

# Superconducting Materials Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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# **Abstracts**

The global superconducting materials market size reached US\$ 1,068 Million in 2022. Looking forward, IMARC Group expects the market to reach US\$ 2,642 Million by 2028, exhibiting a growth rate (CAGR) of 16.3% during 2022-2028.

Superconducting materials refer to various metallic compounds or alloys that can conduct electricity/ electric charge with no resistance and without releasing heat, sound and energy. Some of the commonly used superconducting materials include gallium, cadmium, aluminum, vanadium, zinc, tungsten, thorium, lead, titanium and lanthanum. These materials are available in the form of powders or crystals, magnets, wires and cables. They are widely used in power storage devices, power grids, electric motors, magnetic levitation trains, magnetic resonance imaging (MRI) and electromagnetic generators. As a result, they find extensive applications across various industries, including electronics and medical.

Significant growth in the electronics and medical industries across the globe represents one of the key factors creating a positive outlook for the market. Superconducting materials are extensively used in the MRI equipment to diagnose various medical ailments, such as cardiovascular and musculoskeletal disorders, by producing accurate images of the internal organs. In line with this, electronics manufacturers use these materials for resistance-free conductivity in electric fans, elevators, pumps, industrial equipment, air conditioners, televisions and refrigerators. Additionally, various product innovations, such as the development of high-temperature superconducting fibers, are acting as other major growth-inducing factors. They are commonly used to manufacture high-endurance power cables, which can transmit energy at high speeds and can be efficiently utilized in various storage systems. Other factors, including the utilization of superconducting materials for improving the performance of smart grids, along with extensive research and development (R&D) activities, are anticipated to drive the



market further.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each segment of the global superconducting materials market report, along with forecasts at the global, regional and country levels from 2023-2028. Our report has categorized the market based on product type and end use industry.

Breakup by Product Type:

Low-temperature Superconducting Materials (LTS)

High-temperature Superconducting Materials (HTS)

Breakup by End Use Industry:

Medical

Electronics

Energy

Defense

Others

Breakup by Region:

North America

**United States** 

Canada

Asia-Pacific

China

Japan

India

South Korea

Australia

Indonesia

Others

Europe

Germany

France

United Kingdom

Italy

Spain

Russia

Others

Latin America

Brazil

Mexico

Others



#### Middle East and Africa

Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being American Superconductor Co., evico GmbH, Hitachi Ltd., Hyper Tech Research Inc., Metal Oxide Technologies, Inc., Siemens AG, Sumitomo Electric Industries Ltd., Superconductor Technologies Inc., SuperPower Inc. (The Furukawa Electric Co. Ltd.) and Western Superconducting Technologies Co. Ltd. Key Questions Answered in This Report:

How has the global superconducting materials market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global superconducting materials market?

What are the key regional markets?

What is the breakup of the market based on the product type?

What is the breakup of the market based on the end use industry?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global superconducting materials market and who are the key players?

What is the degree of competition in the industry?



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