Growth Opportunities for Ceramics Matrix Composites in the Global Aerospace Industry 2016-2021: Trends, Forecasts and Market Analysis

Description: According to a new market report, the future of the aerospace CMC industry looks positive with opportunities in commercial aircraft, defense, and spacecraft applications. The global aerospace CMC industry is forecast to grow at a CAGR of 8.9% from 2016 to 2021. The major growth drivers of this market are increasing penetration of CMC in the future generation aircraft and spacecraft and its superior thermo-mechanical properties. CMCs have been developed to achieve a damage tolerant quasi-ductile fracture behavior and to maintain all other advantages of monolithic ceramics at high temperatures; and offer better performance than traditional inorganic fiber-polymer composites.

In this market, Oxide/Oxide, SiC/SiC and Carbon/Carbon are the three types of CMC. The author predicts that the demand for the SiC/SiC CMC is likely to experience the highest growth in the forecast period supported by its excellent mechanical properties, such as oxidation resistance, corrosion resistance, and low density even at high temperatures.

Within the aerospace CMC market, commercial aircraft is expected to remain the largest market with the highest growth during forecast period due to increasing usage of CMC materials in commercial aircraft like A320Neo, B737Max, and C919 and aircraft brake disks.

By component, landing gear is expected to remain the largest market for CMC due to the usage of CMC in aircraft brakes. CMC consumption in aircraft engine is expected to witness the highest growth during the forecast period due to increasing usage of CMC in aero engines.

North America is expected to remain the largest as well as the highest growing region during the forecast period due to presence of major aircraft manufacturers, increasing penetration of CMC in aircraft, and usage of CMC in the hotter sections of engines. Recently, GE has started using CMC in shrouds of LeapX engine and Rolls-Royce has plans to use CMC in shrouds, combustor liner, airfoils in the upcoming engines.

For market expansion, the report suggests innovation and new product development, where the unique properties of CMC can be capitalized. The report further suggests the development of partnerships with customers to create win-win situations and the development of performance-driven solutions for end users.

Emerging trends, which have a direct impact on the dynamics of the industry, include application of CMC materials in heating areas, usage of CMCs in aerospace industry to reduce NOx and CO2 emission, and usage of CMC to reduce operating cost. 3M, GE Aviation, SGL Carbon SE, COI Ceramics Inc, and CoorsTek Inc. are among the major supplier of CMC in the aerospace industry. Some companies are opting for M&A as a strategic initiative for driving growth.

The author has analyzed ceramic matrix composites (CMC) in the global aerospace industry by CMC type, application type, and region, and has come up with a comprehensive research report, “Growth Opportunities for Ceramic Matrix Composites (CMC) in the Global Aerospace Industry 2016-2021: Trend, Forecast, and Market Analysis” The report serves as a springboard for growth strategy, as it provides a comprehensive data and analysis on trends, key drivers, and directions. The study includes a forecast for the ceramic matrix composites (CMC) in the global aerospace industry through 2021, segmented by CMC type, application type, and region as follows:

By CMC type (Value $ Million from 2010 to 2021)
- Oxide/Oxide
- SiC/SiC
- Carbon/Carbon & Others

By application type (Value $ Million from 2010 to 2021)
- Commercial Aircraft
- Defense
- Space
By region (Value $ Million from 2010 to 2021)
- North America
- Europe
- Rest of World (Including APAC)

This report answers following 11 key questions:
Q.1. What are some of the most promising, high-growth opportunities for ceramics matrix composites in the global aerospace industry by material type, components, applications and regions?
Q.2. Which product/segments will grow at a faster pace and why?
Q.3. Which region will grow at a faster pace and why?
Q.4. What are the key factors affecting market dynamics? What are the drivers and challenges of the market?
Q.5. What are the business risks and threats of this market?
Q.6. What are the emerging trends in this market and reasons behind them?
Q.7. What are some changing demands of customers in this market?
Q.8. What are the new developments in the market? Which companies are leading these developments?
Q.9. Who are the major players in this market? What strategic initiatives are being implemented by key players for business growth?
Q.10. How is the competitive rivalry and threat of substitution in this market?
Q.11. What are M&A activities in the last 5 years in this market? What reasons to these activities and how have they impacted the industry?

This unique report will provide you with valuable information, insights, and tools needed to identify new growth opportunities and operate your business successfully in this market. This report will save hundreds of hours of your own personal research time and will significantly benefit you in expanding your business in this market. In today’s stringent economy, you need every advantage that you can find.

To make business, investment, and strategic decisions, you need timely, useful information. This market report fulfills this core need and is an indispensable reference guide for multinational materials suppliers, product manufacturers, investors, executives, distributors, and many more that operate in this market.

Some of the features of “Growth Opportunities for Ceramics Matrix Composites in the Global Aerospace Industry 2016-2021: Trends, Forecast, and Market Analysis” include:
- Market size estimates: Ceramics matrix composites in global aerospace industry size estimation in value ($M) shipment.
- Trend and forecast analysis: Ceramics matrix composites in global aerospace industry trend (2010-2015) and forecast (2016-2021) by region and segment.
- Segmentation analysis: Ceramics matrix composites in global aerospace industry size by various CMC material types such as oxide/oxide, SiC/SiC, C/C and others both in terms of value shipment.
- Regional analysis: Ceramics matrix composites in global aerospace industry breakdown by key regions such as North America, Europe, and Rest of World.
- Growth opportunities: Analysis on growth opportunities in different applications and regions.
- Strategic analysis: This includes M&A, new product development, competitive landscape, and expansion strategies of ceramics matrix composites products suppliers in global aerospace industry.
- Emerging applications: Emerging applications of ceramics matrix composites in global aerospace industry in various markets.
- Analysis of competitive intensity of the industry based on Porter's Five Forces model.

Contents:
1. Executive Summary
2. Industry Background and Classifications
   2.1: Introduction
   2.2: The Aerospace Industry
   2.3: Industry Classification
   2.4: Ceramics Matrix Composites in Aerospace Industry
   2.5: Supply Chain
3. Market Trends and Forecast Analysis
   3.1: Market Analysis 2015
3.1.1: CMC Consumption in the Global Aerospace Industry
3.1.2: CMC Consumption in the Global Aerospace Industry by Material Type
3.1.3: CMC Consumption in the Global Aerospace Industry by Application
3.1.4: CMC Consumption in the Global Aerospace Industry by Component
3.1.5: CMC Consumption in the Global Aerospace Industry by Region
3.2: Market Trends from 2010 to 2015
3.2.1: Macroeconomic Trend
3.2.2: CMC Consumption in the Global Aerospace Industry Trend
3.2.3: CMC Consumption in the Global Aerospace Industry Trends by Material Type
3.2.4: CMC Consumption in the Global Aerospace Industry Trend by Application
3.2.5: CMC Consumption in the Global Aerospace Industry Trends by Component
3.2.6: CMC Consumption in the Global Aerospace Industry Trends by Region
3.2.7: Industry Drivers and Challenges
3.3: Market Forecast From 2016-2021
3.3.1: Macroeconomic Forecast
3.3.2: CMC Consumption in the Global Aerospace Industry Forecast
3.3.3: CMC Consumption in the Global Aerospace Industry Forecast by Material Type
3.3.4: CMC Consumption in the Global Aerospace Industry Forecast by Application
3.3.5: CMC Consumption in the Global Aerospace Industry Forecast by Component
3.3.6: CMC Consumption in the Global Aerospace Industry Forecast by Region
4. Competitor Analysis
4.1: Product Portfolio Analysis
4.2: Geographical Reach
4.3: Operational Integration
4.4: Growth Leadership Analysis
4.5: Porter’s Five Forces Analysis
5. Growth Opportunities and Strategic Analysis
5.1: Growth Opportunity Analysis
5.1.1: Growth Opportunities for CMC in the Global Aerospace Industry by Material Type
5.1.2: Growth Opportunities for CMC consumption in the Global Aerospace Industry by Application
5.1.3: Growth Opportunities for CMC Consumption in the Global Aerospace Industry by Components
5.1.4: Growth Opportunities for CMC Consumption in the Global Aerospace Industry by Region
5.2: Emerging Trends for CMC in the Global Aerospace Industry
5.3: Strategic Analysis
5.3.1: Innovations and New Product Development
5.3.2: Expansion Strategies
5.3.3: Product-Market Growth Matrix for CMC in the Aerospace Industry
5.3.4: Mergers and Acquisitions in the Global CMC Aerospace Market
6. Company Profiles of Leading Players
in 2015

Figure 3.7: CMC Distribution (%) in Global Aerospace Industry by Region in 2015
Figure 3.8: CMC Distribution ($ Million) in Global Aerospace Industry Distribution ($ Million) by Region in 2015
Figure 3.9: Global GDP Growth Rate Trend 2010-2015
Figure 3.10: Trend in Commercial Aircraft Deliveries for Boeing and Airbus 20010-2015
Figure 3.11: External Forces Shaping CMC Growth in Aerospace Industry
Figure 3.12: Growth Trend of CMC in Global Aerospace Industry Trends from 2010 to 2015
Figure 3.13: CMC in Global Aerospace Industry ($ Million) Trends by Material Type from 2010 to 2015
Figure 3.14: CMC in Global Aerospace Industry Trends ($ Million) by Application from 2010 to 2015
Figure 3.15: CMC in Global Aerospace Industry Trends ($ Million) by Component from 2010 to 2015
Figure 3.16: CMC in Global Aerospace Industry Trends ($ Million) by Region from 2010 to 2015
Figure 3.17: Drivers and Challenges for CMC in Global Aerospace Industry
Figure 3.18: Forecast of Global GDP Growth Rate 2016-2021
Figure 3.19: Commercial Aircraft Deliveries Forecast from 2016 to 2021
Figure 3.20: Growth Forecast for CMC in Global Aerospace Industry Forecast ($ Million) from 2016 to 2021
Figure 3.21: Growth Forecast for CMC in Global Aerospace Industry Forecast ($ Million) by Material Type from 2016 to 2021
Figure 3.22: Growth Forecast for CMC in Global Aerospace Industry Forecast ($ Million) by Application from 2016 to 2021
Figure 3.23: Growth Forecast for CMC in Global Aerospace Industry by Component from 2016 to 2021
Figure 3.24: Growth Forecast for CMC in Global Aerospace Industry by Region from 2016 to 2021

Chapter 4. Competitor Analysis

Figure 4.1: Geographical Mapping of Major Global Aerospace CMC Suppliers
Figure 4.2: Market Coverage of Aerospace CMC Manufacturers in the Global Aerospace Industry
Figure 4.3: Growth Leadership Matrix of CMC in Global Aerospace Industry
Figure 4.4: Porter's Five Forces Analysis for CMC in the Global Aerospace Industry

Chapter 5. Growth Opportunities and Strategic Analysis

Figure 5.1: Growth Opportunities for CMC Consumption in Global Aerospace Industry by Material Type
Figure 5.2: Growth Opportunities for CMC Consumption in Global Aerospace Industry by Application
Figure 5.3: Growth Opportunities for CMC Consumption in Global Aerospace Industry by Component
Figure 5.4: Growth Opportunities for CMC Consumption in Global Aerospace Industry by Region
Figure 5.5: Emerging Trends for CMC Consumption in Global Aerospace Industry
Figure 5.6: Product- Market Strategy for CMC Consumption in Global Aerospace Industry

List of Tables

Chapter 1. Executive Summary

Table 1.1: CMC in the Global Aerospace Industry Parameters and Attributes

Chapter 2. Industry Background and Classifications

Table 2.1: Ceramics Matrix Composites Properties

Chapter 3. Market Trends and Forecast Analysis

Table 3.1: Market Trends of CMC in Global Aerospace Industry from 2010 to 2015
Table 3.2: Average Growth Rates of CMC Consumption in Global Aerospace Industry for One, Three, and Five Years in Terms of $ Million
Table 3.3: Market Size ($M) and 2014-2015 Growth Rates of CMC in Global Aerospace Industry by Material Type
Table 3.4: Market Size ($M) and Compound Annual Growth Rate 2010-2015 of CMC in Global Aerospace Industry by Material Type
Table 3.5: Market Size ($M) and 2014-2015 Growth Rates of CMC in Global Aerospace Industry by Application
Table 3.6: Market Size ($M) and Compound Annual Growth Rate 2010-2015 of CMC in Global Aerospace Industry by Application
Table 3.7: Market Size ($M) and 2014-2015 Growth Rates of CMC in Global Aerospace Industry by...
Table 3.8: Market Size ($M) and Compound Annual Growth Rate 2010-2015 of CMC in Global Aerospace Industry by Component
Table 3.9: Market Size ($M) and 2014-2015 Growth Rates of CMC in Global Aerospace Industry by Region
Table 3.10: Market Size ($M) and Compound Annual Growth Rate 2010-2015 of CMC in Global Aerospace Industry by Region
Table 3.11: Market Forecast for CMC in Global Aerospace Industry from 2016 to 2021
Table 3.12: Average Growth Rates of CMC in the Global Aerospace Industry for One, Three, and Five Years in Terms of $ Million
Table 3.13 Market Size ($M) and 2015-2016 Growth Rates of CMC in the Global Aerospace Industry by Material Type
Table 3.14: Market Size ($M) and Compound Annual Growth Rate 2016-2021 of CMC in the Global Aerospace Industry by Material Type
Table 3.15: Market Size ($M) and 2015-2016 Growth Rates of CMC in the Global Aerospace Industry by Application
Table 3.16: Market Size ($M) and Compound Annual Growth Rate (2016-2021) of CMC in the Global Aerospace Industry by Application
Table 3.17: Market Size ($M) and 2015-2016 Growth Rates of CMC in the Global Aerospace Industry by Component
Table 3.18 Market Size ($M) and Compound Annual Growth Rate (2016-2021) of CMC in the Global Aerospace Industry by Component
Table 3.19: Market Size ($M) and 2015-2016 Growth Rates of CMC in the Global Aerospace Industry by Region
Table 3.20: Market Size ($M) and Compound Annual Growth Rate (2016-2021) of CMC in the Global Aerospace Industry by Region

Chapter 4. Competitor Analysis
Table 4.1: Product Mapping of CMC Manufacturers Based on CMC Type
Table 4.2: Presence of CMC Manufacturers across the Value Chain

Chapter 5. Growth Opportunities and Strategic Analysis
Table 5.1: Capability Enhancement Activities by Competitors
Table 5.2: Type of Market Expansion Activities by Competitors

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