+357 96 030922
info@marketpublishers.com

Aircraft Potted-In Inserts Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Aircraft Type (Narrow-Body Aircraft, Wide-Body Aircraft, Regional Aircraft, and General Aviation), By Application Type (Galleys Panels, Lavatory Panels, Stowage Bin Panels, Floor Panels, Cabin Linings, Cargo Liners, and Others), By Material Type (Aluminum, Steel, Plastics, and Others), By Region & Competition, 2021-2031F

https://marketpublishers.com/r/A98700020A87EN.html
Date: January 2026
Pages: 180
Price: US$ 4,500.00 (Single User License)
ID: A98700020A87EN

Abstracts

The Global Aircraft Potted-In Inserts Market is projected to expand from USD 52.74 Million in 2025 to USD 90.32 Million by 2031, registering a CAGR of 9.38%. These specialized fasteners are critical for establishing durable threaded points within honeycomb sandwich structures, predominantly found in aircraft flooring and interiors. By enabling the secure attachment of components to lightweight composite panels without damaging the structural core, these inserts play a vital role in modern aviation. The market is largely driven by the aerospace sector's focus on weight reduction to improve fuel efficiency, which demands the widespread use of composite sandwich panels, as well as a recovery in aircraft production rates. Data from the General Aviation Manufacturers Association indicates that in 2025, the value of airplane deliveries for 2024 rose by 14.3% to $26.7 billion, reflecting strong production activity that fuels demand for these structural elements.

Despite this growth, the market contends with substantial obstacles related to supply chain stability. Fluctuations in raw material availability and a scarcity of skilled labor have interrupted production schedules for both original equipment manufacturers and

+357 96 030922
info@marketpublishers.com

tier-one suppliers. These logistical hurdles often result in delays for aircraft retrofitting and completion projects, creating uncertainty in inventory management for fastener suppliers. To ensure consistent delivery timelines, manufacturers must successfully navigate these constraints, as the failure to procure essential small-part components like potted-in inserts can halt progress on the broader assembly line and delay the final delivery of aircraft.

Market Driver

The expansion of the global commercial aircraft fleet acts as a primary foundation for the demand for potted-in inserts, given their ubiquity in honeycomb composite panels used for galleys, stowage bins, and flooring. As original equipment manufacturers accelerate production to meet delivery goals, the sourcing of structural fasteners has intensified to guarantee the structural integrity of lightweight interior designs. This trajectory is supported by major industry projections predicting long-term requirements; for instance, Boeing's 'Commercial Market Outlook 2024' estimates the aviation industry will need nearly 44,000 new commercial airplanes through 2043 to address traffic growth and replacement needs. This significant increase in airframes directly drives a sustained volume of insert installations, further reinforced by a recovery in air travel, with the International Air Transport Association noting a 10.4% increase in global passenger traffic for the full year of 2024 compared to the prior year.

Additionally, the surging demand for cabin interior modernization and retrofitting projects acts as a crucial catalyst, especially as airlines look to update aging fleets and incorporate premium economy cabins. Retrofitting entails significant reconfiguration of cabin layouts, necessitating the removal and re-installation of seats, lavatories, and monuments, all of which depend on potted-in inserts for secure attachment to bulkheads and floorboards without compromising the core. High-profile refurbishment initiatives illustrate the magnitude of this aftermarket opportunity; according to a May 2024 report by Aviation Business Middle East, Emirates expanded its retrofit program to cover 191 aircraft, increasing its investment to refurbish an additional 71 frames. Such comprehensive modernization efforts ensure a steady revenue stream for insert manufacturers that extends beyond the cyclical patterns of new aircraft manufacturing.

Market Challenge

Supply chain instability, driven by acute skilled labor shortages and volatility in raw materials, represents a significant barrier to the Global Aircraft Potted-In Inserts Market. Because these specialized fasteners are vital for interior installation, any manufacturing

+357 96 030922
info@marketpublishers.com

disruptions create immediate bottlenecks during the final phases of aircraft assembly. When suppliers of inserts fail to maintain consistent output due to resource limitations, original equipment manufacturers are compelled to postpone completion and retrofitting schedules. This unpredictability hinders fastener companies from fulfilling potential market orders, as production lines are forced to halt while awaiting these small yet essential structural components.

The consequences of these logistical constraints are measurable and highlight a growing disparity between industry demand and execution capabilities. The failure to source critical parts prevents manufacturers from completing airframes, resulting in unrealized revenue. According to the International Air Transport Association, the backlog for global commercial aircraft hit a record 17,000 units in 2024, emphasizing the severity of these production delays. This buildup of unfilled orders indicates that, despite strong financial interest, the market's physical expansion is being actively curtailed by the supply chain's failure to deliver essential items, such as potted-in inserts, in a timely manner.

Market Trends

The adoption of automated potting and installation systems is fundamentally transforming production lines by substituting labor-intensive manual methods with high-precision robotic dispensers. This technological evolution addresses the essential requirement for consistency in adhesive placement and mixing, ensuring uniform bond strength within honeycomb sandwich structures while notably shortening cycle times. Manufacturers are heavily investing in these upgrades to mitigate risks linked to human error and stabilize output quality during critical fastener integration. This shift toward industrial modernization is evidenced by recent investment trends; the Association for Manufacturing Technology reported in February 2025 that total orders for manufacturing technology from the aerospace sector rose by nearly 32% in 2024, signaling a decisive shift toward automated production capabilities.

Concurrently, the utilization of additive manufacturing for complex geometries allows engineers to overcome the constraints of traditional machining for potted-in inserts. This trend facilitates the creation of inserts featuring irregular exterior shapes and optimized internal lattice structures that interlock more effectively with curing compounds, thereby minimizing component weight while maximizing pull-out strength. The industry is increasingly validating this approach to fabricate specialized fasteners suited for unique honeycomb core configurations where standard cylindrical inserts are ineffective. The momentum behind this method is robust; a June 2024 report by Protolabs on aerospace

+357 96 030922
info@marketpublishers.com

manufacturing noted that 3D printing has become a dominant technological focus, with 74.09% of surveyed professionals identifying it as a key manufacturing methodology currently in use.

Key Market Players

Precision Castparts Corp.

Arconic Corporation

Lisi Aerospace S.A.S.

Penn Engineering & Manufacturing Corp.

The Young Engineers, Inc.

Witten Company Inc.

TriMas Corporation

Avantus Aerospace, Inc.

Stanley Black and Decker Inc.

Alcoa Corporation

Report Scope

In this report, the Global Aircraft Potted-In Inserts Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Aircraft Potted-In Inserts Market, By Aircraft Type

Narrow-Body Aircraft

Wide-Body Aircraft

+357 96 030922
info@marketpublishers.com

Regional Aircraft

and General Aviation

Aircraft Potted-In Inserts Market, By Application Type

Galleys Panels

Lavatory Panels

Stowage Bin Panels

Floor Panels

Cabin Linings

Cargo Liners

and Others

Aircraft Potted-In Inserts Market, By Material Type

Aluminum

Steel

Plastics

and Others

Aircraft Potted-In Inserts Market, By Region

North America

United States

Canada

Mexico

+357 96 030922
info@marketpublishers.com

- Europe
  - France
  - United Kingdom
  - Italy
  - Germany
  - Spain
- Asia Pacific
  - China
  - India
  - Japan
  - Australia
  - South Korea
- South America
  - Brazil
  - Argentina
  - Colombia
- Middle East & Africa
  - South Africa
  - Saudi Arabia

+357 96 030922
info@marketpublishers.com

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Aircraft Potted-In Inserts Market.

Available Customizations:

Global Aircraft Potted-In Inserts Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

6. NORTH AMERICA AIRCRAFT POTTED-IN INSERTS MARKET OUTLOOK

7. EUROPE AIRCRAFT POTTED-IN INSERTS MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

8. ASIA PACIFIC AIRCRAFT POTTED-IN INSERTS MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

9. MIDDLE EAST & AFRICA AIRCRAFT POTTED-IN INSERTS MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

10. SOUTH AMERICA AIRCRAFT POTTED-IN INSERTS MARKET OUTLOOK

11. MARKET DYNAMICS

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

17. ABOUT US & DISCLAIMER

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Aircraft Potted-In Inserts Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Aircraft Type (Narrow-Body Aircraft, Wide-Body Aircraft, Regional Aircraft, and General Aviation), By Application Type (Galleys Panels, Lavatory Panels, Stowage Bin Panels, Floor Panels, Cabin Linings, Cargo Liners, and Others), By Material Type (Aluminum, Steel, Plastics, and Others), By Region & Competition, 2021-2031F

Product link: https://marketpublishers.com/r/A98700020A87EN.html

Price: US$ 4,500.00 (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/A98700020A87EN.html