

Asia Pacific Pressure Vessel Composite Materials Market Forecast to 2028 – COVID-19 Impact and Regional Analysis – by Material (Resin, Fiber, and Others) and End User (CNG Vehicles, Hydrogen Vehicle, Gas Transport, and Others)

<https://marketpublishers.com/r/A3E572544E3DEN.html>

Date: February 2023

Pages: 117

Price: US\$ 3,000.00 (Single User License)

ID: A3E572544E3DEN

Abstracts

The Asia Pacific pressure vessel composite materials market is expected to grow from US\$ 418.51 million in 2022 to US\$ 1,312.55 million by 2028; it is estimated to grow at a CAGR of 21.0% from 2022 to 2028.

Surging Approval of Carbon Fiber-Reinforced Plastic (CFRP) Pressure Vessels

As climate change has become scientifically linked to fossil fuel and greenhouse gas emissions, hydrogen has been identified as a sustainable, realistic option for decarbonizing transport by powering cars, heavy-duty trucks, forklifts/logistic equipment, railcars, marine vessels and aircraft, as well as stationary power plants. These systems require storing and transporting the hydrogen fuel in a pressurized gaseous, cryogenic liquid or hybrid cryo-compressed state. Carbon fiber reinforced plastic (CFRP) pressure vessels are a well-proven solution for high-pressure hydrogen gas storage owing to their lighter weight and convenient storage needs at higher pressure. Moreover, CFRP offers good corrosion resistance. Hydrogen pressure vessels are highly prone to hydrogen embrittlement in which metals become brittle due to prolonged contact of fluids. Pressure vessels lined with CFRP are highly resistant to this embrittlement making CFRP one of the most desirable materials in the market. Hydrogen fueled vehicles are witnessing huge demand as economies are shifting towards carbon neutrality. In the wake of these initiatives, many companies are investing huge amount in research and development of hydrogen-fueled aircrafts. For instance, in July 2020, ZeroAvia completed its first test flight of single-engine, six-seat, Piper aircraft using

compressed hydrogen gas and is planning to test 19-seat hydrogen powered aircraft modified with twin-turboprop by 2020. Such initiatives are expected to significantly drive the demand for carbon-fiber reinforced plastics to design pressure vessels, boosting the pressure vessel composite materials market over the coming years.

Asia Pacific Pressure Vessel Composite Materials Market Overview

Asia Pacific pressure vessel composite materials market comprises several developing economies such as China, India, Japan, Australia, South Korea, among others. These emerging countries are experiencing growth in the industrial sector due to the presence of cheap labor. Asia Pacific is one of the leading players in the pressure vessel composite materials market owing to the rise in the use of pressure vessels in the automotive industry. Pressure vessels are mainly utilized in the automotive sector due to their easy availability and reduced cost. Using CNG and hydrogen vehicles in place of fuel vehicles also favors the growth of the pressure vessel composite materials market in Asia Pacific. The pressure vessel composite materials market improves efficiency and cost savings for the owners, occupants, and managers of pressure vessel composite materials.

Asia Pacific Pressure Vessel Composite Materials Market Revenue and Forecast to 2028 (US\$ Million)

Asia Pacific Pressure Vessel Composite Materials Market Segmentation

The Asia Pacific pressure vessel composite materials market is segmented based on material, end user, and country. Based on material, the Asia Pacific pressure vessel composite materials market is segmented into resin, fiber, and others. The thermoset cylinders segment held the largest market share in 2022.

Based on end user, the Asia Pacific pressure vessel composite materials market is segmented into CNG vehicles, hydrogen vehicle, gas transport, and others. The CNG vehicles segment held the largest market share in 2022.

Based on country, the Asia Pacific pressure vessel composite materials market is segmented into Australia, China, Japan, India, South Korea, and the Rest of Asia Pacific. China dominated the market share in 2022.

3M Co; BASF SE; Huntsman Corporation; Kolon Industries Inc.; Mitsubishi Chemical

Holdings Corp; Solvay SA; Hexion Inc.; and Olin Corp are the leading companies operating in the Asia Pacific pressure vessel composite materials market.

Contents

1. INTRODUCTION

- 1.1 Study Scope
- 1.2 The Insight Partners Research Report Guidance
- 1.3 Market Segmentation
 - 1.3.1 Asia Pacific Pressure Vessel Composite Materials Market, by Material
 - 1.3.2 Asia Pacific Pressure Vessel Composite Materials Market, by End User
 - 1.3.3 Asia Pacific Pressure Vessel Composite Materials Market, by Country

2. KEY TAKEAWAYS

3. RESEARCH METHODOLOGY

- 3.1 Scope of the Study
- 3.2 Research Methodology
 - 3.2.1 Data Collection:
 - 3.2.2 Primary Interviews:
 - 3.2.3 Hypothesis formulation:
 - 3.2.4 Macro-economic factor analysis:
 - 3.2.5 Developing base number:
 - 3.2.6 Data Triangulation:
 - 3.2.7 Country level data:

4. ASIA PACIFIC PRESSURE VESSEL COMPOSITE MATERIALS MARKET LANDSCAPE

- 4.1 Market Overview
 - 4.2.1 Asia Pacific PEST Analysis
- 4.3 Expert Opinion

5. PRESSURE VESSEL COMPOSITE MATERIALS MARKET – KEY MARKET DYNAMICS

- 5.1 Market Drivers
 - 5.1.1 Increasing Demand for Natural Gas-Fueled Vehicles
 - 5.1.2 Increasing Demand for Pressure Vessels from Various End-Use Industries

5.2 Restraint

5.2.1 Storage Capacity of Composite Pressure Vessels

5.3 Opportunity

5.3.1 Increasing use of Pressure Vessel Composite Materials for Space Technology

5.4 Future Trend

5.4.1 Rising Demand for Epoxy Resins

5.4.2 Surging Adoption of Carbon Fiber-Reinforced Plastic (CFRP) Pressure Vessels

5.5 Impact Analysis of Drivers and Restraints

6. PRESSURE VESSEL COMPOSITE MATERIALS– ASIA PACIFIC MARKET ANALYSIS

6.1 Asia Pacific Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

7. ASIA PACIFIC PRESSURE VESSEL COMPOSITE MATERIALS MARKET ANALYSIS – BY MATERIAL

7.1 Overview

7.2 Pressure Vessel Composite Materials Market, By Material (2021 and 2028)

7.3 Resin

7.3.1 Overview

7.3.2 Resin: Pressure Vessel Composite Materials Market – Revenue and Forecast to 2028 (US\$ Million)

7.4 Fiber

7.4.1 Overview

7.4.2 Fiber: Pressure Vessel Composite Materials Market – Revenue and Forecast to 2028 (US\$ Million)

7.5 Others

7.5.1 Overview

7.5.2 Others: Pressure Vessel Composite Materials Market – Revenue and Forecast to 2028 (US\$ Million)

8. ASIA PACIFIC PRESSURE VESSEL COMPOSITE MATERIALS MARKET ANALYSIS – BY END USER

8.1 Overview

8.2 Pressure Vessel Composite Materials Market, By End User (2021 and 2028)

8.3 CNG Vehicles

8.3.1 Overview

8.3.2 CNG Vehicles: Pressure Vessel Composite Materials Market– Revenue and Forecast to 2028 (US\$ Million)

8.4 Hydrogen Vehicles

8.4.1 Overview

8.4.2 Hydrogen Vehicles: Pressure Vessel Composite Materials Market– Revenue and Forecast to 2028 (US\$ Million)

8.5 Gas Transport

8.5.1 Overview

8.5.2 Gas Transport: Pressure Vessel Composite Materials Market– Revenue and Forecast to 2028 (US\$ Million)

8.6 Others

8.6.1 Overview

8.6.2 Others: Pressure Vessel Composite Materials Market– Revenue and Forecast to 2028 (US\$ Million)

9. ASIA PACIFIC PRESSURE VESSEL COMPOSITE MATERIALS MARKET– COUNTRY ANALYSIS

9.1 Asia Pacific: Pressure Vessel Composite Materials Market

9.1.1 Asia Pacific: Pressure Vessel Composite Materials Market, by Key Country

9.1.1.1 Australia: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

9.1.1.1.1 Australia: Pressure Vessel Composite Materials Market, By Material

9.1.1.1.2 Australia: Pressure Vessel Composite Materials Market, by End User

9.1.1.2 China: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

9.1.1.2.1 China: Pressure Vessel Composite Materials Market, By Material

9.1.1.2.2 China: Pressure Vessel Composite Materials Market, by End User

9.1.1.3 India: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

9.1.1.3.1 India: Pressure Vessel Composite Materials Market, by Material

9.1.1.3.2 India: Pressure Vessel Composite Materials Market, by End User

9.1.1.4 Japan: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

9.1.1.4.1 Japan: Pressure Vessel Composite Materials Market, By Material

9.1.1.4.2 Japan: Pressure Vessel Composite Materials Market, by End User

9.1.1.5 South Korea: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

9.1.1.5.1 South Korea: Pressure Vessel Composite Materials Market, By Material

9.1.1.5.2 South Korea: Pressure Vessel Composite Materials Market, by End User

9.1.1.6 Rest of Asia Pacific: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

9.1.1.6.1 Rest of Asia Pacific: Pressure Vessel Composite Materials Market, By Material

9.1.1.6.2 Rest of Asia Pacific: Pressure Vessel Composite Materials Market, by End User

10. INDUSTRY LANDSCAPE

10.1 Overview

10.2 Market Initiative

10.3 New Product Development

10.4 Merger and Acquisition

11. COMPANY PROFILES

11.1 3M Co

11.1.1 Key Facts

11.1.2 Business Description

11.1.3 Products and Services

11.1.4 Financial Overview

11.1.5 SWOT Analysis

11.1.6 Key Developments

11.2 BASF SE

11.2.1 Key Facts

11.2.2 Business Description

11.2.3 Products and Services

11.2.4 Financial Overview

11.2.5 SWOT Analysis

11.2.6 Key Developments

11.3 Huntsman Corporation

11.3.1 Key Facts

11.3.2 Business Description

11.3.3 Products & Services

11.3.4 Financial Overview

11.3.5 SWOT Analysis

11.3.6 Key Developments

11.4 Kolon Industries Inc.

- 11.4.1 Key Facts
- 11.4.2 Business Description
- 11.4.3 Products and Services
- 11.4.4 Financial Overview
- 11.4.5 SWOT Analysis
- 11.4.6 Key Developments
- 11.5 Mitsubishi Chemical Holdings Corp
- 11.5.1 Key Facts
- 11.5.2 Business Description
- 11.5.3 Products & Services
- 11.5.4 Financial Overview
- 11.5.5 SWOT Analysis
- 11.5.6 Key Developments
- 11.6 Solvay SA
- 11.6.1 Key Facts
- 11.6.2 Business Description
- 11.6.3 Products and Services
- 11.6.4 Financial Overview
- 11.6.5 SWOT Analysis
- 11.6.6 Key Developments
- 11.7 ZOLTEK Corp
- 11.7.1 Key Facts
- 11.7.2 Business Description
- 11.7.3 Products and Services
- 11.7.4 Financial Overview
- 11.7.5 SWOT Analysis
- 11.7.6 Key Developments
- 11.8 Steelhead Composites Inc
- 11.8.1 Key Facts
- 11.8.2 Business Description
- 11.8.3 Products and Services
- 11.8.4 Financial Overview
- 11.8.5 SWOT Analysis
- 11.8.6 Key Developments
- 11.9 Hexion Inc
- 11.9.1 Key Facts
- 11.9.2 Business Description
- 11.9.3 Products and Services
- 11.9.4 Financial Overview

11.9.5 SWOT Analysis

11.9.6 Key Developments

11.10 Olin Corp

11.10.1 Key Facts

11.10.2 Business Description

11.10.3 Products and Services

11.10.4 Financial Overview

11.10.5 SWOT Analysis

11.10.6 Key Developments

12. APPENDIX

12.1 About The Insight Partners

12.2 Glossary of Terms

List Of Tables

LIST OF TABLES

Table 1. Asia Pacific Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

Table 2. Australia Pressure Vessel Composite Materials Market, By Material – Revenue and Forecast to 2028 (US\$ Million)

Table 3. Australia Pressure Vessel Composite Materials Market, by End User – Revenue and Forecast to 2028 (US\$ Million)

Table 4. China Pressure Vessel Composite Materials Market, By Material – Revenue and Forecast to 2028 (US\$ Million)

Table 5. China Pressure Vessel Composite Materials Market, by End User – Revenue and Forecast to 2028 (US\$ Million)

Table 6. India Pressure Vessel Composite Materials Market, By Material – Revenue and Forecast to 2028 (US\$ Million)

Table 7. India Pressure Vessel Composite Materials Market, by End User – Revenue and Forecast to 2028 (US\$ Million)

Table 8. Japan Pressure Vessel Composite Materials Market, By Material– Revenue and Forecast to 2028 (US\$ Million)

Table 9. Japan Pressure Vessel Composite Materials Market, by End User – Revenue and Forecast to 2028 (US\$ Million)

Table 10. South Korea Pressure Vessel Composite Materials Market, By Material – Revenue and Forecast to 2028 (US\$ Million)

Table 11. South Korea Pressure Vessel Composite Materials Market, by End User – Revenue and Forecast to 2028 (US\$ Million)

Table 12. Rest of Asia Pacific Pressure Vessel Composite Materials Market, By Material – Revenue and Forecast to 2028 (US\$ Million)

Table 13. Rest of Asia Pacific Pressure Vessel Composite Materials Market, by End User – Revenue and Forecast to 2028 (US\$ Million)

Table 14. Glossary of Terms, Global Pressure Vessel Composite Materials Market

List Of Figures

LIST OF FIGURES

- Figure 1. Asia Pacific Pressure Vessel Composite Materials Market Segmentation
- Figure 2. Asia Pacific Pressure Vessel Composite Materials Market Segmentation – By Country
- Figure 3. Asia Pacific Pressure Vessel Composite Materials Market Overview
- Figure 4. Asia Pacific Pressure Vessel Composite Materials Market, By Product Type
- Figure 5. Asia Pacific Pressure Vessel Composite Materials Market, by Country
- Figure 6. Asia Pacific PEST Analysis
- Figure 7. Asia Pacific Expert Opinion
- Figure 8. Asia Pacific Impact Analysis of Driver and Restraints on Pressure Vessel Composite Materials Market
- Figure 9. Asia Pacific Pressure Vessel Composite Materials Market – Revenue and Forecast to 2028 (US\$ Million)
- Figure 10. Asia Pacific Pressure Vessel Composite Materials Market Revenue Share, By Material (2021 and 2028)
- Figure 11. Resin: Asia Pacific Pressure Vessel Composite Materials Market – Revenue and Forecast To 2028 (US\$ Million)
- Figure 12. Fiber: Asia Pacific Pressure Vessel Composite Materials Market – Revenue and Forecast To 2028 (US\$ Million)
- Figure 13. Others: Asia Pacific Pressure Vessel Composite Materials Market – Revenue and Forecast To 2028 (US\$ Million)
- Figure 14. Asia Pacific Pressure Vessel Composite Materials Market Revenue Share, By End User (2021 and 2028)
- Figure 15. CNG Vehicles: Asia Pacific Pressure Vessel Composite Materials Market– Revenue and Forecast To 2028 (US\$ Million)
- Figure 16. Hydrogen Vehicles: Asia Pacific Pressure Vessel Composite Materials Market– Revenue and Forecast To 2028 (US\$ Million)
- Figure 17. Gas Transport: Asia Pacific Pressure Vessel Composite Materials Market– Revenue and Forecast To 2028 (US\$ Million)
- Figure 18. Others: Asia Pacific Pressure Vessel Composite Materials Market– Revenue and Forecast To 2028 (US\$ Million)
- Figure 19. Asia Pacific: Pressure Vessel Composite Materials Market Revenue Share, by Key Country (2021 and 2028)
- Figure 20. Australia: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)
- Figure 21. China: Pressure Vessel Composite Materials Market –Revenue and Forecast

to 2028 (US\$ Million)

Figure 22. India: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

Figure 23. Japan: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

Figure 24. South Korea: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

Figure 25. Rest of Asia Pacific: Pressure Vessel Composite Materials Market –Revenue and Forecast to 2028 (US\$ Million)

I would like to order

Product name: Asia Pacific Pressure Vessel Composite Materials Market Forecast to 2028 – COVID-19 Impact and Regional Analysis – by Material (Resin, Fiber, and Others) and End User (CNG Vehicles, Hydrogen Vehicle, Gas Transport, and Others)

Product link: <https://marketpublishers.com/r/A3E572544E3DEN.html>

Price: US\$ 3,000.00 (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/A3E572544E3DEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970