

# Ceramic Roller Bearings Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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# **Abstracts**

The global ceramic roller bearings market size reached US\$ 375.4 Million in 2022. Looking forward, IMARC Group expects the market to reach US\$ 626.2 Million by 2028, exhibiting a growth rate (CAGR) of 9.1% during 2023-2028.

Ceramic roller bearings are designed to carry heavy loads while minimizing friction by using rolling cylindrical elements. These roller bearings are composed of different materials, such as silicon nitride, zirconium oxide, aluminum oxide, and silicon carbide. Ceramic roller bearings exhibit low thermal conductivity, enhanced electrical insulation, better dimensional stability, improved water resistance, etc. As a result, they find extensive applications across diverse industries, such as railways, power generation, aerospace, automotive, marine, etc.

The elevating levels of industrialization along with the increasing penetration of automation trends for heavy-duty applications are propelling the demand for ceramic roller bearings. Furthermore, the growing shift from conventional stainless-steel bearings towards ceramic-based alternatives for higher precision, lower friction, improved wear and tear resistance, etc., is also driving the global market. Apart from this, a significant growth in the automotive industry is catalyzing the adoption of ceramic roller bearings in passenger cars and commercial vehicles. In line with this, the rising demand for lightweight materials in automotive components has led to the integration of both stainless steel and ceramic roller bearings that offer high-temperature resistance and enhanced fuel efficiency. Moreover, the increasing adoption of ceramic roller bearings in manufacturing rail and marine equipment based on excellent electrical insulation and better suitability in highly corrosive environments is also propelling the market growth. Additionally, several manufacturers are focusing on improving the



performance of ceramic roller bearings by deploying advanced seal and lubrication technologies, which will further continue to drive the market in the coming years.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global ceramic roller bearings market report, along with forecasts at the global and regional level from 2023-2028. Our report has categorized the market based on type, product type and application.

Breakup by Type:

Silicon Nitride Zirconium Oxide Others

Breakup by Product Type:

Hybrid Ceramic Roller Bearings Full Ceramic Roller Bearings

Breakup by Application:

Automotive and Railways Industrial and Mechanical Equipment Power Generation Aerospace Others

Breakup by Region:

China Europe United States Japan Rest of Asia Pacific Others

Competitive Landscape:



The competitive landscape of the industry has also been examined with some of the key players being AB SKF, Cerabea Co. Ltd., CeramicSpeed, CeramTec GmbH, Emerson Bearing Company, Hentec Oy Ab, JTEKT Corporation, NSK Ltd., Ortech Advanced Ceramics, Schaeffler Technologies AG & Co. KG and The Timken Company.

Key Questions Answered in This Report: How has the global ceramic roller bearings market performed so far and how will it perform in the coming years? What has been the impact of COVID-19 on the global ceramic roller bearings market? What are the key regional markets? What is the breakup of the market based on the type? What is the breakup of the market based on the product type? What is the breakup of the market based on the application? What are the various stages in the value chain of the industry? What are the key driving factors and challenges in the industry? What is the structure of the global ceramic roller bearings market and who are the key players? What is the degree of competition in the industry?



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