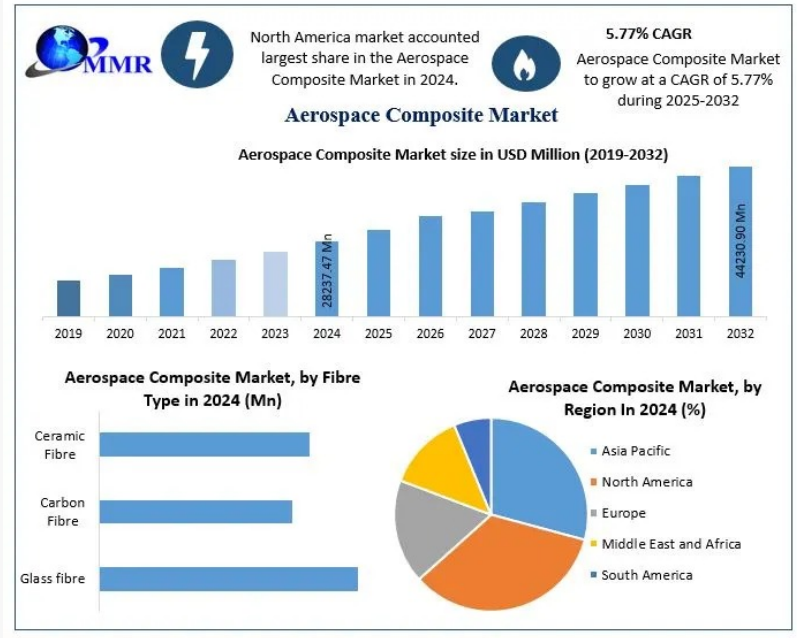
Aerospace Composite Market – Growing at 5.77% CAGR to Reach USD 44.23 Billion by 2032 Maximize Market Research

Aerospace Composite Market was predominantly led by North America, capturing a significant 35% market share in 2024.



WILMINGTON, DE, UNITED STATES, September 11, 2025 / EINPresswire.com/ -- Aerospace Composite Industry Overview

The Aerospace Composite Market size was valued at USD 28237.47 million in 2024, and the Aerospace Composite Market revenue is expected to grow at 5.77% through 2025 to 2032, reaching nearly USD 44230.90 million.

The aerospace composites market is vital for improving fuel efficiency, reducing weight, and enhancing structural strength in commercial and military aircraft. North America leads the market, driven by strong aerospace manufacturing, high defense spending, and innovations, especially in the U.S. Carbon fiber dominates as the preferred material due to its superior strength-to-weight ratio. Recent developments include Mallinda Inc.'s launch of Vitrimax VHM resin in 2025, offering recyclability and self-healing properties, supporting sustainability. Parker-Hannifin raised its 2024 profit forecast due to strong aerospace demand, reflecting increased orders from major manufacturers like Boeing and Airbus.

> In aerospace, composites are the cornerstone of innovation, combining strength and lightness to elevate performance and sustainability in every flight"
>
> *Dharti Raut*

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The comprehensive study provides an in-depth analysis of the Aerospace Composite Market, offering crucial insights into its current landscape and future trajectory.

Global Aerospace Composites Market Segments Covered	
By Fibre Type	Glass fibre Carbon Fibre Ceramic Fibre Others
By Matrix Type	Polymer Matrix Composite Metal Matrix Composite Ceramic Matrix Composite
By End-User Industry	Commercial Aircraft Business And General Aviation Aircraft Military Aircraft Civil Helicopter Others
By Region	**North America** (**United States**, Canada and Mexico) **Europe** (UK, France, Germany, Italy, Spain, Sweden, Austria, Turkey, Russia an Rest of Europe) **Asia Pacific** (**China**, India, Japan, South Korea, Australia, ASEAN (Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam etc.) and Rest APAC) **Middle East and Africa** (South Africa, GCC, Egypt, Nigeria and Rest of ME&A) **South America** (Brazil, Argentina, Colombia and Rest of South America)

Key Insights & Recent Developments

The study highlights the growing adoption of Carbon fiber composites, which dominate the aerospace sector due to their high strength-to-weight ratio, with growing use in fuselage, wings, and engine components. Thermoplastic composites are gaining traction for faster processing and recyclability, while ceramic matrix composites (CMCs) are increasingly used in engines and hypersonic vehicles for high-temperature resistance.

Innovations like Automated Fiber Placement (AFP), out-of-autoclave (OOA) processing, and resin transfer molding are improving production speed and reducing costs. Companies are also focusing on recyclable and sustainable composite materials, including bio-based resins and thermoplastics, to address lifecycle and environmental concerns.

Major players like Hexcel, Solvay, and Toray are investing in new material technologies and strategic collaborations. Aerospace firms are scaling up production with automation to meet rising aircraft and space vehicle demand. Additionally, the Asia-Pacific region is becoming a growth hub due to expanding manufacturing and defense programs.

Aerospace Composite Market Dynamics

The Aerospace Composites Market is driven by the demand for lightweight materials that enhance fuel efficiency and reduce emissions. Composites, especially carbon fiber and ceramic matrix types, are widely used in aircraft structures, engines, and space vehicles for their strength and durability under extreme conditions. Growing aircraft production and sustainability goals further boost their adoption. However, high production costs, complex manufacturing processes, and limited recyclability of thermoset composites act as restraints. The lack of efficient repair methods and recycling infrastructure adds to the challenges. Despite these hurdles, opportunities are emerging through next-gen aircraft, eVTOLs, reusable spacecraft, and increased use of thermoplastics, which allow faster, more sustainable production. Rapid aerospace expansion in the Asia-Pacific region also presents strong growth potential. Still, supply chain disruptions and lengthy certification processes for new materials remain challenges.

Aerospace Composite Market Regional Analysis

The report provides a detailed breakdown of the market across major regions:

North America: North America dominates due to its advanced aerospace industry, major manufacturers like Boeing, and strong defense spending driving composite use. Leading companies such as Hexcel and Solvay are investing in automated manufacturing and recyclable composites, fueling innovation. Recently, Boeing expanded its composite wing production with cutting-edge automation to boost efficiency.

Europe: Europe is the second dominating region due to its strong aerospace industry led by Airbus, focus on sustainable composite materials, and investments in advanced manufacturing technologies. Recently, Airbus partnered with Solvay to develop recyclable thermoplastic composites, enhancing production efficiency and reducing environmental impact in aircraft manufacturing.

Aerospace Composite Market Segments Covered

The study segments the market based on Fibre Type, Matrix Type and End-User Industry

By Fibre Type. Carbon fibre dominates in North America and Europe due to its excellent strength-to-weight ratio, essential for fuel efficiency and structural strength in aerospace. Leading manufacturers like Boeing and Airbus extensively use it. Advanced manufacturing and R&D facilities in these regions further reinforce carbon fibre's strong position in the market.

By Matrix Type, Polymer Matrix Composites (PMCs) dominate in North America due to their lightweight, cost-effectiveness, and easy fabrication compared to metal or ceramic matrices. Major aerospace OEMs and material suppliers in the region extensively use PMCs for airframes, interiors, and secondary components, making them the leading matrix type in the market.

By End-User Industry the commercial aircraft segment leads in North America and Europe due to high production of models like Boeing 737 and Airbus A320, which use composites to reduce weight and emissions. These regions, home to Boeing and Airbus, are global aviation leaders, driving strong demand for aerospace composites in this sector.

Aerospace Composite Market Trends

The aerospace composites market is led by the carbon fibre segment due to its high strength-to-weight ratio, crucial for fuel-efficient commercial and military aircraft. North America dominates the market, driven by major players like Boeing and strong defense investments. Key trends include advancements in automated manufacturing methods like Automated Fiber Placement, and a growing focus on recyclable and bio-based composites to meet sustainability goals. Additionally, aerospace firms are expanding into emerging markets like India to diversify supply

chains and reduce costs, reflecting a dynamic and evolving industry landscape.

Competitive Landscape

Key players in the aerospace composites market are making significant advancements. In 2024, Argosy International LLC began building a 2,300m² aerospace materials facility in Taiwan, targeting Asia-Pacific aerospace manufacturers with AS9100 certification. ACP Composites Inc. is expanding into UAV-focused lightweight composites. Advanced Composites Inc. is improving manufacturing precision for aerospace custom solutions. ATLAS Composite Technologies continues enhancing its production capabilities to meet aerospace demands. Avior Produits Intégrés Inc. is innovating integrated composite solutions, emphasizing quality and industry standards. These developments reflect ongoing efforts to boost capacity, innovation, and meet evolving aerospace market needs.

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The report profiles key players in the market, including

The Maximize Market Research report profiles key players in the Aerospace Composite Market

ACP Composites Inc.
Advanced Composites Inc
Argosy International LLC
ATLAS COMPOSITE TECHNOLOGIES
Avior Produits Intégrés Inc.
Axiom Materials
Collins Aerospace
Cutting Dynamics
DuPont
Hexcel Corporation
Huntsman International LLC
Hyosung Advanced Materials Co Ltd
Materion Aerospace Metal Composites
Mitsubishi Chemical Carbon Fiber and Composites (MCCFC)
PARK AEROSPACE CORP
Plastic Reinforcement Fabrics Ltd
Renegade Materials Corporation
SGL Carbon
Solvay
ST Advanced Composites Pvt Ltd,
Syensqo
Tata Advanced System Limited

Teijin Limited
Toray Composite Materials America, Inc.
VX Aerospace

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