Aerospace Additive Manufacturing Market Research Report - Global Forecast till 2025

Report / Search Code: MRFR/A&D/1022-CR  Publish Date: September, 2019

Price

<table>
<thead>
<tr>
<th>1-user PDF</th>
<th>$3560.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise PDF</td>
<td>$4375.0</td>
</tr>
</tbody>
</table>

Description:

Global Aerospace Additive Manufacturing Market Research Report: By Platform (Aircraft [Fixed-Wing and Rotary-Wing], Unmanned Aerial Vehicle and Spacecraft), Application (Engine, Structural and Others), Material Type (Metal Alloy, Plastic, Rubber and others), Technology (3D Printing, Laser Sintering (Direct Metal and Selective), Stereolithography, Fused Deposition Modelling and Electron Beam Melting) and Region (North America, Europe, Asia-Pacific, Middle East & Africa and Latin America) - Forecast till 2025

Market Scenario

Additive manufacturing (AM) is the process of building three-dimensional objects based on a CAD digital model. AM uses an additive process, where an object is developed by applying materials in successive layers as per the CAD design. Unlike conventional manufacturing, which involves a subtractive process (e.g., cutting, drilling, milling) and forming (bending, shaping), the AM process requires minimum or no tooling to build the finished product.

Focus on decreasing carbon footprint through aircraft weight reduction and increasing need for green manufacturing are driving the aerospace additive manufacturing market. Furthermore, the enhanced efficiency offered by AM in manufacturing critical aerospace parts is also driving the market growth. However, high costs associated with AM materials might limit the market growth.

There are several growth opportunities for the global aerospace additive manufacturing market owing to increasing air passenger traffic and growing demand for modern aircraft. Furthermore, technology advances in AM materials are also expected to drive the market growth.

Hence, the Global Aerospace Additive Manufacturing Market is projected to reach USD 3,183.7 Million by 2025, growing at 20.24% CAGR during the forecast period.

Segmentation of the Global Aerospace Additive Manufacturing Market

By platform, the aerospace additive manufacturing market comprises aircraft, unmanned aerial vehicle, and spacecraft. The aircraft segment has been subdivided into fixed-wing and rotary-wing. The aircraft segment dominated the market in 2018 with a market share of 55.58%. However, the unmanned aerial vehicle segment is expected to grow at the highest CAGR during the forecast period. The growing adoption of additive manufacturing for developing larger UAVs and drones is driving the segment growth.

Based on application, the global market has been segregated into engine, structural, and others. The
engine segment dominated the market in 2018 and is expected to register the highest CAGR during the forecast period. The growing usage of 3D printing technology by prominent aviation companies for developing aircraft engines is driving the segment growth. For instance, in 2018, GE Aviation tested first 3D printed commercial aircraft turboprop engine. Hence, the segment is expected to grow at the highest CAGR during the forecast period.

Based on material type, the global market has been divided into metal alloy, plastic, rubber, and others. The metal alloy segment dominated the market in 2018 with a market share of 58.25% and is expected to register a high growth rate during the forecast period. An alloy is a mixture of metals. Metal alloys are used in manufacturing rocket and propulsion hardware, engine injector and its fuel nozzles, and others. Stainless steel, titanium alloys, aluminum, copper alloys, and nickel-based superalloys are the metal alloys used in aerospace additive manufacturing.

Based on technology, the market is segmented into 3D printing, laser sintering, stereolithography, fused deposition modeling, and electron beam melting. The laser sintering segment is sub-segmented into direct metal and selective. The 3D printing segment dominated the market in 2018 and is expected to record the highest growth during the forecast period. Aircraft parts manufactured by using 3D printing technology are lightweight and reduce the consumption of materials used in manufacturing. Hence, the segment is expected to record the highest growth during the forecast period from 2019 to 2025.

Based on the region, the market has been categorized as North America, Europe, Asia-Pacific, Middle East & Africa, and Latin America. North America led the market in 2018 with a market share of 38.86% and is anticipated to record the highest CAGR during the forecast period. The presence of prominent companies such as Stratasys Ltd and 3D Systems, Inc. is driving the market growth in the region.

Key Players

The key players in the global aerospace additive manufacturing market are 3D Systems, Inc. (US), Arcam AB (Sweden), Concept Laser GmbH I (Germany), CRP Technology SRL (Italy), CRS Holdings Inc. (US), EOS (Germany), ExOne (US), Optomec (US), SLM Solution Group AG (Germany), and Stratasys Ltd (US).

Research Methodology

The market values and forecasts are derived using MRFR research methodology, which includes secondary research, primary interviews, data triangulation, and validation from an in-house data repository and statistical modeling tools.

Secondary Research

In this process, data is collected from various secondary sources, including annual reports, SEC filings, journals, government associations, aerospace & defense magazines, white papers, corporate presentations, company websites, and paid databases.

Primary Research

In this process, both the demand- and supply-side parties are interviewed to extract facts and insights into the market forecast, production, trends, and projected market growth. Industry stakeholders such as CEOs, VPs, directors, and marketing executives across the value chain are approached to obtain key information.

Key Insights

- Market sizing, forecast, and analysis: detailed coverage of the market segment and sub-segments
- Regional/country trends and forecast: detailed analysis of the market in North America, Asia-Pacific, Europe, the Middle East & Africa, and Latin America, along with key countries in each region
- Market dynamics intelligence: market drivers, opportunities, trends, restraints, Porter’s five forces, supply chain, and value chain analysis
- Technology trends, regulatory landscape, and patent analysis outlook
- Competitive intelligence: market share analysis, financial analysis, product benchmarking, and strategic developments including joint ventures, product launches, and mergers & acquisitions
- Regional attractiveness and related growth opportunities
Report Customization

MRFR offers report customization to valued customers. Below are the options available for customization:

- **Company Profiles**
  In-depth profiling of additional market players (3 to 4 companies)

- **Country-Level Analysis**
  Detailed analysis of a country-level market and related segments as per the report scope (subject to data availability)

**Intended Audience**

- Aerospace additive manufacturing providers
- Component providers
- Aerospace companies
- Space organizations
- Airline companies
- Government organizations

Infographic Summary:

**GLOBAL AEROSPACE ADDITIVE MANUFACTURING MARKET**

Global Aerospace Additive Manufacturing Market is projected to grow at a CAGR of 20.24%, during the forecast period 2018-2023

- **North America** 33.39%
- **Europe** XX%
- **Asia Pacific** XX%
- **Latin America** XX%
- **Middle East & Africa** XX%

**Market Drivers**

- Focus on decreasing carbon footprint through aircraft weight reduction
- Focus on green manufacturing
- High efficiency of AM in manufacturing of complex aerospace parts

**Major Players**

- CRP
- Stratasys
# TABLE OF CONTENTS

1  EXECUTIVE SUMMARY
   1.1. Market Attractiveness Analysis
   1.1.1. Global Aerospace Additive Manufacturing Market, by Platform
   1.1.2. Global Aerospace Additive Manufacturing Market, by Material Type
   1.1.3. Global Aerospace Additive Manufacturing Market, by Technology
   1.1.4. Global Aerospace Additive Manufacturing Market, by Application
   1.1.5. Global Aerospace Additive Manufacturing Market, by Region

2  MARKET INTRODUCTION

3  RESEARCH METHODOLOGY

4  MARKET INSIGHTS

5  MARKET DYNAMICS

6  MARKET FACTOR ANALYSIS

7  GLOBAL AEROSPACE ADDITIVE MANUFACTURING MARKET, BY PLATFORM

8  GLOBAL AEROSPACE ADDITIVE MANUFACTURING MARKET, BY TECHNOLOGY

9  GLOBAL AEROSPACE ADDITIVE MANUFACTURING MARKET, BY MATERIAL TYPE

10 GLOBAL AEROSPACE ADDITIVE MANUFACTURING MARKET, BY APPLICATION

11 GLOBAL AEROSPACE ADDITIVE MANUFACTURING MARKET, BY REGION

12 COMPETITIVE LANDSCAPE

13 COMPANY PROFILES