



American Superconductor Introduces Amperium™ Wire

- New Brand Name Launched for the Company's Ultra-Thin, High Amperage Superconductor Wire
- High Capacity "Optical Fiber of Power" to be Utilized in Wide Range of Electrical Systems, Including Power Cables and SeaTitan™ Wind Turbines
- Company Migrating to Higher Volume Wire Production Methodology to Meet Increased Customer Demand

DEVENS, Mass., Oct 05, 2010 (BUSINESS WIRE) --

American Superconductor Corporation (NASDAQ: AMSC), a global power technologies company, today introduced its Amperium wire, the new brand name for the company's proprietary second generation (2G) high temperature superconductor (HTS) wire. Previously called "344 superconductors," the new name reflects the product's ability to conduct more than 100 times the electrical current ("amperage") of copper wire of the same dimensions. To put this into perspective, in high-voltage power transmission systems, just one of these ultra-thin wires would be able to carry enough power to serve the needs of approximately 10,000 U.S. homes. The high power density of Amperium wire dramatically reduces the footprint and cost of large-scale electrical equipment, such as power cables and wind generators.

"Amperium wire is the 'optical fiber of power' - we expect this product to revolutionize the electric power industry just as ultra-high-capacity optical fibers revolutionized the telecommunications industry," said AMSC founder and Chief Executive Officer Greg Yurek. "To leverage its power density advantage, power grid operators and manufacturers of power equipment around the world are now increasing their investment in the development and deployment of superconductor products that utilize Amperium wire."

The demand for [Amperium wire](#) is expected to increase significantly in the months and years ahead. Korea Electric Power Company (KEPCO), Korea's only power grid operator, has forecasted the wide deployment of superconductor power cables in the Korean grid starting in the 2012-2013 timeframe. LS Cable Ltd. of Korea has already utilized Amperium wire to manufacture the first power cable system for Korea's commercial grid, which is scheduled to be energized in late 2010.

In the U.S., Amperium wire is currently being utilized by Nexans, the world's largest power cable manufacturer, to produce an extension of the superconductor power transmission cable system that has been running in Long Island Power Authority's (LIPA) primary power corridor since April 2008. Additional cable projects that are expected to utilize Amperium wire include the Tres Amigas SuperStation, which aims to connect America's three power grids for the first time ever to unlock the country's renewable energy resources.

Other applications that are expected to consume large quantities of this wire in the years ahead include [FaultBlocker™](#) surge-suppressing power cables and fault current limiters for city grids, electric generators for AMSC's [SeaTitan™](#) superconductor wind turbines, large electric motors and U.S. Navy degaussing systems.

"AMSC has always been the global HTS wire leader, with an estimated market share of more than 80 percent," Yurek said. "The investments we are making today in Amperium wire are intended to extend our competitive lead at a time when the industry is at an inflection point."

Yurek addressed the World Energy Congress in September 2010 regarding the history and advantages of superconductor wire for the power industry. His presentation entitled "Superconductors: Coming of Age to Meet World Energy Needs" can be accessed [here](#).

About AMSC's Amperium™ Wire

Amperium wire is AMSC's brand name for its second generation (2G) high temperature superconductor (HTS) wire. Ribbon-shaped Amperium wire is typically only 400 microns thick. It comprises a core of 2G HTS material clad with thin strips of metal such as copper or stainless steel. Amperium wire offers significantly higher power density and efficiency compared with similar copper-based wire products. As a result, electrical systems that incorporate Amperium wire are dramatically smaller, lighter and often more cost effective than comparable systems based on copper wire. Applications for Amperium wire include power

transmission and distribution cables, fault current limiters, ship propulsion motors and generators, wind turbine generators and degaussing systems for naval ships.

Amperium wire is manufactured utilizing a proprietary process at AMSC's headquarters in Devens, Massachusetts - the world's largest commercial-scale HTS wire manufacturing facility. The process today comprises coating 40-millimeter-wide metallic strips that are later slit into ribbon-shaped wires of varying widths, depending on the end-use application, and then laminated with thin strips of metal to tailor mechanical and non-superconductor electrical properties. Amperium wire for use in power cables is, for example, typically 4.4 millimeter in width while wire for use in generators and motors is typically 12 millimeters in width. AMSC has begun to migrate its manufacturing process to 100-millimeter-wide starting strips, which will significantly increase its existing manufacturing capacity while also significantly reducing manufacturing costs. To learn more, visit www.amsc.com/products/amperiumwire.

[About American Superconductor \(NASDAQ: AMSC\)](#)

AMSC 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 [renewable 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 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. AMSC's technologies are protected by a broad and deep intellectual property portfolio consisting of hundreds of patents and licenses worldwide. More information is available at www.amsc.com.

American Superconductor and design, Revolutionizing the Way the World Uses Electricity, AMSC, Amperium, Powered by AMSC, D-VAR, dSVC, FaultBlocker, PowerModule, PQ-IVR, PQ-SVC, SuperGEAR, SeaTitan, FaultBlocker and Windtec and design are trademarks or registered trademarks of American Superconductor Corporation or its subsidiaries. All other brand names, product names or trademarks belong to their respective holders.

Any statements in this release about future expectations, plans and prospects for the company, including our expectations regarding the future financial performance of the company and other statements containing the words "believes," "anticipates," "plans," "expects," "will" and similar expressions, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. There are a number of important factors that could materially impact the value of our common stock or cause actual results to differ materially from those indicated by such forward-looking statements. Such factors include: we have a history of operating losses, and we may incur losses in the future; our operating results may fluctuate significantly from quarter to quarter and may fall below expectations in any particular fiscal quarter; a significant portion of our revenues are derived from a single customer and revenues from this customer may decline in future periods; adverse changes in domestic and global economic conditions could adversely affect our business; changes in exchange rates could adversely affect our financial results; we may not realize all of the sales expected from our backlog of orders and contracts; 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; we have not manufactured our Amperium wire in commercial quantities, and a failure to manufacture our Amperium wire in commercial quantities at acceptable cost and quality levels would substantially limit our future revenue and profit potential; and our patents may not provide meaningful protection for our technology, which could result in us losing some or all of our market position. Reference is made to these and other factors discussed in the "Risk Factors" section of the company's most recent quarterly or annual report filed with the Securities and Exchange Commission. In addition, any forward-looking statements included in this press release represent the company's views as of the date of this release. While the company anticipates that subsequent events and developments may cause the company's views to change, the company specifically disclaims any obligation to update these forward-looking statements. These forward-looking statements should not be relied upon as representing the company's views as of any date subsequent to the date this press release is issued.

Photos/Multimedia Gallery Available: <http://www.businesswire.com/cgi-bin/mmg.cgi?eid=6448228&lang=en>

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