

Alnico Magnets Market - Forecast from 2026 to 2031

<https://marketpublishers.com/r/A07E6E168290EN.html>

Date: January 2026

Pages: 149

Price: US\$ 3,950.00 (Single User License)

ID: A07E6E168290EN

Abstracts

Alnico Magnets Market, growing at a 8.35% CAGR, is projected to achieve USD 2.584 billion in 2031 from USD 1.597 billion in 2025.

Alnico (Al-Ni-Co-Fe) permanent magnets remain a specialized high-temperature, corrosion-resistant solution with excellent coercivity and thermal stability up to 540 °C. Cast and sintered grades (Alnico 5, 8, 9) deliver remanence of 0.7–1.35 T and energy products to 72 kJ/m³, positioning them between ferrites and rare-earth magnets. The market, valued at USD 0.68 billion in 2025, is projected to reach USD 1.1 billion by 2032 at a CAGR of 7.1 % (Fact.MR, 2025), sustained by niche applications where neodymium's temperature limitations and ferrite's low performance are unacceptable.

Core Growth Drivers

1. Automotive and EV sensor demand Alnico's superior temperature stability (α_{Br} = -0.02 %/°C vs. -0.12 %/°C for NdFeB) makes it the preferred choice for ABS wheel-speed sensors, crankshaft/camshaft position sensors, and brushless DC motor rotors in under-hood environments. Rising global vehicle production—expected to exceed 95 million units in 2025 (S&P Global Mobility)—and continued use in legacy ICE platforms sustain steady offtake. Mild-hybrid 48 V systems and certain EV resolver designs also retain Alnico rotors for high-temperature reliability.
2. Aerospace & defense instrumentation Alnico magnets dominate traveling-wave tubes (TWTs), gyrocompasses, magnetic sensors, and cockpit instruments requiring operation from -55 °C to +250 °C with minimal drift. Growth in satellite constellations and defense modernization programs supports stable high-margin volume.
3. High-fidelity audio transducers Guitar pickups, professional loudspeakers, and dynamic microphones continue to specify cast Alnico 5 and 8 for warm tonal

characteristics unattainable with ceramic or neodymium equivalents.

4. Renewable energy generators Direct-drive wind turbines and certain hydroelectric generators utilize Alnico's temperature-stable field in excitation systems where rare-earth supply risk or cost is prohibitive.

Market Restraints

1. Higher cost vs. alternatives Alnico pricing remains 3–8× that of bonded ferrite and 1.5–3× sintered NdFeB on a \$/BHmax basis. Complex casting/sintering processes and cobalt content (15–30 %) keep production costs elevated.

2. Lower energy product Maximum (BH)max of 72 kJ/m³ limits use in compact, high-torque motors and actuators where NdFeB's 400+ kJ/m³ enables drastic miniaturization.

Segmentation Insights

By End-Use Industry

Automotive: ~45 % share (sensors, small motors)

Electronics & Audio: ~25 % (guitar pickups, professional speakers)

Aerospace & Defense: ~20 % (instruments, TWTs)

Industrial & Renewable Energy: ~10 %

By Region Asia-Pacific dominates with >60 % production and consumption share, led by China's integrated casting/sintering capacity (Hangzhou Permanent Magnet Group, HPMG) and cost-competitive supply chains. Japan and South Korea maintain high-grade sintered Alnico for audio and instrumentation. North America retains strong demand in defense and premium audio but limited domestic production (Adams Magnetic, Dexter). Europe focuses on aerospace-qualified grades.

Competitive Landscape

The supply base is concentrated and stable:

Adams Magnetic Products (USA) – broad grade portfolio, custom machining

Dexter Magnetic Technologies (USA) – aerospace/defense focus

Hangzhou Permanent Magnet Group (China) – largest global capacity

Shin-Etsu, Hitachi Metals, and Eclipse Magnetics – high-grade sintered offerings

Alnico magnets occupy a resilient, low-volume/high-value niche defined by temperature stability and corrosion resistance rather than raw strength. Asia-Pacific's manufacturing dominance ensures price stability, while automotive sensors, professional audio, and defense instrumentation provide structural demand through 2032. Substitution risk remains low in these thermally demanding applications, supporting steady mid-single-digit growth despite competition from rare-earth and ferrite alternatives in less critical segments.

Key Benefits of this Report:

Insightful Analysis: Gain detailed market insights covering major as well as emerging geographical regions, focusing on customer segments, government policies and socio-economic factors, consumer preferences, industry verticals, and other sub-segments.

Competitive Landscape: Understand the strategic maneuvers employed by key players globally to understand possible market penetration with the correct strategy.

Market Drivers & Future Trends: Explore the dynamic factors and pivotal market trends and how they will shape future market developments.

Actionable Recommendations: Utilize the insights to exercise strategic decisions to uncover new business streams and revenues in a dynamic environment.

Caters to a Wide Audience: Beneficial and cost-effective for startups, research institutions, consultants, SMEs, and large enterprises.

What do businesses use our reports for?

Industry and Market Insights, Opportunity Assessment, Product Demand Forecasting, Market Entry Strategy, Geographical Expansion, Capital Investment Decisions, Regulatory Framework & Implications, New Product Development, Competitive Intelligence

Report Coverage:

Historical data from 2021 to 2025 & forecast data from 2026 to 2031

Growth Opportunities, Challenges, Supply Chain Outlook, Regulatory Framework, and Trend Analysis

Competitive Positioning, Strategies, and Market Share Analysis

Revenue Growth and Forecast Assessment of segments and regions including countries

Company Profiling (Strategies, Products, Financial Information, and Key Developments among others.

Alnico Magnets Market Segmentation:

By Manufacturing Process

Sintering

Casting

By Material

Nickel

Copper

Cobalt

Others

By Application

Electric Motors

Generators

Medical Instruments

Speakers & Microphones

Others

By End-User

Automotive

Aerospace

Medical & Healthcare

Electrical & Electronics

Others

By Geography

North America

USA

Canada

Mexico

South America

Brazil

Argentina

Others

Europe

Germany

France

United Kingdom

Spain

Italy

Others

Middle East and Africa

Saudi Arabia

UAE

Israel

Others

Asia Pacific

China

India

Japan

South Korea

Indonesia

Thailand

Others

Contents

1. EXECUTIVE SUMMARY

2. MARKET SNAPSHOT

- 2.1. Market Overview
- 2.2. Market Definition
- 2.3. Scope of the Study
- 2.4. Market Segmentation

3. BUSINESS LANDSCAPE

- 3.1. Market Drivers
- 3.2. Market Restraints
- 3.3. Market Opportunities
- 3.4. Porter's Five Forces Analysis
- 3.5. Industry Value Chain Analysis
- 3.6. Policies and Regulations
- 3.7. Strategic Recommendations

4. TECHNOLOGICAL OUTLOOK

5. ALNICO MAGNETS MARKET BY MANUFACTURING PROCESS

- 5.1. Introduction
- 5.2. Sintering
- 5.3. Casting

6. ALNICO MAGNETS MARKET BY MATERIAL

- 6.1. Introduction
- 6.2. Nickel
- 6.3. Copper
- 6.4. Cobalt
- 6.5. Others

7. ALNICO MAGNETS MARKET BY APPLICATION

- 7.1. Introduction
- 7.2. Electric Motors
- 7.3. Generators
- 7.4. Medical Instruments
- 7.5. Speakers & Microphones
- 7.6. Others

8. ALNICO MAGNETS MARKET BY END-USER

- 8.1. Introduction
- 8.2. Automotive
- 8.3. Aerospace
- 8.4. Medical & Healthcare
- 8.5. Electrical & Electronics
- 8.6. Others

9. ALNICO MAGNETS MARKET BY GEOGRAPHY

- 9.1. Introduction
- 9.2. North America
 - 9.2.1. USA
 - 9.2.2. Canada
 - 9.2.3. Mexico
- 9.3. South America
 - 9.3.1. Brazil
 - 9.3.2. Argentina
 - 9.3.3. Others
- 9.4. Europe
 - 9.4.1. Germany
 - 9.4.2. France
 - 9.4.3. United Kingdom
 - 9.4.4. Spain
 - 9.4.5. Italy
 - 9.4.6. Others
- 9.5. Middle East and Africa
 - 9.5.1. Saudi Arabia
 - 9.5.2. UAE
 - 9.5.3. Israel
 - 9.5.4. Others

9.6. Asia Pacific

9.6.1. China

9.6.2. India

9.6.3. Japan

9.6.4. South Korea

9.6.5. Indonesia

9.6.6. Thailand

9.6.7. Others

10. COMPETITIVE ENVIRONMENT AND ANALYSIS

10.1. Major Players and Strategy Analysis

10.2. Market Share Analysis

10.3. Mergers, Acquisitions, Agreements, and Collaborations

10.4. Competitive Dashboard

11. COMPANY PROFILES

11.1. QIANGSHENG MAGNETS CO., LTD

11.2. Master Magnetics, Inc.

11.3. Adams Magnetic Products Co

11.4. Arnold Magnetic Technologies

11.5. Ningbo Newland Co., Ltd

11.6. Dexter Magnetic Technologies, Inc. (TSL Engineered Products, LLC)

11.7. Xiamen Kings Magnet Co., Ltd.

11.8. Stanford Magnets

11.9. Eneflux-Armtek Magnetics (EAM)

11.10. Permanent Magnetics Ltd. (Taparia Group)

12. APPENDIX

12.1. Currency

12.2. Assumptions

12.3. Base and Forecast Years Timeline

12.4. Key Benefits for the Stakeholders

12.5. Research Methodology

12.6. Abbreviations

I would like to order

Product name: Alnico Magnets Market - Forecast from 2026 to 2031

Product link: <https://marketpublishers.com/r/A07E6E168290EN.html>

Price: US\$ 3,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/A07E6E168290EN.html>