

Advanced Composites Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

<https://marketpublishers.com/r/A480188CD08EEN.html>

Date: November 2024

Pages: 220

Price: US\$ 4,850.00 (Single User License)

ID: A480188CD08EEN

Abstracts

The Global Advanced Composites Market, valued at USD 31.5 billion in 2023, is projected to grow at a compound annual growth rate (CAGR) of 5.2% from 2024 to 2032. This growth is largely driven by the rising demand for lightweight materials, particularly in the electric vehicle (EV) sector. As EV manufacturers strive to improve battery efficiency and extend vehicle range, advanced composites like carbon fiber and glass fiber have become essential components in various automotive parts, including chassis and body panels. These materials help reduce overall weight without compromising strength, making them critical for enhancing performance and efficiency.

The market is segmented by product type into carbon fiber composites, glass fiber composites, aramid fiber composites, ceramic matrix composites, and others. Among these, carbon fiber composites emerged as a dominant segment in 2023, generating approximately USD 14.2 billion in revenue. Expected to grow at a CAGR of 5.4% over the forecast period, carbon fiber composites are widely recognized for their superior strength-to-weight ratio. This characteristic makes them a preferred choice across multiple industries, such as aerospace, automotive, and sports equipment, where minimizing weight is crucial for boosting performance.

End-use industries driving the demand for advanced composites include aerospace & defense, automotive, wind energy, marine, construction, and electronics & electrical. In 2023, the aerospace & defense sector accounted for around 33% of the global market share, with a projected CAGR of 5.6% through 2032. Advanced composites are integral in developing lightweight and durable components for various defense applications. These materials enhance fuel efficiency and range, contributing to the operational efficiency of military aircraft, unmanned aerial vehicles (UAVs), and armored vehicles.

In North America, the U.S. represents a significant share of the advanced composites market, generating approximately USD 9.5 billion in revenue in 2023. The country is home to several leading aerospace and defense companies that heavily rely on advanced composites to enhance the performance of their products. The consistent demand for carbon fiber, glass fiber, and ceramic matrix composites in this region underscores the strategic importance of lightweight, high-strength materials in both commercial and defense sectors.

As industries continue to prioritize efficiency, durability, and sustainability, the global advanced composites market is poised for steady growth, offering innovative solutions across diverse applications.

Contents

Report Content

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Market scope & definitions
- 1.2 Base estimates & calculations
- 1.3 Forecast calculations.
- 1.4 Data sources
 - 1.4.1 Primary
 - 1.4.2 Secondary
 - 1.4.2.1 Paid sources
 - 1.4.2.2 Public sources

CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 Industry synopsis, 2021-2032

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem analysis
 - 3.1.1 Factor affecting the value chain.
 - 3.1.2 Profit margin analysis.
 - 3.1.3 Disruptions
 - 3.1.4 Future outlook
 - 3.1.5 Manufacturers
 - 3.1.6 Distributors
- 3.2 Supplier landscape
- 3.3 Profit margin analysis.
- 3.4 Key news & initiatives
- 3.5 Regulatory landscape
- 3.6 Impact forces
 - 3.6.1 Growth drivers
 - 3.6.1.1 Increasing demand for lightweight materials
 - 3.6.1.2 Advancements in composite manufacturing technologies
 - 3.6.2 Industry pitfalls & challenges
 - 3.6.2.1 High production costs
- 3.7 Growth potential analysis

3.8 Porter's analysis

3.9 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2023

4.1 Introduction

4.2 Company market share analysis

4.3 Competitive positioning matrix

4.4 Strategic outlook matrix

CHAPTER 5 MARKET ESTIMATES & FORECAST, BY PRODUCT TYPE, 2021-2032 (USD MILLION) (THOUSAND TONS)

5.1 Key trends

5.2 Carbon fiber composites

5.3 Glass fiber composites

5.4 Aramid fiber composites

5.5 Ceramic matrix composites

5.6 Others (natural fibers, basalt fiber, Etc)

CHAPTER 6 MARKET ESTIMATES & FORECAST, BY RESIN TYPE, 2021-2032 (USD MILLION) (THOUSAND TONS)

6.1 Key trends

6.2 Thermoset resins

6.2.1 Epoxy

6.2.2 Polyester

6.2.3 Vinyl ester

6.2.4 Others (phenolic, Etc)

6.3 Thermoplastic resins

6.3.1 Polyetheretherketone (PEEK)

6.3.2 Polypropylene (PP)

6.3.3 Polyamide (PA)

6.3.4 Others (polycarbonate (PC), Etc)

CHAPTER 7 MARKET ESTIMATES & FORECAST, BY MANUFACTURING PROCESS, 2021-2032 (USD MILLION) (THOUSAND TONS)

7.1 Key trends

- 7.2 Layup process
- 7.3 Filament winding
- 7.4 Injection molding
- 7.5 Pultrusion
- 7.6 Resin Transfer Molding (RTM)
- 7.7 Others (compression molding, Etc)

CHAPTER 8 MARKET ESTIMATES & FORECAST, BY APPLICATION, 2021-2032 (USD MILLION) (THOUSAND TONS)

- 8.1 Aerospace components
- 8.2 Automotive components
- 8.3 Wind energy
- 8.4 Marine
- 8.5 Sporting goods
- 8.6 Construction and infrastructure
- 8.7 Others (electronics, Etc)

CHAPTER 9 MARKET ESTIMATES & FORECAST, BY END USE, 2021-2032 (USD MILLION) (THOUSAND TONS)

- 9.1 Key trends
- 9.2 Aerospace & defense
- 9.3 Automotive
- 9.4 Wind energy
- 9.5 Marine
- 9.6 Construction
- 9.7 Electronics & electrical
- 9.8 Others (sporting goods, Etc)

CHAPTER 10 MARKET ESTIMATES & FORECAST, BY REGION, 2021-2032 (USD MILLION) (THOUSAND TONS)

- 10.1 Key trends
- 10.2 North America
 - 10.2.1 U.S.
 - 10.2.2 Canada
- 10.3 Europe
 - 10.3.1 UK

- 10.3.2 Germany
- 10.3.3 France
- 10.3.4 Italy
- 10.3.5 Spain
- 10.3.6 Russia
- 10.4 Asia Pacific
 - 10.4.1 China
 - 10.4.2 India
 - 10.4.3 Japan
 - 10.4.4 South Korea
 - 10.4.5 Australia
- 10.5 Latin America
 - 10.5.1 Brazil
 - 10.5.2 Mexico
- 10.6 MEA
 - 10.6.1 UAE
 - 10.6.2 Saudi Arabia
 - 10.6.3 South Africa

CHAPTER 11 COMPANY PROFILES

- 11.1 Cytec Industries Inc.
- 11.2 DuPont
- 11.3 Gurit Holding AG
- 11.4 Hexcel Corporation
- 11.5 Huntsman Corporation
- 11.6 Hyosung Corporation
- 11.7 Mitsubishi Chemical Holdings Corporation
- 11.8 Nippon Graphite Fiber Corporation
- 11.9 Owens Corning
- 11.10 Royal DSM N.V.
- 11.11 SGL Carbon SE
- 11.12 Solvay S.A.
- 11.13 Teijin Limited
- 11.14 Tencate Advanced Composites
- 11.15 Toray Industries, Inc.

I would like to order

Product name: Advanced Composites Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

Product link: <https://marketpublishers.com/r/A480188CD08EEN.html>

Price: US\$ 4,850.00 (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/A480188CD08EEN.html>