

# Industrial Silicon-Based Electrical Bushing Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 - 2032

<https://marketpublishers.com/r/I10A14DFD859EN.html>

Date: November 2024

Pages: 80

Price: US\$ 4,850.00 (Single User License)

ID: I10A14DFD859EN

## Abstracts

The Global Industrial Silicon-Based Electrical Bushing Market was valued at USD 171.9 million in 2023 and is projected to grow at a CAGR of 7.6% from 2024 to 2032. Silicon-based bushings have gained popularity due to their ability to withstand moisture, extreme temperatures, and challenging environments. Their durability and low-maintenance requirements help businesses reduce costs and minimize downtime. The push for eco-friendly manufacturing practices also drives the shift toward silicon materials in bushings, as these materials are both long-lasting and recyclable, aligning with global sustainability goals.

Rising demand for efficient power distribution systems, including smart grids, further accelerates the adoption of advanced silicon-based bushings. This trend is particularly noticeable in regions like North America and Europe, where smart grid projects are becoming more prevalent. Silicon-based bushings enable enhanced monitoring capabilities, which support data collection and diagnostics to improve grid reliability and performance.

The market is segmented by insulation materials, including glass, polymeric, and porcelain bushings. The porcelain segment is expected to grow significantly, with projections indicating it will surpass USD 106.8 million by 2032. Porcelain bushings are vital in high-voltage transmission and distribution networks due to their strong insulation and dielectric properties. The global increase in electricity demand has led to expanded power grids and investments in high-voltage projects, particularly in rapidly industrializing regions, boosting demand for reliable bushing materials.

In terms of applications, the market includes segments like transformers, switchgear,

and others, with the switchgear segment forecasted to experience a growth rate of over 7.1% by 2032. Silicon-based bushings are especially suitable for switchgear applications, as they provide excellent heat resistance and insulation for high-voltage and medium-voltage equipment. These properties minimize wear and tear from heat-induced expansion and contraction, supporting long-term performance in industrial and utility environments.

The U.S. market for industrial silicon-based electrical bushings is anticipated to surpass USD 43.2 million by 2032. As aging power infrastructure requires upgrades, utilities are increasingly choosing silicon-based bushings for their superior insulation and durability compared to traditional porcelain bushings. This shift is critical for high-voltage applications where reliability is essential.

Similarly, Europe's modernization efforts focus on reducing carbon emissions and improving energy efficiency. Silicon-based bushings play an important role in enhancing the durability and insulation of high-voltage equipment, supporting Europe's investments in advanced grid infrastructure and substation upgrades. These developments indicate a promising outlook for the silicon-based electrical bushing market globally.

## Contents

### Report Content

#### **CHAPTER 1 METHODOLOGY & SCOPE**

- 1.1 Market definitions
- 1.2 Base estimates & calculations
- 1.3 Forecast calculation
- 1.4 Data sources
  - 1.4.1 Primary
  - 1.4.2 Secondary
    - 1.4.2.1 Paid
    - 1.4.2.2 Public

#### **CHAPTER 2 EXECUTIVE SUMMARY**

- 2.1 Industry 360° synopsis, 2021 – 2032

#### **CHAPTER 3 INDUSTRY INSIGHTS**

- 3.1 Industry ecosystem analysis
- 3.2 Regulatory landscape
- 3.3 Industry impact forces
  - 3.3.1 Growth drivers
  - 3.3.2 Industry pitfalls & challenges
- 3.4 Growth potential analysis
- 3.5 Porter's analysis
  - 3.5.1 Bargaining power of suppliers
  - 3.5.2 Bargaining power of buyers
  - 3.5.3 Threat of new entrants
  - 3.5.4 Threat of substitutes
- 3.6 PESTEL analysis

#### **CHAPTER 4 COMPETITIVE LANDSCAPE, 2023**

- 4.1 Strategic dashboard
- 4.2 Innovation & sustainability landscape

## **CHAPTER 5 MARKET SIZE AND FORECAST, BY INSULATION, 2021 – 2032 ('000 UNITS & USD MILLION)**

- 5.1 Key trends
- 5.2 Porcelain
- 5.3 Polymeric
- 5.4 Glass

## **CHAPTER 6 MARKET SIZE AND FORECAST, BY VOLTAGE, 2021 – 2032 ('000 UNITS & USD MILLION)**

- 6.1 Key trends
- 6.2 Medium voltage
- 6.3 High voltage
- 6.4 Extra high voltage

## **CHAPTER 7 MARKET SIZE AND FORECAST, BY APPLICATION, 2021 – 2032 ('000 UNITS & USD MILLION)**

- 7.1 Key trends
- 7.2 Transformer
- 7.3 Switchgear
- 7.4 Others

## **CHAPTER 8 MARKET SIZE AND FORECAST, BY REGION, 2021 – 2032 ('000 UNITS & USD MILLION)**

- 8.1 Key trends
- 8.2 North America
  - 8.2.1 U.S.
  - 8.2.2 Canada
  - 8.2.3 Mexico
- 8.3 Europe
  - 8.3.1 Germany
  - 8.3.2 France
  - 8.3.3 Russia
  - 8.3.4 UK
  - 8.3.5 Italy
  - 8.3.6 Spain

- 8.3.7 Netherlands
- 8.4 Asia Pacific
  - 8.4.1 China
  - 8.4.2 Japan
  - 8.4.3 South Korea
  - 8.4.4 India
  - 8.4.5 Australia
- 8.5 Middle East & Africa
  - 8.5.1 Saudi Arabia
  - 8.5.2 UAE
  - 8.5.3 South Africa
- 8.6 Latin America
  - 8.6.1 Brazil
  - 8.6.2 Argentina

## **CHAPTER 9 COMPANY PROFILES**

- 9.1 ABB
- 9.2 Barberi
- 9.3 CG Power
- 9.4 Eaton
- 9.5 Elliot Industries
- 9.6 General Electric
- 9.7 GIPRO
- 9.8 Hitachi Energy
- 9.9 Hubbell
- 9.10 Jiangxi Johnson Electric
- 9.11 Liyond
- 9.12 Maschinenfabrik Reinhausen
- 9.13 Meister International
- 9.14 Nexans
- 9.15 PFISTERER
- 9.16 Poinsa
- 9.17 Polycast
- 9.18 Siemens Energy

## I would like to order

Product name: Industrial Silicon-Based Electrical Bushing Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 - 2032

Product link: <https://marketpublishers.com/r/l10A14DFD859EN.html>

Price: US\$ 4,850.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/l10A14DFD859EN.html>