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US Collection

Magnets: United States

July 2019



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About This Report

Scope

This report forecasts to 2023 US magnet demand in nominal US dollars at the manufacturer level. Total demand is segmented by product in terms of:

- neodymium
- ferrite
- samarium cobalt
- alnico and other magnets such as copper nickel iron, iron chromium cobalt, and iron cobalt vanadium

Total demand is also segmented by market as follows:

- electronics
- automotive
- industrial
- other markets such as aerospace and military equipment, all-terrain vehicles, and electric bicycles and scooters

To illustrate historical trends, total demand is provided in annual series from 2008 to 2018; the various segments are reported at five-year intervals for 2008, 2013, and 2018.

This report analyzes the US market for permanent magnets, which are defined as “hard” materials that can be magnetized (gain the ability to attract iron and other ferromagnetic objects) by an external magnetic field and remain magnetized after the external field is removed. In this report, the terms “magnets” and “magnetic materials” are used as synonyms for permanent magnets and permanent magnetic materials.

Demand figures presented here represent the value of finished magnets and do not include the value of magnet-containing subassemblies or devices.

Key macroeconomic indicators are also provided with quantified trends. Other various topics, including profiles of pertinent leading companies, are covered in this report. A full outline of report items by page is available in the Table of Contents.

Sources

Magnets: United States (FF65066) is based on *Global Magnets*, a comprehensive industry study published by The Freedonia Group. Reported findings represent the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources, such as:

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- firms participating in the industry, and their suppliers and customers
- government/public agencies
- intergovernmental and non-governmental organizations
- trade associations and their publications
- the business and trade press
- indicator forecasts by The Freedonia Group
- the findings of other reports and studies by The Freedonia Group

Specific sources and additional resources are listed in the Resources section of this publication for reference and to facilitate further research.

Industry Codes

Table 5 | NAICS & SIC Codes Related to Magnets

NAICS/SCIAN 2017		SIC	
North American Industry Classification System		Standard Industrial Classification	
327110	Pottery, ceramics, and plumbing fixture manufacturing	3264	Porcelain electrical supplies
332999	All other miscellaneous fabricated metal product manufacturing	3499	Fabricated metal products, nec

Source: US Census Bureau

Freedonia Methodology

The Freedonia Group, a subsidiary of MarketResearch.com, has been in business for more than 30 years and in that time has developed a comprehensive approach to data analysis that takes into account the variety of industries covered and the evolving needs of our customers.

Every industry presents different challenges in market sizing and forecasting, and this requires flexibility in methodology and approach. Freedonia methodology integrates a variety of quantitative and qualitative techniques to present the best overall picture of a market's current position as well as its future outlook: When published data are available, we make sure they are correct and representative of reality. We understand that published data often have flaws either in scope or quality, and adjustments are made accordingly. Where no data are available, we use various methodologies to develop market sizing (both top-down and bottom-up) and then triangulate those results to come up with the most accurate data series possible. Regardless of approach, we also talk to industry participants to verify both historical perspective and future growth opportunities.

Methods used in the preparation of Freedonia market research include, but are not limited to, the following activities: comprehensive data mining and evaluation, primary research,

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consensus forecasting and analysis, ratio analysis using key indicators, regression analysis, end use growth indices and intensity factors, purchase power parity adjustments for global data, consumer and end user surveys, market share and corporate sales analysis, product lifespan analysis, product or market life cycle analysis, graphical data modeling, long-term historical trend analysis, bottom-up and top-down demand modeling, and comparative market size ranking.

Freedonia quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or r^2 . The most stable data series relative to the trend carries an r^2 value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

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Global Magnets

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Global Buses

Global Hybrid & Electric Vehicles

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Global Pumps Market

HVAC Equipment

North America Automotive Aftermarket

North American Medium- & Heavy-Duty Truck Aftermarket

Power Lawn & Garden Equipment

Power Tools in the US

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Hybrid & Electric Vehicles: United States

Insulated Wire & Cable: United States

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Motor Vehicles: United States

Small Kitchen Appliances: United States

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Journal of Magnetism

Journal of Magnetism and Magnetic Materials

Magnetics Business & Technology

Agencies & Associations

ASTM International

IEEE Magnetics Society

International Electrotechnical Commission

United States Census Bureau

United States Consumer Product Safety Commission

United States Department of Energy

United States Geological Survey

United States International Trade Commission