

Hydrogen Storage Alloys Market Forecasts to 2028 – Global Analysis By Type (AB2, AB5), Application (Cooling Devices, Rechargeable Batteries, Fuel Cells, Hydrogen Recovery Or Separation), and By Geography

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Abstracts

According to Statistics MRC, the Global Hydrogen Storage Alloys Market is accounted for \$2,633.13 million in 2020 and is expected to reach \$5,402.69 million by 2028 growing at a CAGR of 9.4% during the forecast period. Some of the key factors propelling the market growth include the surge in hydrogen generation and storage systems, increasing demand of environmentally friendly technologies for the automotive industry, and growing demand for hydrogen storage alloys for electrochemical applications. However, high cost and complex nature associated with hydrogen energy storage systems is likely to hamper the market.

Hydrogen storage alloys are metallic materials which is able to reversibly absorb and release significant amounts of hydrogen from the gas phase or electrochemically. It is the most vulnerable component of Ni-MH cell which renders susceptibility to corrosion in the strong alkaline environment. These alloys are pulverized during charge & discharge processes due to repeated lattice expansion and shrinkage results in hydrogen absorption and desorption. These alloys are acts as a good hydrogen storage material due to its properties such as low cost, high safety and non-greenhouse gas.

By alloy type, titanium hydrogen storage segment is anticipated to grow at a significant rate during the forecast period, because they have high affinity for hydrogen, light in weight and react reversibly with hydrogen.

On the basis of geography, North America region is expected to have considerable market growth during the forecast period, due to rising demand of environmentally friendly technologies for the automotive industry increases exponentially, and this opens new possibilities for a novel player in the mobility sector.

Some of the key players in Hydrogen Storage Alloys Market include Liaoning Kingpowers Group, China Northern Rare Earth (Group) High-Tech, Guangdong Rising Nonferrous Metals Group, Chuo Denki Kogyo, Merck KGaA, Japan Metals & Chemicals, Whole Win (Beijing) Materials Science and Technology Company, Ajax Tocco Magnethermic Corporation, Baotou Santoku Battery Materials Co., Ltd., Xiamen Tungsten Co. Ltd, H Bank Technology, Santoku Corporation, AMG Titanium Alloys & Coatings LLC, Jiangmen Kanhoo Industry Co. Ltd, Mitsui, Lab Tech, and American Elements.

Types Covered:

AB2

AB5

Alloy Types Covered:

Zirconium Hydrogen Storage

Rare Earth Hydrogen Storage

Titanium Hydrogen Storage

Magnesium (Mg) Hydrogen Storage

Iron (Fe) Hydrogen Storage

Sales Channels Covered:

Distributor

Direct Sales

Applications Covered:

Cooling Devices

Rechargeable Batteries

Fuel Cells

Hydrogen Recovery Or Separation

Refrigeration and Heating Equipment

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

France

Italy

UK

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2019, 2020, 2021, 2025 and 2028

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic analysis: Drivers and Constraints, Product/Technology Analysis, Porter's five forces analysis, SWOT analysis, etc.

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

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Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as

per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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