

What's New in the World of Superconductivity (January, 2007)

Power

American Superconductor Corporation (January 8, 2007)

On January 5, 2007, American Superconductor Corporation (AMSC) completed the previously announced acquisition of Windtec. Windtec is now a wholly owned subsidiary of AMSC and will be operated by the company's Power Electronic Systems business unit. Windtec, based in Austria, designs wind turbine systems and licenses their designs to third parties for an upfront fee plus royalty payments. The company's customers include industrial equipment manufacturers and engineering construction companies in China, Japan and the Czech Republic, with strong demand for their services also coming from Canada, France, India and South Korea. Greg Yurek, chief executive officer and founder of AMSC, commented, "This acquisition opens an important chapter in American Superconductor's history, positioning our company for strong additional sales in one of the most exciting growth sectors in energy today. Our company has been serving the wind market for more than three years with our D-VAR® and PowerModule power electronics products. We now will be able to offer a much more diverse and unique array of products and services - from the design and licensing of entire wind energy systems to turbine electrical systems to wind farm grid interconnection solutions. From a financial perspective, Windtec provides American Superconductor with a powerful revenue growth catalyst as well as an immediate source of strong cash flow... Having completed this acquisition, we are now focused on closing additional orders this quarter and in the quarters ahead to ensure strong financial performance for AMSC going forward." Windtec estimates that its total revenues for the 12 months ending December 31, 2006, were approximately \$13 million and that its net income was approximately \$1 million. As of the acquisition date, Windtec had approximately \$35 million in existing backlog.

Source:

"American Superconductor Completes Acquisition of Windtec™"

American Superconductor Corporation press release (January 8, 2007)

http://phx.corporate-ir.net/phoenix.zhtml?c=86422&p=irol-newsArticle_Print&ID=947620&highlight

American Superconductor Corporation (January 16, 2007)

American Superconductor Corporation (AMSC) has announced the achievement of world-record-level production rates for 344 superconductors with commercial-grade electrical performances. The production rates reportedly exceed the levels required to meet commercial cost targets. The company is on track for the initial volume production of commercial-grade product in December 2007, as planned. Angelo Santamaria, vice president and general manager of the AMSC Wires business unit, commented, "Although we have previously achieved commercial-grade electrical performance, that alone is not sufficient to meet market needs; we need to be able to produce high-performance wire day-to-day at costs that allow us to offer attractive prices and achieve attractive margins. We now have a clear pathway to

produce HTS wire with price-performance ratios equivalent to copper." AMSC has already shipped 6,800 meters of 344 superconductors to customers and is on track to ship an additional 3,200 meters by the end of March 2007.

Source:

"American Superconductor Demonstrates World-Record-Level Production Rates for 344 Superconductors with Commercial-Grade Electrical Performance"

American Superconductor Corporation press release (January 16, 2007)

http://phx.corporate-ir.net/phoenix.zhtml?c=86422&p=irol-newsArticle_Print&ID=950395&highlight

Trithor (January 16, 2007)

Zenergy Power plc has been selected as the overall winner of the 2006 Frost & Sullivan European Product Innovation of the Year Award for its research and development of advanced second-generation HTS wires for electric power and magnet applications. A senior research analyst at Frost & Sullivan, Kasturi Nadkarny, commented, "With a view towards reducing equipment transportation and installation costs, wind turbine producers are constantly looking for lighter, cheaper, and more efficient component materials and devices. In this context, Zenergy's lightweight, highly conductive 2G wires are emerging at the forefront."

Source:

"Frost & Sullivan Product Innovation of the Year"

Trithor press release (January 16, 2007)

<http://www.trithor.com/pdf/press-en/2007-01-16-F&S-TT.pdf>

American Superconductor Corporation (January 18, 2007)

American Superconductor Corporation (AMSC) has signed a contract worth more than \$2 million with South Korea's Doosan Heavy Industries & Construction Co., Ltd. for the development of a new wind energy system. Under the terms of the contract, Windtec™, a wholly owned subsidiary of AMSC, will develop a 3-MW wind energy system and support the assembly and installation of the first prototype. Doosan expects to begin production of these systems in late 2009. The new system will be the first 3-MW system to be developed by Windtec. Jong-Po Park, general manager of the renewable energy development team at Doosan, commented, "AMSC's Windtec subsidiary brings unique capabilities that can significantly lower Doosan's barrier to entry in wind energy. Given that 1 MW systems remain the norm in today's market, we believe Windtec's 3 MW turbine design will enable Doosan to quickly become a market leader. We look forward to a long and fruitful business relationship together." The deal represents Windtec's first entry into the South Korean renewable energy market.

Source:

"AMSC Signs Wind Energy System Development Contract with Doosan Heavy Industries & Construction"

American Superconductor Corporation press release (January 18, 2007)

http://phx.corporate-ir.net/phoenix.zhtml?c=86422&p=irol-newsArticle_Print&ID=951438&highlight

American Superconductor Corporation (January 23, 2007)

Windtec™, a wholly owned subsidiary of the American Superconductor Corporation (AMSC), has sold a license for its Model WT1650 wind energy system to China's Zhuzhou Electric Locomotive Research Institute (ZELRI), a division of China-Southern-Loric. The license includes an upfront fee of approximately \$2 million as well as royalty payments for each 1.65-MW system that is installed and a right of first refusal for AMSC to provide the electrical components for each system manufactured by ZELRI. Accordingly, the potential revenue from this license exceeds \$30 million for the first set of WT1650 wind energy systems ZELRI plans to manufacture and install. ZELRI plans to demonstrate the WT1650 in late 2007 and to begin full-scale production in 2008.

Source:

"AMSC's Windtec(TM) Sells License for New Wind Energy System Design in China"

American Superconductor Corporation press release (January 23, 2007)

http://phx.corporate-ir.net/phoenix.zhtml?c=86422&p=irol-newsArticle_Print&ID=952775&highlight

American Superconductor Corporation (January 30, 2007)

American Superconductor Corporation (AMSC) and Siemens AG have announced the achievement of commercial-grade performance levels for a medium-voltage (2 MVA) fault current limiter (FCL). The FCL is based on Siemens' proprietary superconductor switching module technology and utilizes coils fabricated from AMSC's proprietary 344S superconductors. The system was operated at a voltage of 7.5 kV, which corresponds to the 13-kV class of three-phase power equipment that is widely used in utility distribution grids. The FCL successfully limited the current during a fault by up to twenty-five times. Heinz-Werner Neumueller, Department Head of Siemens Corporate Technology, commented, "Based on our [AMSC and Siemens'] new test results, our combined efforts have created an excellent prospect to develop a commercial FCL that is able to suppress fault currents, enabling reliable expansion of power grids to meet the ever-increasing demand for electricity in cities around the world." As a result of this success, AMSC and Siemens have extended their strategic alliance for a third year; together, they will continue to focus on the development and commercialization of FCLs for power transmission and distribution grids. The US Department of Energy has estimated that the potential market for FCLs is several billion dollars over the next 15 years.

Source:

"American Superconductor and Siemens Achieve Commercial-Grade Performance Levels for Superconductor Surge Protection Device for Power Grids"

American Superconductor Corporation press release (January 30, 2007)

http://phx.corporate-ir.net/phoenix.zhtml?c=86422&p=irol-newsArticle_Print&ID=955580&highlight

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