

Aircraft Strut Market Forecasts to 2030 – Global Analysis By Product (Shock Struts, Non-shock Struts, Pneumatic Struts, Hydraulic Struts and Other Products), Aircraft Type, Material, Application, End User and By Geography

<https://marketpublishers.com/r/AA50BEF8ED23EN.html>

Date: January 2025

Pages: 150

Price: US\$ 4,150.00 (Single User License)

ID: AA50BEF8ED23EN

Abstracts

According to Statistics MRC, the Global Aircraft Strut Market is accounted for \$4.21 billion in 2024 and is expected to reach \$9.65 billion by 2030 growing at a CAGR of 8.5% during the forecast period. An aircraft strut is a structural component used in an aircraft's landing gear system to provide support and absorb shock during takeoff, landing, and taxiing. It serves as a shock absorber, helping to dampen the forces experienced by the aircraft when it contacts the ground. Aircraft struts are crucial for maintaining the structural integrity of the landing gear, improving safety, and ensuring smooth, controlled landings.

According to the India Brand Equity Foundation (IBEF), in FY22, the country's aircraft passenger traffic raised by 70%.

Market Dynamics:

Driver:

Rise in global air travel

With expanding airline routes and services, there is a greater requirement for commercial aircraft, directly increasing the demand for reliable landing gear components like struts. Moreover, frequent takeoffs and landings lead to higher wear and tear on aircraft, necessitating regular strut replacements and repairs. This surge in

air travel contributes to both the production of new aircraft and the ongoing maintenance of older fleets, fueling market expansion.

Restraint:

Maintenance and replacement challenges

Maintenance and replacement challenges in aircraft struts arise due to their critical role in absorbing shock and supporting the aircraft's weight during landing and taxiing. Frequent exposure to high stress, extreme temperatures, and corrosion necessitates rigorous inspection and timely replacements. Consequently, market growth is hampered as end-users delay investments in new or replacement strut technologies.

Opportunity:

Growing emphasis on reducing aircraft weight

The growing emphasis on reducing aircraft weight to enhance fuel efficiency and lower operational costs has increased demand for lightweight materials and components, including aircraft struts. Struts made from advanced materials like titanium alloys, carbon composites, and lightweight metals offer the required strength while reducing the overall weight of the aircraft. The aerospace industry's focus on sustainability and operational efficiency drives the ongoing demand for innovative, lightweight struts, fueling market growth.

Threat:

High manufacturing costs

High manufacturing costs in aircraft struts arise from the need for advanced materials like titanium and high-strength alloys, which are expensive and require specialized processing. The production process involves precision engineering, stringent quality checks, and adherence to strict aviation safety standards, further driving costs. Additionally, high costs restrict the entry of smaller players into the market, reducing competition and innovation, further slowing down growth.

Covid-19 Impact

The covid-19 pandemic significantly impacted the aircraft strut market by disrupting

global air travel, leading to a sharp decline in demand for new aircraft and aircraft parts, including struts. Airlines reduced their fleets, and aircraft production slowed, affecting the demand for landing gear components. Additionally, supply chain disruptions and labor shortages hindered manufacturing and maintenance. However, as the aviation industry recovers, the market is expected to rebound with a gradual increase in aircraft production and maintenance needs.

The hydraulic struts segment is expected to be the largest during the forecast period

The hydraulic struts segment is predicted to secure the largest market share throughout the forecast period. Hydraulic struts are essential components in various mechanical systems, including aircraft landing gears, automotive suspensions, and heavy machinery. They use hydraulic fluid to provide shock absorption and damping, offering superior load-bearing capacity and stability. These struts are valued for their ability to manage high stress, improve performance, and extend the lifespan of the systems they are integrated into.

The landing gear segment is expected to have the highest CAGR during the forecast period

The landing gear segment is anticipated to witness the highest CAGR during the forecast period. Aircraft struts in landing gear applications are critical components designed to absorb and dampen the forces encountered during takeoff, landing, and taxiing. They provide structural support to the aircraft, ensuring stability and minimizing shock to the airframe. By managing the impact forces, aircraft struts help maintain smooth landings and prolong the lifespan of the landing gear and overall aircraft.

Region with largest share:

Asia Pacific is expected to register the largest market share during the forecast period driven by the growing air travel demand, expanding aircraft fleets, and increasing aircraft manufacturing in countries like China, India, and Japan. The rise of low-cost carriers and strong investments in military aircraft contributes to market growth. Key players in the region include companies like Safran, Honeywell International, Collins Aerospace, and Messier-Bugatti-Dowty. With the aviation sector's recovery and expansion, the Asia-Pacific market is expected to grow steadily.

Region with highest CAGR:

North America is expected to witness the highest CAGR over the forecast period fuelled by the region's strong aviation industry. The growing need for aircraft maintenance and replacement parts, along with technological advancements in landing gear systems, boosts the market. Key players in the region include Boeing, Lockheed Martin, Collins Aerospace, and Safran. The demand for more efficient and durable aircraft struts, coupled with significant investments in defense and commercial aviation, positions North America for steady market growth in the coming years.

Key players in the market

Some of the key players profiled in the Aircraft Strut Market include Collins Aerospace, Liebherr-Aerospace, GE Aviation, UTC Aerospace Systems, Boeing, Airbus, Rolls-Royce, Parker Hannifin Corporation, Honeywell Aerospace, SKF Group, Rockwell Collins, Triumph Group, Bell Textron, Safran Landing Systems, Stratolaunch LLC, Magellan Aerospace, Esterline Technologies, Spirit AeroSystems, Goodrich Corporation and Dowty Propellers.

Key Developments:

In March 2024, Stratolaunch LLC introduced the Stratolaunch Talon-A a cutting-edge, reusable hypersonic test vehicle. The Talon-A is engineered to test and validate; hypersonic technologies, including flight dynamics, propulsion, materials, and advanced avionics. The vehicle's design is highly modular, allowing for different payloads and configurations to be tested during different flights.

In May 2022, Safran announced the development of a new, cutting-edge landing gear system specifically designed for next-generation military aircraft. The system represents a significant leap forward, as it features a 'clean-sheet' design. This means that the landing gear was developed from scratch, without relying on existing designs, to meet the specialized needs of modern military aviation.

Products Covered:

Shock Struts

Non-shock Struts

Pneumatic Struts

Hydraulic Struts

Other Products

Aircraft Types Covered:

Commercial Aircraft

Military Aircraft

Business Jets

Helicopters

General Aviation Aircraft

Other Aircraft Types

Materials Covered:

Aluminum

Steel

Composite

Titanium

Other Materials

Applications Covered:

Landing Gear

Nose Landing Gear

Main Landing Gear

Tail Struts

Wing Struts

Other Applications

End Users Covered:

Original Equipment Manufacturers (OEMs)

Aftermarket

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2022, 2023, 2024, 2026, and 2030
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Product Analysis
- 3.7 Application Analysis
- 3.8 End User Analysis
- 3.9 Emerging Markets
- 3.10 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL AIRCRAFT STRUT MARKET, BY PRODUCT

- 5.1 Introduction
- 5.2 Shock Struts
- 5.3 Non-shock Struts
- 5.4 Pneumatic Struts
- 5.5 Hydraulic Struts
- 5.6 Other Products

6 GLOBAL AIRCRAFT STRUT MARKET, BY AIRCRAFT TYPE

- 6.1 Introduction
- 6.2 Commercial Aircraft
- 6.3 Military Aircraft
- 6.4 Business Jets
- 6.5 Helicopters
- 6.6 General Aviation Aircraft
- 6.7 Other Aircraft Types

7 GLOBAL AIRCRAFT STRUT MARKET, BY MATERIAL

- 7.1 Introduction
- 7.2 Aluminum
- 7.3 Steel
- 7.4 Composite
- 7.5 Titanium
- 7.6 Other Materials

8 GLOBAL AIRCRAFT STRUT MARKET, BY APPLICATION

- 8.1 Introduction
- 8.2 Landing Gear
- 8.3 Nose Landing Gear
- 8.4 Main Landing Gear
- 8.5 Tail Struts
- 8.6 Wing Struts
- 8.7 Other Applications

9 GLOBAL AIRCRAFT STRUT MARKET, BY END USER

- 9.1 Introduction
- 9.2 Original Equipment Manufacturers (OEMs)
- 9.3 Aftermarket

10 GLOBAL AIRCRAFT STRUT MARKET, BY GEOGRAPHY

- 10.1 Introduction
- 10.2 North America
 - 10.2.1 US
 - 10.2.2 Canada
 - 10.2.3 Mexico
- 10.3 Europe
 - 10.3.1 Germany
 - 10.3.2 UK
 - 10.3.3 Italy
 - 10.3.4 France
 - 10.3.5 Spain
 - 10.3.6 Rest of Europe
- 10.4 Asia Pacific
 - 10.4.1 Japan
 - 10.4.2 China
 - 10.4.3 India
 - 10.4.4 Australia
 - 10.4.5 New Zealand
 - 10.4.6 South Korea
 - 10.4.7 Rest of Asia Pacific
- 10.5 South America
 - 10.5.1 Argentina
 - 10.5.2 Brazil
 - 10.5.3 Chile
 - 10.5.4 Rest of South America
- 10.6 Middle East & Africa
 - 10.6.1 Saudi Arabia
 - 10.6.2 UAE
 - 10.6.3 Qatar
 - 10.6.4 South Africa
 - 10.6.5 Rest of Middle East & Africa

11 KEY DEVELOPMENTS

- 11.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 11.2 Acquisitions & Mergers
- 11.3 New Product Launch
- 11.4 Expansions
- 11.5 Other Key Strategies

12 COMPANY PROFILING

- 12.1 Collins Aerospace
- 12.2 Liebherr-Aerospace
- 12.3 GE Aviation
- 12.4 UTC Aerospace Systems
- 12.5 Boeing
- 12.6 Airbus
- 12.7 Rolls-Royce
- 12.8 Parker Hannifin Corporation
- 12.9 Honeywell Aerospace
- 12.10 SKF Group
- 12.11 Rockwell Collins
- 12.12 Triumph Group
- 12.13 Bell Textron
- 12.14 Safran Landing Systems
- 12.15 Stratolaunch LLC
- 12.16 Magellan Aerospace
- 12.17 Esterline Technologies
- 12.18 Spirit AeroSystems
- 12.19 Goodrich Corporation
- 12.20 Dowty Propellers

List Of Tables

LIST OF TABLES

- Table 1 Global Aircraft Strut Market Outlook, By Region (2022-2030) (\$MN)
- Table 2 Global Aircraft Strut Market Outlook, By Product (2022-2030) (\$MN)
- Table 3 Global Aircraft Strut Market Outlook, By Shock Struts (2022-2030) (\$MN)
- Table 4 Global Aircraft Strut Market Outlook, By Non-shock Struts (2022-2030) (\$MN)
- Table 5 Global Aircraft Strut Market Outlook, By Pneumatic Struts (2022-2030) (\$MN)
- Table 6 Global Aircraft Strut Market Outlook, By Hydraulic Struts (2022-2030) (\$MN)
- Table 7 Global Aircraft Strut Market Outlook, By Other Products (2022-2030) (\$MN)
- Table 8 Global Aircraft Strut Market Outlook, By Aircraft Type (2022-2030) (\$MN)
- Table 9 Global Aircraft Strut Market Outlook, By Commercial Aircraft (2022-2030) (\$MN)
- Table 10 Global Aircraft Strut Market Outlook, By Military Aircraft (2022-2030) (\$MN)
- Table 11 Global Aircraft Strut Market Outlook, By Business Jets (2022-2030) (\$MN)
- Table 12 Global Aircraft Strut Market Outlook, By Helicopters (2022-2030) (\$MN)
- Table 13 Global Aircraft Strut Market Outlook, By General Aviation Aircraft (2022-2030) (\$MN)
- Table 14 Global Aircraft Strut Market Outlook, By Other Aircraft Types (2022-2030) (\$MN)
- Table 15 Global Aircraft Strut Market Outlook, By Material (2022-2030) (\$MN)
- Table 16 Global Aircraft Strut Market Outlook, By Aluminum (2022-2030) (\$MN)
- Table 17 Global Aircraft Strut Market Outlook, By Steel (2022-2030) (\$MN)
- Table 18 Global Aircraft Strut Market Outlook, By Composite (2022-2030) (\$MN)
- Table 19 Global Aircraft Strut Market Outlook, By Titanium (2022-2030) (\$MN)
- Table 20 Global Aircraft Strut Market Outlook, By Other Materials (2022-2030) (\$MN)
- Table 21 Global Aircraft Strut Market Outlook, By Application (2022-2030) (\$MN)
- Table 22 Global Aircraft Strut Market Outlook, By Landing Gear (2022-2030) (\$MN)
- Table 23 Global Aircraft Strut Market Outlook, By Nose Landing Gear (2022-2030) (\$MN)
- Table 24 Global Aircraft Strut Market Outlook, By Main Landing Gear (2022-2030) (\$MN)
- Table 25 Global Aircraft Strut Market Outlook, By Tail Struts (2022-2030) (\$MN)
- Table 26 Global Aircraft Strut Market Outlook, By Wing Struts (2022-2030) (\$MN)
- Table 27 Global Aircraft Strut Market Outlook, By Other Applications (2022-2030) (\$MN)
- Table 28 Global Aircraft Strut Market Outlook, By End User (2022-2030) (\$MN)
- Table 29 Global Aircraft Strut Market Outlook, By Original Equipment Manufacturers (OEMs) (2022-2030) (\$MN)
- Table 30 Global Aircraft Strut Market Outlook, By Aftermarket (2022-2030) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

I would like to order

Product name: Aircraft Strut Market Forecasts to 2030 – Global Analysis By Product (Shock Struts, Non-shock Struts, Pneumatic Struts, Hydraulic Struts and Other Products), Aircraft Type, Material, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/AA50BEF8ED23EN.html>

Price: US\$ 4,150.00 (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/AA50BEF8ED23EN.html>