

## **Global Markets for Advanced Aerospace Materials**

Market Research Report | 2025-03-05 | 189 pages | BCC Research

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## Report description:

Description

### Report Scope

This report provides a thorough qualitative and quantitative assessment of the global market for advanced aerospace materials. It considers 2023 as the base year, and provides revenue forecasts for 2024 to 2029 (\$ millions). The report analyzes the market based on type, application, end user and region. Each region is further sub-segmented into key countries. Segmental analysis is broken into:

- Type: Advanced aluminum alloys, advanced composites, titanium alloys, superalloys, advanced steel alloys, ceramic-matrix composites, and advanced adhesives.
- Application: Commercial aircraft, military aircraft, general aviation, and helicopters.
- Commercial aircraft: Passenger aircraft, transport aircraft, and space aircraft.
- End user: Private sector and public sector.
- Region: North America, Europe, Asia-Pacific, and Rest of the World (ROW).

## Report Includes

- 113 data tables and 51 additional tables
- Analyses of global market trends for advanced aerospace materials, with market revenue data for 2023, estimates for 2024, forecast for 2025 and 2027, and projected CAGRs through 2029
- Estimates of the size and growth forecasts of the global market, and a corresponding market share analysis by material type, aircraft type, ownership type, and region/country
- Facts and figures pertaining to current trends, market dynamics, technological advances, regulations and standards, and the impact of various macroeconomic factors
- Insights derived from the Porter's Five Forces model, as well as global value/supply chain and PESTLE analyses, and case studies
- Evaluation of recent patent activity and key granted and published patents
- Overview of sustainability trends and ESG developments, with emphasis on consumer attitudes, and the ESG scores and

practices of leading companies

- Review of emerging trends and technologies, and new developments in advanced aerospace materials
- Analysis of the industry structure, including companies' market shares and rankings, strategic alliances, M&A activity and a venture funding outlook
- Company profiles of major players within the industry, including Solvay, DuPont, Ametek Inc., and Constellium

**Executive Summary** 

Summary:

The global market for advanced aerospace materials is estimated to increase from \$29.2 billion in 2024 to reach \$42.9 billion by 2029, at a compound annual growth rate (CAGR) of 8.0% from 2024 through 2029.

The aerospace and space exploration industry has evolved, not just in terms of technological advances, but in the development of innovative materials. Major advances in materials science, mainly within composite technology, have enabled the development of promising novel materials for aerospace engineering. These materials also play a key role in augmenting sustainability by reducing fuel consumption and improving safety and performance. Nanomaterials, high-performance metal alloys, composites, and artificially engineered materials have transformed aerospace engineering.

The global market for advanced aerospace materials will enjoy strong growth in the coming years due to an increase in air passenger traffic, rising demand for military aircraft, and favorable government support. Moreover, a growing number of projects and investments in space missions and satellite launches are also expected to fuel the overall demand for these materials.

Materials such as composites, which are lightweight yet high-performance, are attracting attention from aircraft makers due to their role in augmenting sustainability by lowering fuel consumption and carbon emissions. Metal alloys such as advanced aluminum, titanium, superalloys, and steel are also expected to observe a positive growth trend.

The market leader by region is North America, where demand in North America is led by vast aircraft production capacity in the U.S. and favorable government initiatives. Europe is a close second.

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**ARCONIC** 

AUBERT & DUVAL

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**CONSTELLIUM** 

CRS HOLDINGS LLC.

**DONCASTERS GROUP** 

**DUPONT** 

GFE GESELLSCHAFT FUR ELEKTROMETALLURGIE MBH

HAYNES INTERNATIONAL

HEXCEL CORP.

**SOLVAY** 

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