

# Global Ceramic Matrix Composites Market by Size, by Type, by Application, by Region, History and Forecast 2019-2030

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## Abstracts

Composite materials are comprised of at least two parts: the reinforcement, which provides special mechanical properties such as stiffness or strength, and the matrix material, which holds everything together. Ceramic matrix composites (CMCs) are a special type of composite material in which both the reinforcement (refractory fibers) and matrix material are ceramics. In some cases the same kind of ceramic is used for both parts of the structure, and additional secondary fibers may also be included. Because of this, CMCs are considered a subgroup of both composite materials and ceramics.

Ceramic matrix composites behave much differently from conventional ceramics, and are far different from the high-performance metal alloys that used to be implemented. Like ceramics, they are hard and stable at higher temperatures. But they are also very lightweight (one-third the weight of the nickel superalloys they often replace) and possess significantly greater fracture toughness and thermal shock resistance.

There is an extremely wide range of CMC applications, such as: Heat exchangers, Turbine blades, Stator vanes, High-performance braking systems, Immersion burner tubes, Bulletproof armor, Heating elements, etc. The list of uses is growing quickly, too. CMC components are used in Electrical Engineering, Spaceflight, Aviation, electrical, and electronics industries, just to name a few.

According to APO Research, The global Ceramic Matrix Composites market is projected to grow from US\$ million in 2024 to US\$ million by 2030, at a Compound Annual Growth Rate (CAGR) of % during the forecast period.

GE Aviation, Safran, Rolls-Royce Group and CoorsTek are the top 4 players of Ceramic Matrix Composites, with about 52% market shares.

In terms of production side, this report researches the Ceramic Matrix Composites production, growth rate, market share by manufacturers and by region (region level and country level), from 2019 to 2024, and forecast to 2030.

In terms of consumption side, this report focuses on the sales of Ceramic Matrix Composites by region (region level and country level), by company, by type and by application. from 2019 to 2024 and forecast to 2030.

This report presents an overview of global market for Ceramic Matrix Composites, capacity, output, revenue and price. Analyses of the global market trends, with historic market revenue or sales data for 2019 - 2023, estimates for 2024, and projections of CAGR through 2030.

This report researches the key producers of Ceramic Matrix Composites, also provides the consumption of main regions and countries. Of the upcoming market potential for Ceramic Matrix Composites, and key regions or countries of focus to forecast this market into various segments and sub-segments. Country specific data and market value analysis for the U.S., Canada, Mexico, Brazil, China, Japan, South Korea, Southeast Asia, India, Germany, the U.K., Italy, Middle East, Africa, and Other Countries.

This report focuses on the Ceramic Matrix Composites sales, revenue, market share and industry ranking of main manufacturers, data from 2019 to 2024. Identification of the major stakeholders in the global Ceramic Matrix Composites market, and analysis of their competitive landscape and market positioning based on recent developments and segmental revenues. This report will help stakeholders to understand the competitive landscape and gain more insights and position their businesses and market strategies in a better way.

This report analyzes the segments data by type and by application, sales, revenue, and price, from 2019 to 2030. Evaluation and forecast the market size for Ceramic Matrix Composites sales, projected growth trends, production technology, application and end-user industry.

Descriptive company profiles of the major global players, including GE Aviation, Safran, Rolls-Royce Group, CoorsTek, COI Ceramics, BJS Ceramics GmbH, Composites

Horizons, Ultramet and WPX Faser Keramik, etc.

### Ceramic Matrix Composites segment by Company

GE Aviation

Safran

Rolls-Royce Group

CoorsTek

COI Ceramics

BJS Ceramics GmbH

Composites Horizons

Ultramet

WPX Faser Keramik

Applied Thin Films

Walter E. C. Pritzkow Spezialkeramik

### Ceramic Matrix Composites segment by Type

Oxide

Silicon Carbide

Carbon

Others

### Ceramic Matrix Composites segment by Application

Aviation

Space

Electrical Engineering

Others

### Ceramic Matrix Composites segment by Region

North America

U.S.

Canada

Europe

Germany

France

U.K.

Italy

Russia

Asia-Pacific

China

Japan

South Korea

India

Australia

China Taiwan

Indonesia

Thailand

Malaysia

Latin America

Mexico

Brazil

Argentina

Middle East & Africa

Turkey

Saudi Arabia

UAE

## Study Objectives

1. To analyze and research the global status and future forecast, involving, production, value, consumption, growth rate (CAGR), market share, historical and forecast.
2. To present the key manufacturers, capacity, production, revenue, market share, and Recent Developments.
3. To split the breakdown data by regions, type, manufacturers, and Application.
4. To analyze the global and key regions market potential and advantage, opportunity and challenge, restraints, and risks.

5. To identify significant trends, drivers, influence factors in global and regions.
6. To analyze competitive developments such as expansions, agreements, new product launches, and acquisitions in the market.

### Reasons to Buy This Report

1. This report will help the readers to understand the competition within the industries and strategies for the competitive environment to enhance the potential profit. The report also focuses on the competitive landscape of the global Ceramic Matrix Composites market, and introduces in detail the market share, industry ranking, competitor ecosystem, market performance, new product development, operation situation, expansion, and acquisition. etc. of the main players, which helps the readers to identify the main competitors and deeply understand the competition pattern of the market.
2. This report will help stakeholders to understand the global industry status and trends of Ceramic Matrix Composites and provides them with information on key market drivers, restraints, challenges, and opportunities.
3. This report will help stakeholders to understand competitors better and gain more insights to strengthen their position in their businesses. The competitive landscape section includes the market share and rank (in volume and value), competitor ecosystem, new product development, expansion, and acquisition.
4. This report stays updated with novel technology integration, features, and the latest developments in the market.
5. This report helps stakeholders to gain insights into which regions to target globally.
6. This report helps stakeholders to gain insights into the end-user perception concerning the adoption of Ceramic Matrix Composites.
7. This report helps stakeholders to identify some of the key players in the market and understand their valuable contribution.

### Chapter Outline

Chapter 1: Provides an overview of the Ceramic Matrix Composites market, including product definition, global market growth prospects, production value, capacity, and average price forecasts (2019-2030).

Chapter 2: Analysis key trends, drivers, challenges, and opportunities within the global Ceramic Matrix Composites industry.

Chapter 3: Detailed analysis of Ceramic Matrix Composites market competition landscape. Including Ceramic Matrix Composites manufacturers' output value, output and average price from 2019 to 2024, as well as competition analysis indicators such as origin, product type, application, merger and acquisition information, etc.

Chapter 4: Provides the analysis of various market segments by type, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different market segments.

Chapter 5: Provides the analysis of various market segments by application, covering the market size and development potential of each market segment, to help readers find the blue ocean market in different downstream markets.

Chapter 6: Provides profiles of key players, introducing the basic situation of the main companies in the market in detail, including product production/output, value, price, gross margin, product introduction, recent development, etc.

Chapter 7: Production/Production Value of Ceramic Matrix Composites by region. It provides a quantitative analysis of the market size and development potential of each region in the next six years.

Chapter 8: Consumption of Ceramic Matrix Composites in regional level and country level. It provides a quantitative analysis of the market size and development potential of each region and its main countries and introduces the market development, future development prospects, market space, and production of each country in the world.

Chapter 9: Analysis of industrial chain, including the upstream and downstream of the industry.

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