

Global Ceramic Matrix Composites Market Size, Manufacturers, Opportunities and Forecast to 2030

https://marketpublishers.com/r/GBDEE8DFB142EN.html

Date: April 2024

Pages: 104

Price: US\$ 3,450.00 (Single User License)

ID: GBDEE8DFB142EN

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 was estimated at US\$ million in 2023 and is projected to reach a revised size of US\$ million by 2030, witnessing a CAGR of xx% during the forecast period 2024-2030.

GE Aviation, Safran, Rolls-Royce Group and CoorsTek are the top 4 players of Ceramic



Matrix Composites, with about 52% market shares.

Report Scope

This report aims to provide a comprehensive presentation of the global market for Ceramic Matrix Composites, with both quantitative and qualitative analysis, to help readers develop business/growth strategies, assess the market competitive situation, analyze their position in the current marketplace, and make informed business decisions regarding Ceramic Matrix Composites.

The Ceramic Matrix Composites market size, estimations, and forecasts are provided in terms of sales volume (KG) and revenue (\$ millions), considering 2023 as the base year, with history and forecast data for the period from 2019 to 2030. This report segments the global Ceramic Matrix Composites market comprehensively. Regional market sizes, concerning products by Type, by Application, and by players, are also provided. For a more in-depth understanding of the market, the report provides profiles of the competitive landscape, key competitors, and their respective market ranks. The report also discusses technological trends and new product developments.

Key Companies & Market Share Insights

In this section, the readers will gain an understanding of the key players competing. This report has studied the key growth strategies, such as innovative trends and developments, intensification of product portfolio, mergers and acquisitions, collaborations, new product innovation, and geographical expansion, undertaken by these participants to maintain their presence. Apart from business strategies, the study includes current developments and key financials. The readers will also get access to the data related to global revenue, price, and sales by manufacturers for the period 2019-2024. This all-inclusive report will certainly serve the clients to stay updated and make effective decisions in their businesses. Some of the prominent players reviewed in the research report include:

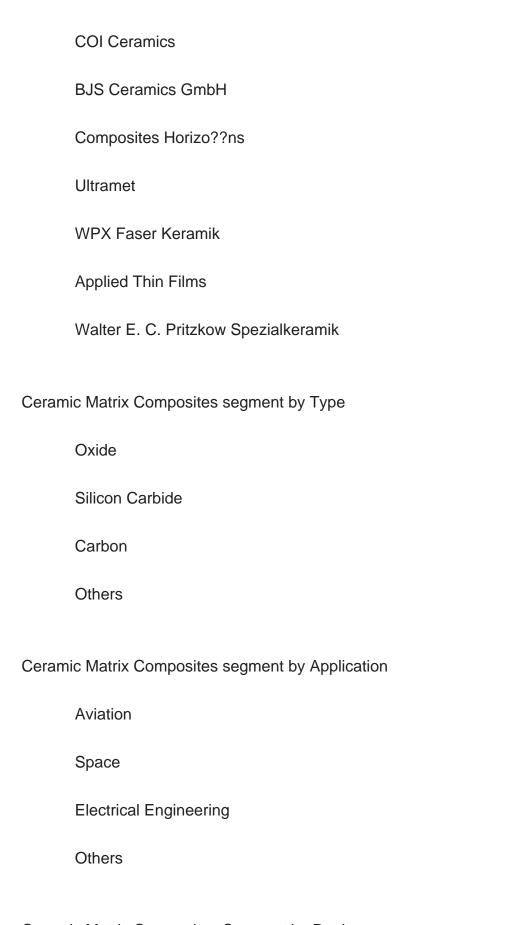
GE Aviation

Safran

Rolls-Royce Group

CoorsTek





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	

Key Drivers & Barriers

High-impact rendering factors and drivers have been studied in this report to aid the readers to understand the general development. Moreover, the report includes restraints and challenges that may act as stumbling blocks on the way of the players. This will assist the users to be attentive and make informed decisions related to business. Specialists have also laid their focus on the upcoming business prospects.

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: Introduces the study scope of this report, executive summary of market segments by type, market size segments for North America, Europe, Asia Pacific, Latin America, Middle East & Africa.

Chapter 2: Introduces the market dynamics, latest developments of the market, the driving factors and restrictive factors of the market, the challenges and risks faced by manufacturers in the industry, and the analysis of relevant policies in the industry.

Chapter 3: Detailed analysis of Ceramic Matrix Composites manufacturers competitive landscape, price, sales, revenue, market share and ranking, latest development plan, merger, and acquisition information, etc.

Chapter 4: Sales, revenue of Ceramic Matrix Composites in regional level. It provides a quantitative analysis of the market size and development potential of each region and introduces the future development prospects, and market space in the world.

Chapter 5: Introduces market segments by application, market size segment for North America, Europe, Asia Pacific, Latin America, Middle East & Africa.

Chapter 6: Provides profiles of key players, introducing the basic situation of the main companies in the market in detail, including product sales, revenue, price, gross margin,



product introduction, recent development, etc.

Chapter 7, 8, 9, 10 and 11: North America, Europe, Asia Pacific, Latin America, Middle East & Africa, sales and revenue by country.

Chapter 12: Analysis of industrial chain, key raw materials, manufacturing cost, and market dynamics.

Chapter 13: Concluding Insights of the report.



Contents

1 MARKET OVERVIEW

- 1.1 Product Definition
- 1.2 Global Market Growth Prospects
- 1.2.1 Global Ceramic Matrix Composites Market Size Estimates and Forecasts (2019-2030)
 - 1.2.2 Global Ceramic Matrix Composites Sales Estimates and Forecasts (2019-2030)
- 1.3 Ceramic Matrix Composites Market by Type
 - 1.3.1 Oxide
 - 1.3.2 Silicon Carbide
 - 1.3.3 Carbon
 - 1.3.4 Others
- 1.4 Global Ceramic Matrix Composites Market Size by Type
- 1.4.1 Global Ceramic Matrix Composites Market Size Overview by Type (2019-2030)
- 1.4.2 Global Ceramic Matrix Composites Historic Market Size Review by Type (2019-2024)
 - 1.4.3 Global Ceramic Matrix Composites Forecasted Market Size by Type (2025-2030)
- 1.5 Key Regions Market Size by Type
- 1.5.1 North America Ceramic Matrix Composites Sales Breakdown by Type (2019-2024)
 - 1.5.2 Europe Ceramic Matrix Composites Sales Breakdown by Type (2019-2024)
- 1.5.3 Asia-Pacific Ceramic Matrix Composites Sales Breakdown by Type (2019-2024)
- 1.5.4 Latin America Ceramic Matrix Composites Sales Breakdown by Type (2019-2024)
- 1.5.5 Middle East and Africa Ceramic Matrix Composites Sales Breakdown by Type (2019-2024)

2 GLOBAL MARKET DYNAMICS

- 2.1 Ceramic Matrix Composites Industry Trends
- 2.2 Ceramic Matrix Composites Industry Drivers
- 2.3 Ceramic Matrix Composites Industry Opportunities and Challenges
- 2.4 Ceramic Matrix Composites Industry Restraints

3 MARKET COMPETITIVE LANDSCAPE BY COMPANY

3.1 Global Top Players by Ceramic Matrix Composites Revenue (2019-2024)



- 3.2 Global Top Players by Ceramic Matrix Composites Sales (2019-2024)
- 3.3 Global Top Players by Ceramic Matrix Composites Price (2019-2024)
- 3.4 Global Ceramic Matrix Composites Industry Company Ranking, 2022 VS 2023 VS 2024
- 3.5 Global Ceramic Matrix Composites Key Company Manufacturing Sites & Headquarters
- 3.6 Global Ceramic Matrix Composites Company, Product Type & Application
- 3.7 Global Ceramic Matrix Composites Company Commercialization Time
- 3.8 Market Competitive Analysis
 - 3.8.1 Global Ceramic Matrix Composites Market CR5 and HHI
- 3.8.2 Global Top 5 and 10 Ceramic Matrix Composites Players Market Share by Revenue in 2023
 - 3.8.3 2023 Ceramic Matrix Composites Tier 1, Tier 2, and Tier

4 CERAMIC MATRIX COMPOSITES REGIONAL STATUS AND OUTLOOK

- 4.1 Global Ceramic Matrix Composites Market Size and CAGR by Region: 2019 VS 2023 VS 2030
- 4.2 Global Ceramic Matrix Composites Historic Market Size by Region
 - 4.2.1 Global Ceramic Matrix Composites Sales in Volume by Region (2019-2024)
 - 4.2.2 Global Ceramic Matrix Composites Sales in Value by Region (2019-2024)
- 4.2.3 Global Ceramic Matrix Composites Sales (Volume & Value), Price and Gross Margin (2019-2024)
- 4.3 Global Ceramic Matrix Composites Forecasted Market Size by Region
- 4.3.1 Global Ceramic Matrix Composites Sales in Volume by Region (2025-2030)
- 4.3.2 Global Ceramic Matrix Composites Sales in Value by Region (2025-2030)
- 4.3.3 Global Ceramic Matrix Composites Sales (Volume & Value), Price and Gross Margin (2025-2030)

5 CERAMIC MATRIX COMPOSITES BY APPLICATION

- 5.1 Ceramic Matrix Composites Market by Application
 - 5.1.1 Aviation
 - 5.1.2 Space
 - 5.1.3 Electrical Engineering
 - 5.1.4 Others
- 5.2 Global Ceramic Matrix Composites Market Size by Application
- 5.2.1 Global Ceramic Matrix Composites Market Size Overview by Application (2019-2030)



- 5.2.2 Global Ceramic Matrix Composites Historic Market Size Review by Application (2019-2024)
- 5.2.3 Global Ceramic Matrix Composites Forecasted Market Size by Application (2025-2030)
- 5.3 Key Regions Market Size by Application
- 5.3.1 North America Ceramic Matrix Composites Sales Breakdown by Application (2019-2024)
- 5.3.2 Europe Ceramic Matrix Composites Sales Breakdown by Application (2019-2024)
- 5.3.3 Asia-Pacific Ceramic Matrix Composites Sales Breakdown by Application (2019-2024)
- 5.3.4 Latin America Ceramic Matrix Composites Sales Breakdown by Application (2019-2024)
- 5.3.5 Middle East and Africa Ceramic Matrix Composites Sales Breakdown by Application (2019-2024)

6 COMPANY PROFILES

- 6.1 GE Aviation
 - 6.1.1 GE Aviation Comapny Information
 - 6.1.2 GE Aviation Business Overview
- 6.1.3 GE Aviation Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
- 6.1.4 GE Aviation Ceramic Matrix Composites Product Portfolio
- 6.1.5 GE Aviation Recent Developments
- 6.2 Safran
 - 6.2.1 Safran Comapny Information
 - 6.2.2 Safran Business Overview
- 6.2.3 Safran Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
 - 6.2.4 Safran Ceramic Matrix Composites Product Portfolio
 - 6.2.5 Safran Recent Developments
- 6.3 Rolls-Royce Group
 - 6.3.1 Rolls-Royce Group Comapny Information
 - 6.3.2 Rolls-Royce Group Business Overview
- 6.3.3 Rolls-Royce Group Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
- 6.3.4 Rolls-Royce Group Ceramic Matrix Composites Product Portfolio
- 6.3.5 Rolls-Royce Group Recent Developments



- 6.4 CoorsTek
 - 6.4.1 CoorsTek Comapny Information
 - 6.4.2 CoorsTek Business Overview
- 6.4.3 CoorsTek Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
- 6.4.4 CoorsTek Ceramic Matrix Composites Product Portfolio
- 6.4.5 CoorsTek Recent Developments
- 6.5 COI Ceramics
 - 6.5.1 COI Ceramics Comapny Information
 - 6.5.2 COI Ceramics Business Overview
- 6.5.3 COI Ceramics Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
 - 6.5.4 COI Ceramics Ceramic Matrix Composites Product Portfolio
- 6.5.5 COI Ceramics Recent Developments
- 6.6 BJS Ceramics GmbH
 - 6.6.1 BJS Ceramics GmbH Comapny Information
 - 6.6.2 BJS Ceramics GmbH Business Overview
- 6.6.3 BJS Ceramics GmbH Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
 - 6.6.4 BJS Ceramics GmbH Ceramic Matrix Composites Product Portfolio
 - 6.6.5 BJS Ceramics GmbH Recent Developments
- 6.7 Composites Horizo??ns
 - 6.7.1 Composites Horizo??ns Comapny Information
 - 6.7.2 Composites Horizo??ns Business Overview
- 6.7.3 Composites Horizo??ns Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
 - 6.7.4 Composites Horizo??ns Ceramic Matrix Composites Product Portfolio
 - 6.7.5 Composites Horizo??ns Recent Developments
- 6.8 Ultramet
 - 6.8.1 Ultramet Comapny Information
 - 6.8.2 Ultramet Business Overview
- 6.8.3 Ultramet Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
- 6.8.4 Ultramet Ceramic Matrix Composites Product Portfolio
- 6.8.5 Ultramet Recent Developments
- 6.9 WPX Faser Keramik
 - 6.9.1 WPX Faser Keramik Comapny Information
 - 6.9.2 WPX Faser Keramik Business Overview
- 6.9.3 WPX Faser Keramik Ceramic Matrix Composites Sales, Revenue and Gross



Margin (2019-2024)

- 6.9.4 WPX Faser Keramik Ceramic Matrix Composites Product Portfolio
- 6.9.5 WPX Faser Keramik Recent Developments
- 6.10 Applied Thin Films
 - 6.10.1 Applied Thin Films Comapny Information
 - 6.10.2 Applied Thin Films Business Overview
- 6.10.3 Applied Thin Films Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
 - 6.10.4 Applied Thin Films Ceramic Matrix Composites Product Portfolio
 - 6.10.5 Applied Thin Films Recent Developments
- 6.11 Walter E. C. Pritzkow Spezialkeramik
 - 6.11.1 Walter E. C. Pritzkow Spezialkeramik Comapny Information
 - 6.11.2 Walter E. C. Pritzkow Spezialkeramik Business Overview
- 6.11.3 Walter E. C. Pritzkow Spezialkeramik Ceramic Matrix Composites Sales, Revenue and Gross Margin (2019-2024)
- 6.11.4 Walter E. C. Pritzkow Spezialkeramik Ceramic Matrix Composites Product Portfolio
- 6.11.5 Walter E. C. Pritzkow Spezialkeramik Recent Developments

7 NORTH AMERICA BY COUNTRY

- 7.1 North America Ceramic Matrix Composites Sales by Country
- 7.1.1 North America Ceramic Matrix Composites Sales Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030
 - 7.1.2 North America Ceramic Matrix Composites Sales by Country (2019-2024)
- 7.1.3 North America Ceramic Matrix Composites Sales Forecast by Country (2025-2030)
- 7.2 North America Ceramic Matrix Composites Market Size by Country
- 7.2.1 North America Ceramic Matrix Composites Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030
- 7.2.2 North America Ceramic Matrix Composites Market Size by Country (2019-2024)
- 7.2.3 North America Ceramic Matrix Composites Market Size Forecast by Country (2025-2030)

8 EUROPE BY COUNTRY

- 8.1 Europe Ceramic Matrix Composites Sales by Country
- 8.1.1 Europe Ceramic Matrix Composites Sales Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030



- 8.1.2 Europe Ceramic Matrix Composites Sales by Country (2019-2024)
- 8.1.3 Europe Ceramic Matrix Composites Sales Forecast by Country (2025-2030)
- 8.2 Europe Ceramic Matrix Composites Market Size by Country
- 8.2.1 Europe Ceramic Matrix Composites Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030
- 8.2.2 Europe Ceramic Matrix Composites Market Size by Country (2019-2024)
- 8.2.3 Europe Ceramic Matrix Composites Market Size Forecast by Country (2025-2030)

9 ASIA-PACIFIC BY COUNTRY

- 9.1 Asia-Pacific Ceramic Matrix Composites Sales by Country
- 9.1.1 Asia-Pacific Ceramic Matrix Composites Sales Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030
- 9.1.2 Asia-Pacific Ceramic Matrix Composites Sales by Country (2019-2024)
- 9.1.3 Asia-Pacific Ceramic Matrix Composites Sales Forecast by Country (2025-2030)
- 9.2 Asia-Pacific Ceramic Matrix Composites Market Size by Country
- 9.2.1 Asia-Pacific Ceramic Matrix Composites Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030
 - 9.2.2 Asia-Pacific Ceramic Matrix Composites Market Size by Country (2019-2024)
- 9.2.3 Asia-Pacific Ceramic Matrix Composites Market Size Forecast by Country (2025-2030)

10 LATIN AMERICA BY COUNTRY

- 10.1 Latin America Ceramic Matrix Composites Sales by Country
- 10.1.1 Latin America Ceramic Matrix Composites Sales Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030
 - 10.1.2 Latin America Ceramic Matrix Composites Sales by Country (2019-2024)
- 10.1.3 Latin America Ceramic Matrix Composites Sales Forecast by Country (2025-2030)
- 10.2 Latin America Ceramic Matrix Composites Market Size by Country
- 10.2.1 Latin America Ceramic Matrix Composites Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030
 - 10.2.2 Latin America Ceramic Matrix Composites Market Size by Country (2019-2024)
- 10.2.3 Latin America Ceramic Matrix Composites Market Size Forecast by Country (2025-2030)

11 MIDDLE EAST AND AFRICA BY COUNTRY



- 11.1 Middle East and Africa Ceramic Matrix Composites Sales by Country
- 11.1.1 Middle East and Africa Ceramic Matrix Composites Sales Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030
- 11.1.2 Middle East and Africa Ceramic Matrix Composites Sales by Country (2019-2024)
- 11.1.3 Middle East and Africa Ceramic Matrix Composites Sales Forecast by Country (2025-2030)
- 11.2 Middle East and Africa Ceramic Matrix Composites Market Size by Country
- 11.2.1 Middle East and Africa Ceramic Matrix Composites Market Size Growth Rate (CAGR) by Country: 2019 VS 2023 VS 2030
- 11.2.2 Middle East and Africa Ceramic Matrix Composites Market Size by Country (2019-2024)
- 11.2.3 Middle East and Africa Ceramic Matrix Composites Market Size Forecast by Country (2025-2030)

12 VALUE CHAIN AND SALES CHANNELS ANALYSIS

- 12.1 Ceramic Matrix Composites Value Chain Analysis
 - 12.1.1 Ceramic Matrix Composites Key Raw Materials
 - 12.1.2 Key Raw Materials Price
 - 12.1.3 Raw Materials Key Suppliers
 - 12.1.4 Manufacturing Cost Structure
- 12.1.5 Ceramic Matrix Composites Production Mode & Process
- 12.2 Ceramic Matrix Composites Sales Channels Analysis
 - 12.2.1 Direct Comparison with Distribution Share
 - 12.2.2 Ceramic Matrix Composites Distributors
 - 12.2.3 Ceramic Matrix Composites Customers

13 CONCLUDING INSIGHTS

14 APPENDIX

- 14.1 Reasons for Doing This Study
- 14.2 Research Methodology
- 14.3 Research Process
- 14.4 Authors List of This Report
- 14.5 Data Source
- 14.5.1 Secondary Sources



14.5.2 Primary Sources14.6 Disclaimer



I would like to order

Product name: Global Ceramic Matrix Composites Market Size, Manufacturers, Opportunities and

Forecast to 2030

Product link: https://marketpublishers.com/r/GBDEE8DFB142EN.html

Price: US\$ 3,450.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/GBDEE8DFB142EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970



