Description:

Global Advanced Composites Market Research Report: Information by Resin Type (Advanced Thermosetting Resin (Epoxy, Acrylic, Phenolic, Polyurethane, Vinyl Ester, and Others), Advanced Thermoplastic Resin [Polyphenylene Sulfide (PPS), Polyetherimide (PEI), Polyetheretherketone (PEEK)], and Others), Fiber Type (Carbon Fiber Composites, Aramid Fiber Composites, S-Glass Composites, and Others), Application (Aerospace & Defense, Wind Energy, Automotive, Sports Equipment, Consumer Goods, Construction, Medical, and Others), and Region (Asia-Pacific, North America, Europe, Latin America, and Middle East & Africa)—Forecast till 2025

According to MRFR analysis, the global advanced composites market is estimated to be valued at over USD 20 billion and is projected to grow with 9% CAGR during the forecast period, 2019–2025. Composites are materials that are synthesized by a combination of two or more constituent elements having different physical or chemical properties. The resultant material or composites acquire characteristics, which are different from that of the constituent materials. The composite materials that are formed are lighter, stronger, and cost-effective. Advanced composites, also known as polymer matrix composites, are a combination of polymeric resins, which are inserted in a resin matrix. These types of composites exhibit extraordinary strength, excellent mechanical resistance, and high stiffness and modulus of elasticity. Additionally, owing to an excellent thermal conductivity and dimensional ability, along with lightweight and electrical properties, the advanced composites find several applications in automotive, aerospace & defense, and consumer electronics industry. Moreover, the strength-to-weight ratio of the advanced composites is higher than that of traditional materials, which favors the growth in its demand for manufacturing the aircraft engines, wind-turbine, and marine applications.

The major factors driving the growth of the global advanced composites market are the surging demand for the product from rapidly growing aerospace & defense and automotive industries and increasing the use of stiff yet lightweight materials in sports, consumer electronics, and vehicles. According to the estimates of MRFR, the global aerospace & defense market is expected to grow at a robust CAGR of more than 10% on account of increasing demand for both commercial and fighter jets and the increasing number of air passengers across the globe. This is expected to fuel the demand for advanced composites during the forecast period. In addition, the increasing focus on the generation and use of renewable energy to reduce the global carbon footprint and global warming in turn, the wind energy rapidly gaining popularity in the emerging economies of Asia-Pacific. The global composite market is projected to reach over USD 110 billion during the review period on account of the growing demand from major end-use industries. Furthermore, the major manufacturers of the advanced composites are heavily investing in the production of thermoplastic composites to meet increasing demand from diverse end-use industries.

However, the cost-intensive nature of thermoplastic composite is likely to hamper the market growth in the coming years.

Regional Analysis

The global advanced composites market has been segmented into five key regions—North America, Europe, Asia-Pacific, the Middle East & Africa, and Latin America. Asia-Pacific accounted for the largest market share in 2018. This is mainly attributed to the high demand for composite materials
automotive, consumer electronics, and wind turbine applications. Additionally, the favorable
government policies towards the growth of the renewable energy and construction industry are also
driving the growth of this regional market for advanced composites. North America held a substantial
share of the market in 2018 and is expected grow at a healthy CAGR during the assessment period
owing to increasing demand from the well-established aerospace & defense and automotive industry
in the regional market. Europe is another major regional market, wherein the growth of the market is
primarily driven by rising demand for the product in the automotive and energy industries.

Segmentation

The global advanced composites market is segmented based on fiber type, resin type, application,
and region.
By resin type, the global market is divided into advanced thermosetting resin and advanced
thermoplastic resin. The advanced thermosetting resin segment is further sub-segmented into epoxy,
acrylic, phenolic, polyurethane, vinyl ester, and others. The advanced thermoplastic resin is further
categorized into polyphenylene sulfide (PPS), polyetherimide (PEI), polyetheretherketone (PEEK),
and others.
Based on fiber type, the global market is segmented into carbon fiber composites, aramid fiber
composites, s-glass composites, and others.
Based on application, the global market is segmented into aerospace & defense, wind energy,
automotive, sports equipment, consumer goods, construction, medical, and others.
The advanced composites market had been studied with respect to five key regions—Asia-Pacific,
North America, Europe, Latin America, and the Middle East & Africa.

Key Players

The prominent players in the global advanced composites market are 3M (US), Axalta Coating
Systems, LLC (US), PPG Industries (US), DowAksa Advanced Composites Holdings BV (The
Netherlands), TEIJIN LIMITED (Japan), Koninklijke Ten Cate B.V. (the Netherlands), Toray
Industries Inc. (Japan), Hexcel Corporation (US), SGL Carbon (Germany), Cytec Solvay Group (US),
Huntsman International, LLC (US), and Mitsubishi Chemical Holding Corporation (Japan).

Intended Audience

- Advanced composites manufacturers
- Traders and distributors of advanced composites
- Research and development institutes
- Potential investors
- Raw material suppliers
- Nationalized laboratory

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