# Dossier: AMERICAN SUPERCONDUCTOR CORPORATION

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,888.00

**Award Date:** 2023-08-25

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

American Superconductor Corporation (AMSC) is a global energy technologies company focused on enabling electrification with advanced technologies, including superconductor solutions, primarily for the power grid and industrial sectors. AMSC's core mission is to solve critical energy and grid challenges, making electricity delivery more efficient, reliable, and resilient. They achieve this through the development and application of high-temperature superconductor (HTS) wire and power electronic technologies. Their unique value proposition lies in their ability to improve grid stability, enable renewable energy integration, enhance naval vessel performance, and increase the efficiency of industrial processes by leveraging the unique properties of superconductivity, enabling more efficient transmission, distribution, and storage of electricity.

**Technology Focus:**

* High-Temperature Superconducting (HTS) Wire and Systems:\*\* AMSC manufactures HTS wire used in various applications, including synchronous condensers (D-VAR® systems) for grid stability and fault current limiters (SuperLimiter®) for protecting electrical infrastructure from damaging surges. The HTS wire boasts significantly higher current-carrying capacity than conventional copper wires of the same size.
* Power Electronics:\*\* AMSC develops and sells power electronic systems and products, including ship protection systems (SPS), wind turbine control systems, and grid interconnection solutions. These systems are designed to enhance efficiency, reliability, and control in energy-intensive applications.

**Recent Developments & Traction:**

* U.S. Navy Contract Award (November 2023):\*\* AMSC was awarded a contract for the development of new technologies for next-generation naval vessels. This continues a long-standing relationship providing ship protection systems. (Specific details of the award value are typically confidential).
* D-VAR® System Deployments:\*\* AMSC has continued to secure and deploy D-VAR® systems across the U.S. and internationally to improve grid stability and support the integration of renewable energy sources. Examples include installations to support solar power plants in various states.
* Industrial Sector Growth:\*\* AMSC is experiencing growth in its industrial sector business, with projects involving their HTS wire and power electronics in applications like electric arc furnaces.

**Leadership & Team:**

* Daniel P. McGahn, Chairman, President, and CEO:\*\* McGahn has been with AMSC since 1995 and has held various leadership positions. He has been instrumental in the company's strategic shift toward grid and industrial applications.

**Competitive Landscape:**

* Siemens Energy:\*\* Competes with AMSC in the power grid solutions market, particularly with its FACTS (Flexible AC Transmission Systems) devices, including Static VAR Compensators (SVCs) which provide similar grid stabilization functions as AMSC's D-VAR® systems. AMSC differentiates itself through its unique application of superconductor technology, which can offer superior performance in specific scenarios requiring high current carrying capacity and compact size.

**Sources:**

1. [https://www.amsc.com/](https://www.amsc.com/)

2. [https://investors.amsc.com/](https://investors.amsc.com/)

3. [https://www.navsea.navy.mil/](https://www.navsea.navy.mil/) (General Source for Navy contracts - specific contract details often require additional research)