

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

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## Abstracts

### Market Overview:

The global ceramic ball bearings market size reached US\$ 1,202.3 Million in 2022. Looking forward, IMARC Group expects the market to reach US\$ 1,903.7 Million by 2028, exhibiting a growth rate (CAGR) of 8.18% during 2023-2028.

Ceramic ball bearings are currently gaining traction around the world as they are superior and more durable than stainless-steel bearings in various aspects. Ceramic ball bearings require less energy owing to their high speed that aids in reducing friction. Moreover, they also offer high dimensional stability; have smoother and rounder surfaces; and provide the low density and optimum resistance against heat and corrosion. Owing to these advantages offered by ceramic ball bearings, they are widely replacing conventional ball bearings in various applications. Nowadays, hybrid ceramic ball bearings are available in different sizes, specifically designed as per the requirement of the industry to minimize the risk of costly repairs and reduce operating costs.

Ceramic ball bearings are significantly lighter and harder compared to their metal counterparts. They do not rust and can self-lubricate and operate at faster speeds. Also, these ball bearings can tolerate intense physical impact and perform exceptionally well when subjected to harsh conditions such as in high corrosion environments, lack of lubrication and elevated temperatures. Other than this, they have excellent electrical insulation properties, which lessen the menace of electrical erosion and seizure of the rolling elements. Owing to this, these bearings are widely employed in passenger cars, commercial vehicles and numerous automobile components. Besides this,

manufacturers have improved the performance of ball bearings by using the advanced seal, lightweight materials and lubrication technologies. These advancements have created vast opportunities for the leading players operating in the industry.

#### Key Market Segmentation:

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

#### Breakup by Raw Material:

- Zirconium Oxide
- Silicon Nitride
- Others

Ceramic Ball bearings made from zirconium oxide currently exhibits a clear dominance in the market as they have a low-density, and better strength and toughness as compared to the ball bearings made from other materials.

#### Breakup by Product Type:

- Hybrid Ceramic Ball Bearings
- Full Ceramic Ball Bearings

At present, hybrid ceramic ball bearings represent the most preferred product type owing to their availability in a variety of styles and sizes, such as angular contact bearings, radial bearings and insert bearings.

#### Breakup by Application:

- Electric Motor
- Automobile
- Under Water Equipment
- Laboratory Equipment
- Aerospace
- Others

Electric motors represent the largest application segment, accounting for majority of the total global market. This can be accredited to several advantages offered by ceramic ball bearings, which include better acceleration capability, lower friction, improved wear-resistance and higher speed.

#### Regional Insights:

United States

China

Europe

Japan

India

South East Asia

On the geographical front, the United States enjoys the leading position in the market since there is an increasing trend of rebounding productions of motor vehicles and a healthy fixed investment environment in the region.

#### Competitive Landscape:

The competitive landscape of the market has been analyzed in the report, along with the detailed profiles of the major players operating in the industry. Some of the leading players are:

AB SKF

NSK Ltd.

NTN Corporation

Ortech Incorporated

CeramicSpeed

Shanghai Lily Bearing Manufacturing Co., Ltd.

Boca Bearings, Inc.

GMN Bearing USA Ltd.

JTEKT Corporation

#### Key Questions Answered in This Report:

What was the size of the global ceramic ball bearings market in 2022?

What is the expected growth rate of the global ceramic ball bearings market during 2023-2028?

What are the key factors driving the global ceramic ball bearings market?

What has been the impact of COVID-19 on the global ceramic ball bearings market?

What is the breakup of the global ceramic ball bearings market based on the raw material?

What is the breakup of the global ceramic ball bearings market based on the product type?

What is the breakup of the global ceramic ball bearings market based on the application?

What are the key regions in the global ceramic ball bearings market?

Who are the key players/companies in the global ceramic ball bearings market?

## Contents

### **1 PREFACE**

### **2 SCOPE AND METHODOLOGY**

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
  - 2.3.1 Primary Sources
  - 2.3.2 Secondary Sources
- 2.4 Market Estimation
  - 2.4.1 Bottom-Up Approach
  - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

### **3 EXECUTIVE SUMMARY**

### **4 INTRODUCTION**

- 4.1 Overview
- 4.2 Key Industry Trends

### **5 GLOBAL BALL BEARINGS MARKET**

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Market Breakup by Size
- 5.4 Market Breakup by Application
- 5.5 Market Breakup by Region
- 5.6 Market Forecast

### **6 GLOBAL CERAMIC BALL BEARINGS MARKET**

- 6.1 Market Overview
- 6.2 Market Performance
- 6.3 Impact of COVID-19
- 6.4 Market Breakup by Raw Material
- 6.5 Market Breakup by Product Type

- 6.6 Market Breakup by Application
- 6.7 Market Breakup by Region
- 6.8 Market Forecast
- 6.9 SWOT Analysis
  - 6.9.1 Overview
  - 6.9.2 Strengths
  - 6.9.3 Weaknesses
  - 6.9.4 Opportunities
  - 6.9.5 Threats
- 6.10 Value Chain Analysis
  - 6.10.1 Overview
  - 6.10.2 Research and Development
  - 6.10.3 Raw Material Procurement
  - 6.10.4 Manufacturing
  - 6.10.5 Marketing
  - 6.10.6 Distribution
  - 6.10.7 End-Use
- 6.11 Porters Five Forces Analysis
  - 6.11.1 Overview
  - 6.11.2 Bargaining Power of Buyers
  - 6.11.3 Bargaining Power of Suppliers
  - 6.11.4 Degree of Competition
  - 6.11.5 Threat of New Entrants
  - 6.11.6 Threat of Substitutes

## **7 MARKET BREAKUP BY RAW MATERIAL**

- 7.1 Zirconium Oxide
  - 7.1.1 Market Trends
  - 7.1.2 Market Forecast
- 7.2 Silicon Nitride
  - 7.2.1 Market Trends
  - 7.2.2 Market Forecast
- 7.3 Others
  - 7.3.1 Market Trends
  - 7.3.2 Market Forecast

## **8 MARKET BREAKUP BY PRODUCT TYPE**

## 8.1 Hybrid Ceramic Ball Bearings

8.1.1 Market Trends

8.1.2 Market Forecast

## 8.2 Full Ceramic Ball Bearings

8.2.1 Market Trends

8.2.2 Market Forecast

# 9 MARKET BREAKUP BY APPLICATION

## 9.1 Electric Motor

9.1.1 Market Trends

9.1.2 Market Forecast

## 9.2 Automobile

9.2.1 Market Trends

9.2.2 Market Forecast

## 9.3 Under Water Equipment

9.3.1 Market Trends

9.3.2 Market Forecast

## 9.4 Laboratory Equipment

9.4.1 Market Trends

9.4.2 Market Forecast

## 9.5 Aerospace

9.5.1 Market Trends

9.5.2 Market Forecast

## 9.6 Others

9.6.1 Market Trends

9.6.2 Market Forecast

# 10 MARKET BREAKUP BY REGION

## 10.1 United States

10.1.1 Market Trends

10.1.2 Market Forecast

## 10.2 China

10.2.1 Market Trends

10.2.2 Market Forecast

## 10.3 Europe

10.3.1 Market Trends

10.3.2 Market Forecast

## 10.4 Japan

### 10.4.1 Market Trends

### 10.4.2 Market Forecast

## 10.5 India

### 10.5.1 Market Trends

### 10.5.2 Market Forecast

## 10.6 South East Asia

### 10.6.1 Market Trends

### 10.6.2 Market Forecast

## **11 CERAMIC BALL BEARING MANUFACTURING PROCESS**

### 11.1 Product Overview

### 11.2 Raw Material Requirements

### 11.3 Detailed Process Flow

### 11.4 Various Types of Unit Operation Involved

### 11.5 Key Success and Risk Factors

## **12 COMPETITIVE LANDSCAPE**

### 12.1 Market Structure

### 12.2 Key Players

### 12.3 Profiles of Key Players

#### 12.3.1 AB SKF

#### 12.3.2 NSK Ltd.

#### 12.3.3 NTN Corporation

#### 12.3.4 Ortech Incorporated

#### 12.3.5 CeramicSpeed

#### 12.3.6 Shanghai Lily Bearing Manufacturing Co., Ltd.

#### 12.3.7 Boca Bearings, Inc.

#### 12.3.8 GMN Bearing USA Ltd.

#### 12.3.9 JTEKT Corporation



## List Of Tables

### LIST OF TABLES

Table 1: Global: Ball Bearings Market: Key Industry Highlights, 2022 and 2028

Table 2: Global: Ceramic Ball Bearings Market: Key Industry Highlights, 2022 and 2028

Table 3: Global: Ceramic Ball Bearings Market Forecast: Breakup by Raw Material (in Million US\$), 2023-2028

Table 4: Global: Ceramic Ball Bearings Market Forecast: Breakup by Product Type (in Million US\$), 2023-2028

Table 5: Global: Ceramic Ball Bearings Market Forecast: Breakup by Application (in Million US\$), 2023-2028

Table 6: Global: Ceramic Ball Bearings Market Forecast: Breakup by Region (in Million US\$), 2023-2028

Table 7: Global: Ceramic Ball Bearings Market: Competitive Structure

Table 8: Global: Ceramic Ball Bearings Market: Key Players

## List Of Figures

### LIST OF FIGURES

Figure 1: Global: Ceramic Ball Bearings Market: Major Drivers and Challenges

Figure 2: Global: Ball Bearings Market: Sales Value (in Billion US\$), 2017-2022

Figure 3: Global: Ball Bearings Market: Breakup by Size (in %), 2022

Figure 4: Global: Ball Bearings Market: Breakup by Application (in %), 2022

Figure 5: Global: Ball Bearings Market: Breakup by Region (in %), 2022

Figure 6: Global: Ball Bearings Market Forecast: Sales Value (in Billion US\$), 2023-2028

Figure 7: Global: Ceramic Ball Bearings Market: Sales Value (in Million US\$), 2017-2022

Figure 8: Global: Ceramic Ball Bearings Market: Breakup by Raw Material (in %), 2022

Figure 9: Global: Ceramic Ball Bearings Market: Breakup by Product Type (in %), 2022

Figure 10: Global: Ceramic Ball Bearings Market: Breakup by Application (in %), 2022

Figure 11: Global: Ceramic Ball Bearings Market: Breakup by Region (in %), 2022

Figure 12: Global: Ceramic Ball Bearings Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 13: Global: Ceramic Ball Bearings Industry: SWOT Analysis

Figure 14: Global: Ceramic Ball Bearings Industry: Value Chain Analysis

Figure 15: Global: Ceramic Ball Bearings Industry: Porter's Five Forces Analysis

Figure 16: Global: Ceramic Ball Bearings Market (Zirconium Oxide): Sales Value (in Million US\$), 2017 & 2022

Figure 17: Global: Ceramic Ball Bearings Market Forecast (Zirconium Oxide): Sales Value (in Million US\$), 2023-2028

Figure 18: Global: Ceramic Ball Bearings Market (Silicon Nitride): Sales Value (in Million US\$), 2017 & 2022

Figure 19: Global: Ceramic Ball Bearings Market Forecast (Silicon Nitride): Sales Value (in Million US\$), 2023-2028

Figure 20: Global: Ceramic Ball Bearings Market (Other Material Types): Sales Value (in Million US\$), 2017 & 2022

Figure 21: Global: Ceramic Ball Bearings Market Forecast (Other Material Types): Sales Value (in Million US\$), 2023-2028

Figure 22: Global: Hybrid Ceramic Ball Bearings Market: Sales Value (in Million US\$), 2017 & 2022

Figure 23: Global: Hybrid Ceramic Ball Bearings Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 24: Global: Full Ceramic Ball Bearings Market: Sales Value (in Million US\$),

2017 & 2022

Figure 25: Global: Full Ceramic Ball Bearings Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 26: Global: Ceramic Ball Bearings Market (Application in Electric Motor): Sales Value (in Million US\$), 2017 & 2022

Figure 27: Global: Ceramic Ball Bearings Market Forecast (Application in Electric Motor): Sales Value (in Million US\$), 2023-2028

Figure 28: Global: Ceramic Ball Bearings Market (Application in Automobile): Sales Value (in Million US\$), 2017 & 2022

Figure 29: Global: Ceramic Ball Bearings Market Forecast (Application in Automobile): Sales Value (in Million US\$), 2023-2028

Figure 30: Global: Ceramic Ball Bearings Market (Application in Under Water Equipment): Sales Value (in Million US\$), 2017 & 2022

Figure 31: Global: Ceramic Ball Bearings Market Forecast (Application in Under Water Equipment): Sales Value (in Million US\$), 2023-2028

Figure 32: Global: Ceramic Ball Bearings Market (Application in Laboratory Equipment): Sales Value (in Million US\$), 2017 & 2022

Figure 33: Global: Ceramic Ball Bearings Market Forecast (Application in Laboratory Equipment): Sales Value (in Million US\$), 2023-2028

Figure 34: Global: Ceramic Ball Bearings Market (Application in Aerospace): Sales Value (in Million US\$), 2017 & 2022

Figure 35: Global: Ceramic Ball Bearings Market Forecast (Application in Aerospace): Sales Value (in Million US\$), 2023-2028

Figure 36: Global: Ceramic Ball Bearings Market (Other Applications): Sales Value (in Million US\$), 2017 & 2022

Figure 37: Global: Ceramic Ball Bearings Market Forecast (Other Applications): Sales Value (in Million US\$), 2023-2028

Figure 38: United States: Ceramic Ball Bearings Market: Sales Value (in Million US\$), 2017 & 2022

Figure 39: United States: Ceramic Ball Bearings Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 40: China: Ceramic Ball Bearings Market: Sales Value (in Million US\$), 2017 & 2022

Figure 41: China: Ceramic Ball Bearings Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 42: Europe: Ceramic Ball Bearings Market: Sales Value (in Million US\$), 2017 & 2022

Figure 43: Europe: Ceramic Ball Bearings Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 44: Japan: Ceramic Ball Bearings Market: Sales Value (in Million US\$), 2017 & 2022

Figure 45: Japan: Ceramic Ball Bearings Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 46: India: Ceramic Ball Bearings Market: Sales Value (in Million US\$), 2017 & 2022

Figure 47: India: Ceramic Ball Bearings Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 48: South East Asia: Ceramic Ball Bearings Market: Sales Value (in Million US\$), 2017 & 2022

Figure 49: South East Asia: Ceramic Ball Bearings Market Forecast: Sales Value (in Million US\$), 2023-2028

Figure 50: Ceramic Ball Bearing Manufacturing: Detailed Process Flow

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