Global Structural Core Materials Market: Information by Product (Foam, Balsa, and Honeycomb), Skin Type (GFRP, CFRP, and NFRP), End-Use Industry (Aerospace, Automotive, Wind Energy, Marine), and Region—Forecast till 2023

Structural core materials are used in composites mainly to enhance their physical properties. The most commonly used structural core materials are foam, balsa, and honeycomb. Balsa has a high aspect ratio and is extensively used in boat hulls, navy vessels, military aircraft, and industrial tanks, among others. Honeycomb materials include aluminum, paper, polypropylene, and impregnated fiberglass. Honeycomb is used in applications where extremely lightweight panels are required. According to MRFR analysis, the global structural core materials market is projected to grow at a CAGR of over 5% during the forecast period. Market growth is driven by increasing product demand from the automobile and aerospace industries. Moreover, with rising international trade, the marine sector has seen substantial growth in recent times which, in turn, is projected to have a positive impact on the global structural core materials market. The growing demand for lightweight materials in aircraft, automobiles, and marine vessels due to their high fuel efficiency is expected to be a major factor driving market growth.

On the basis of product type, the honeycomb segment was the largest in 2017 and is expected to remain so during the forecast period. The growing use of honeycomb in lightweight construction applications and industries such as aerospace is contributing to the growth of the segment. On the basis of skin type, the carbon fiber reinforced polymer segment is anticipated to generate the highest revenue during the assessment period. These composites possess excellent properties such as high tensile strength, low thermal expansion, and stiffness which results in their applications in several end-use industries.

Global Structural Core Materials Market Share, by Product (%)
The market in Asia-Pacific is expected to be the fastest-growing regional market. Increasing automobile production in the region is acting as a major driver for the growth of the market. Additionally, the growing construction industry, mainly in India and China, is also driving the demand for structural core materials. The increasing inclination toward green energy has led to the development of the wind energy industry, in turn, fueling the demand for structural core materials in the region. For instance, according to the Indian Ministry of New and Renewable Energy, the country is ranked fourth in the global wind power installed capacity and has a renewable energy target of 175 GW by the end of 2022.

North America was the largest market in 2017 and is expected to maintain its dominance during the review period. The presence of developed aerospace and automobile industries contributes substantially to the growth of the market mainly in the U.S. and Canada. Moreover, increasing government spending in the construction sector is positively affecting product demand. According to the United States Census Bureau, total construction spending in the U.S. was USD 1,191,812 in 2016 which increased to 1,246,000 by the end of 2017.

Segmentation

The global structural core materials market has been segmented by product, skin type, end-use industry, and region. On the basis of product, the market has been segregated into foam, balsa, and honeycomb. On the basis of skin type, the market has been segmented into glass fiber reinforced polymer (GFRP), carbon fiber reinforced polymer (CFRP), natural fiber reinforced polymer (NFRP), and others. On the basis of end-use industry, the market has been further segregated into aerospace, automotive, wind energy, marine, construction, and others. Based on region, the market has been segregated into North America, Europe, Asia-Pacific, Latin America, and the Middle East & Africa.

Key Players

Some of the key players in the global structural core materials market are Diab Group (Sweden), Hexcel Corporation (U.S.), Schweiter Technologies (Switzerland), Euro Composites (Luxembourg), Gurit Holding (Switzerland), The Gill Corporation (U.S.), Changzhou Tiansheng New Materials Co. Ltd. (China), Plascore Incorporated (U.S.), Armacell International (Luxembourg), and Evonik Industries (Germany).

Intended Audience

- Structural core materials manufacturers
- Traders and distributors of structural core materials
- Research and development institutes
- Potential investors
- Raw material suppliers
- Nationalized laboratories
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