if the underwriters waive the lock-up agreements and allow the stockholders to sell some or all of their shares.

FORWARD-LOOKING STATEMENTS

This prospectus supplement and the information incorporated by reference in this prospectus include “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements are based on current expectations, estimates, forecasts and projections about the industry in which we operate and the beliefs and assumptions of our management, and as such are inherently uncertain. Words such as “expects,” “anticipates,” “targets,” “goals,” “projects,” “intends,” “plans,” “believes,” “seeks,” “estimates,” “continues,” and “may” and variations of such words and similar expressions are intended to identify such forward-looking statements. In addition, any statements that refer to projections regarding our future financial performance; our anticipated growth and trends in our businesses; our capital needs and capital expenditures; our market position and competitive changes in the marketplace for our products; potential acquisitions and divestitures; the effect of new accounting pronouncements and other characterizations of future events or circumstances are forward-looking statements. You are cautioned that these forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions that are referenced in the section of any accompanying prospectus supplement entitled “Risk Factors.” These risk factors could cause actual results to differ materially from those indicated by forward-looking statements. You should also carefully review the risk factors and cautionary statements described in the other documents we file from time to time with the SEC, specifically our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K. We undertake no obligation to revise or update any forward-looking statements, except to the extent required by law.

USE OF PROCEEDS

We estimate the net proceeds to us from this offering will be approximately \$161.6 million, or approximately \$185.9 million if the underwriters exercise their over-allotment option in full, based on an assumed public offering price of \$36.99 per share, the last sale price of our common stock on November 5, 2010, as reported on the NASDAQ Global Select Market, after deducting the estimated underwriting discounts and commissions and offering expenses payable by us.

We intend to use the net proceeds of this offering to expand our superconductor wire manufacturing capacity, to pursue strategic business relationships for the purpose of executing our growth and diversification strategies, including minority investments and acquisitions, and for other general corporate purposes. Pending the application of the net proceeds of this offering, we intend to invest the net proceeds in interest-bearing, investment-grade securities.

UNDERWRITING

Under the terms and subject to the conditions contained in an underwriting agreement to be dated as of the date of this prospectus supplement, the underwriters named below have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares of common stock indicated below:

<u>Name</u>	<u>Number of Shares</u>
Morgan Stanley & Co. Incorporated	
Deutsche Bank Securities Inc.	
Jefferies & Company, Inc.	
Pacific Crest Securities LLC	
Total	4,600,000

The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of our common stock offered by this prospectus supplement are subject to the approval of legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus supplement if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters' over-allotment option described below.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus supplement, and part to certain dealers at a price that represents a concession not in excess of \$ a share under the offering price. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by Morgan Stanley & Co. Incorporated and Deutsche Bank Securities Inc.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to an aggregate of 690,000 shares of our common stock at the price to public listed on the cover page of this prospectus supplement, less underwriting discounts and commissions. To the extent the option is exercised, each underwriter will become obligated, subject to limited conditions, to purchase approximately the same percentage of the additional shares as the number listed next to the underwriter's name in the preceding table bears to the total number of shares listed next to the names of all underwriters in the preceding table.

The following table summarizes the compensation and estimated expenses we will pay in connection with this offering:

	<u>Per Share</u>		<u>Total</u>	
	<u>Without Over-Allotment</u>	<u>With Over-Allotment</u>	<u>Without Over-Allotment</u>	<u>With Over-Allotment</u>
Underwriting discounts and commissions to be paid by us	\$	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$	\$

We estimate that our total expenses in connection with this offering, excluding underwriting discounts and commissions, will be approximately \$450,000.

Our common stock is listed on the NASDAQ Global Select Market under the symbol "AMSC."

We and each of our directors and executive officers have agreed that, without the prior written consent of Morgan Stanley & Co. Incorporated and Deutsche Bank Securities Inc. on behalf of the underwriters, neither we nor they will, during the period ending 90 days after the date of this prospectus supplement:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of directly or

indirectly, any shares of our common stock or any securities convertible into or exercisable for shares of our common stock or exchangeable for our common stock; or

- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock,

whether any transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise.

The restrictions described in the preceding paragraph do not apply to:

- the sale of shares offered pursuant to this prospectus supplement;
- the issuance by us of shares of common stock upon the exercise of an option or a warrant or the conversion of a security outstanding on the date of this prospectus supplement;
- the grant of options or the issuance of shares of common stock by us to employees, officers, directors, advisors or consultants pursuant to any employee benefit plan or share purchase plan;
- the sale or gift of an aggregate of 3,000 shares by some of our directors and officers;
- transactions by any person other than us relating to shares of common stock or other securities acquired in open market transactions after the completion of the offering of the shares, provided that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with subsequent sales of common stock or other securities acquired in such open market transactions;
- certain transfers of shares of common stock or any security convertible into common stock as a bona fide gift or by will or pursuant to the laws of descent and distribution, provided that each transferee agrees to the restrictions described above and that no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of our common stock, shall be required or shall be voluntarily made during the restricted period;
- transfers of shares of common stock pursuant to an existing written contract, instruction or plan complying with Rule 10b5-1 under the Exchange Act; or
- the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act, provided that no transfers occur under such plan during the restricted period.

In order to facilitate the offering of our common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position in our common stock for their own account. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The underwriters can close out a covered short sale by exercising the option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters may also sell shares in excess of the option to purchase additional shares, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. In addition, in order to cover any over-allotments or to stabilize the price of our common stock, the underwriters may bid for, and purchase, shares of our common stock in the open market. Finally, the underwriting syndicate may also reclaim selling concessions allowed to an underwriter or a dealer for distributing our common stock in the offering, if the syndicate repurchases previously distributed shares of our common stock to cover syndicate short positions or to stabilize the price of the common stock. Any of these activities may raise or maintain the market price of our common stock above independent market levels or prevent or retard a decline in the

market price of the common stock. The underwriters are not required to engage in these activities, and may end any of these activities at any time.

We and the underwriters have each agreed to indemnify each other against specified liabilities, including liabilities under the Securities Act.

Some of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us for which they received or will receive customary fees and expenses.

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive, each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Member State it has not made and will not make an offer of our shares of common stock to the public in that Member State, except that it may, with effect from and including such date, make an offer of our shares of common stock to the public in that Member State:

(a) at any time to legal entities which are authorised or regulated to operate in the financial markets or, if not so authorised or regulated, whose corporate purpose is solely to invest in securities;

(b) at any time to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts; or

(c) at any time in any other circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of the above, the expression an “offer of our shares of common stock to the public” in relation to any of our shares of common stock in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares of our common stock to be offered so as to enable an investor to decide to purchase or subscribe for the shares of our common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in that Member State.

Each underwriter has represented and agreed that it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000) in connection with the issue or sale of our shares of common stock in circumstances in which Section 21(1) of such Act does not apply to us and it has complied and will comply with all applicable provisions of such Act with respect to anything done by it in relation to any shares of our common stock in, from or otherwise involving the United Kingdom.

A copy of this prospectus supplement and the accompanying prospectus may be made available in electronic format on the websites maintained by one or more of the underwriters, and one or more of the underwriters may distribute prospectuses electronically. The underwriters may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters that make Internet distributions on the same basis as other allocations.

LEGAL MATTERS

The validity of the shares of common stock we are offering will be passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP, Boston, Massachusetts. Ropes & Gray LLP has acted as counsel for the underwriters in connection with certain legal matters related to this offering.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended March 31, 2010 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

PROSPECTUS

AMERICAN SUPERCONDUCTOR CORPORATION

Common Stock

We may issue common stock from time to time in one or more offerings. This prospectus describes the general manner in which our common stock will be offered. The prospectus supplements will describe the specific manner in which our common stock will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any applicable prospectus supplement before you invest.

We may offer our common stock in amounts, at prices and on terms determined at the time of offering. The common stock may be sold directly to you, through agents, or through underwriters and dealers. If agents, underwriters or dealers are used to sell the common stock, we will name them and describe their compensation in a prospectus supplement.

Our common stock trades on the NASDAQ Global Select Market under the symbol "AMSC."

Investing in our common stock involves certain risks. See "Risk Factors" on page 4 of this prospectus. You should carefully review the risks and uncertainties described under the heading "Risk Factors" included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is November 8, 2010.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may from time to time sell the common stock described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the manner in which we may offer common stock by this prospectus. Each time we offer common stock, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and the accompanying prospectus supplement together with the additional information described under the heading “Where You Can Find More Information” beginning on page 2 of this prospectus.

You should rely only on the information contained in or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. This prospectus and the accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the accompanying prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless the context otherwise indicates, references in this prospectus to “we,” “our” and “us” refer, collectively, to American Superconductor Corporation, a Delaware corporation, and its consolidated subsidiaries.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. Copies of certain information filed by us with the SEC are also available on our website at <http://www.amsc.com>. Our website is not a part of this prospectus. You may also read and copy any document we file at the SEC's public reference room, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference room.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below (File No. 000-19672) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the common stock under the registration statement is terminated or completed:

- Annual Report on Form 10-K for the fiscal year ended March 31, 2010, including the information specifically incorporated by reference into the Annual Report on Form 10-K from our definitive proxy statement for the 2010 Annual Meeting of Stockholders;
- Quarterly Reports on Form 10-Q for the fiscal quarters ended June 30, 2010 and September 30, 2010;
- Current Reports on Form 8-K filed May 14, 2010, May 17, 2010, August 6, 2010, September 15, 2010 and November 8, 2010; and
- The description of our common stock contained in our Registration Statement on Form 8-A filed on November 5, 1991, as updated by the Current Report on Form 8-K filed November 8, 2010 and any other amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

American Superconductor Corporation
64 Jackson Road, Devens, MA 01434
Telephone: (978) 842-3000
Attn: Investor Relations

FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus include “forward — looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements are based on current expectations, estimates, forecasts and projections about the industry in which we operate and the beliefs and assumptions of our management, and as such are inherently uncertain. Words such as “expects,” “anticipates,” “targets,” “goals,” “projects,” “intends,” “plans,” “believes,” “seeks,” “estimates,” “continues,” and “may” and variations of such words and similar expressions are intended to identify such forward-looking statements. In addition, any statements that refer to projections regarding our future financial performance; our anticipated growth and trends in our businesses; our capital needs and capital expenditures; our market position and competitive changes in the marketplace for our products; potential acquisitions and divestitures; the effect of new accounting pronouncements and other characterizations of future events or circumstances are forward-looking statements. You are cautioned that these forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions that are referenced in the section of any accompanying prospectus supplement entitled “Risk Factors.” These risk factors could cause actual results to differ materially from those indicated by forward-looking statements. You should also carefully review the risk factors and cautionary statements described in the other documents we file from time to time with the SEC, specifically our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K. We undertake no obligation to revise or update any forward-looking statements, except to the extent required by law.

AMERICAN SUPERCONDUCTOR CORPORATION

We are a leading power 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 renewable 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 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 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 more than 100 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.

Our principal executive offices are located at 64 Jackson Road, Devens, Massachusetts 01434 and our telephone number at that address is (978) 842-3000.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the specific risks discussed or incorporated by reference in the accompanying prospectus supplement, together with all the other information contained in the prospectus supplement or incorporated by reference in this prospectus. You should also consider the risks and uncertainties discussed under the caption “Risk Factors” included in our most recent Annual Report Form 10-K, which are incorporated by reference in this prospectus, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of any common stock offered under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus supplement. General corporate purposes may include the acquisition of companies or businesses, repayment and refinancing of debt, working capital and capital expenditures. We may temporarily invest the net proceeds in investment-grade, interest-bearing securities until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

PLAN OF DISTRIBUTION

We may sell our common stock:

- through underwriters;
- through dealers;
- through agents;
- directly to purchasers; or
- through a combination of any of these methods of sale.

In addition, we may issue our common stock as a dividend or distribution or in a subscription rights offering to our existing security holders.

We may directly solicit offers to purchase our common stock, or agents may be designated to solicit such offers. We will, in the prospectus supplement relating to such offering, name any agent that could be viewed as an underwriter under the Securities Act and describe any commissions that we must pay. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our common stock through any of these methods or other methods described in the applicable prospectus supplement.

The distribution of the common stock may be effected from time to time in one or more transactions:

- at a fixed price, or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each prospectus supplement will describe the method of distribution of the common stock and any applicable restrictions. The prospectus supplement will also describe the terms of the offering of our common stock, including the following:

- the name of the agent or any underwriters;
- the public offering or purchase price;
- any discounts and commissions to be allowed or paid to the agent or underwriters;
- all other items constituting underwriting compensation;
- any discounts and commissions to be allowed or paid to dealers; and
- any exchanges on which the common stock will be listed.

If any underwriters or agents are utilized in the sale of the common stock, we will enter into an underwriting agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

If a dealer is utilized in the sale of the common stock, we will sell such securities to the dealer, as principal. The dealer may then resell such common stock to the public at varying prices to be determined by such dealer at the time of resale.

If we offer common stock in a subscription rights offering to our existing security holders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby underwriters a commitment fee for the common stock they commit to purchase on a standby basis. If we do

not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us.

Agents, underwriters, dealers and other persons may be entitled under agreements which they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase common stock from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of common stock sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the common stock covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the common stock are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Certain agents, underwriters and dealers, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, and/or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the common stock, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock or any other securities the prices of which may be used to determine payments on such common stock. Specifically, any underwriters may overallocate in connection with the offering, creating a short position for their own accounts. In addition, to cover overallocations or to stabilize the price of the common stock or of any such other securities, the underwriters may bid for, and purchase, the common stock or any such other securities in the open market. Finally, in any offering of the common stock through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the common stock in the offering if the syndicate repurchases previously distributed common stock in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the common stock above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in three business days, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your common stock may be more than three scheduled business days after the trade date for your common stock. Accordingly, in such a case, if you wish to trade common stock on any date prior to the third business day before the original issue date for your common stock, you will be required, by virtue of the fact that your common stock initially are expected to settle in more than three scheduled business days after the trade date for your common stock, to make alternative settlement arrangements to prevent a failed settlement.

LEGAL MATTERS

Unless the applicable prospectus supplement indicates otherwise, the validity of the common stock in respect of which this prospectus is being delivered will be passed upon by Wilmer Cutler Pickering Hale and Dorr LLP.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended March 31, 2010 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

