

# **Pressure Vessel Market Report by Material (Hastelloy, Titanium, Nickel and Nickel Alloys, Tantalum, Steel, and Others), Product (Boiler, Nuclear Reactor, Separator, and Others), End Use (Chemicals and Petrochemicals, Oil and Gas, Power Generation, and Others), and Region 2024-2032**

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## **Abstracts**

The global pressure vessel composite materials market size reached US\$ 478.3 Million in 2023. Looking forward, IMARC Group expects the market to reach US\$ 721.3 Million by 2032, exhibiting a growth rate (CAGR) of 4.53% during 2024-2032.

Pressure vessels are containers made of composite materials, such as carbon fiber and epoxy resin, which are used to store liquid propane gas (LPG), compressed natural gas (CNG), renewable natural gas (RNG), and hydrogen gas (H<sub>2</sub>). They are lightweight and cost-effective while having a long shelf life compared to their steel-based counterparts. They offer a high strength-to-weight ratio, corrosion resistance, and can be customized to meet specific design requirements. They also provide high strength and durability to withstand harsh environmental conditions. As there is a rise in the utilization of hydrogen and compressed natural gas (CNG) vehicles, the demand for pressure vessel composite materials is rising worldwide.

### **Pressure Vessel Composite Materials Market Trends:**

The growing awareness among the masses about environment-friendly and fuel-efficient transportation solutions around the world represents one of the key factors driving the market. Besides this, there is an increase in the demand for lightweight and high-performance pressure vessels in the aerospace industry. This, along with the

growing demand for boilers in various energy generation procedures, is offering a positive market outlook. Moreover, the rising utilization of pressure vessels in the oil and gas industry to conduct physical and chemical processes under high temperatures and pressure is contributing to the growth of the market. In addition, the increasing employment of pressure vessels in the chemical industry to store and transport various chemicals is offering lucrative growth opportunities to industry investors. Apart from this, key market players are extensively investing in research and development (R&D) activities to introduce customized pressure vessels, which is positively influencing the market. Additionally, there is a rise in the adoption of supercritical power generation technologies across the globe. This, coupled with the burgeoning petrochemical industry, is bolstering the growth of the market.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global pressure vessel composite materials market report, along with forecasts at the global, regional and country level from 2024-2032. Our report has categorized the market based on material, application and end user.

#### Breakup by Material:

Epoxy Resin

Glass Fiber

Carbon Fiber

#### Breakup by Application:

CNG Vehicle

Hydrogen Vehicle

Gas Storage

#### Breakup by End User:

Automotive

Aircraft and Military

Aerospace

Marine

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 Huntsman Corporation, IHI Corporation (Dai-ichi Life Insurance Company Limited), Larsen & Toubro Ltd, Nippon Steel Corporation, Olin Corporation, Pentair plc, Solvay S.A., Steelhead Composites Inc. and ZOLTEK Corporation (Toray Industries Inc.).

### Key Questions Answered in This Report

1. What was the size of the global pressure vessel composite materials market in 2023?
2. What is the expected growth rate of the global pressure vessel composite materials market during 2024-2032?
3. What are the key factors driving the global pressure vessel composite materials

market?

4. What has been the impact of COVID-19 on the global pressure vessel composite materials market?

5. What is the breakup of the global pressure vessel composite materials market based on the material?

6. What is the breakup of the global pressure vessel composite materials market based on the application?

7. What is the breakup of the global pressure vessel composite materials market based on end user?

8. What are the key regions in the global pressure vessel composite materials market?

9. Who are the key players/companies in the global pressure vessel composite materials market?

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