

## Powder Metallurgy – A Global Market Overview

*“The report reviews, analyzes and projects the global market for Powder Metallurgy for the period 2014-2023. Powder Metallurgy metal types analyzed in the study include Ferrous Metals and Non-Ferrous Metals. Market for Non-Ferrous Metals further analyzed for their sub types consisting Aluminum, Cobalt, Copper, Nickel, Titanium and Other Non-Ferrous Metals. Powder Metallurgy applications analyzed in this report include Aerospace, Automotive, Business Machines, Electrical & Electronics, Industrial and Other Applications (includes biomaterials, healthcare and oil & gas).”*

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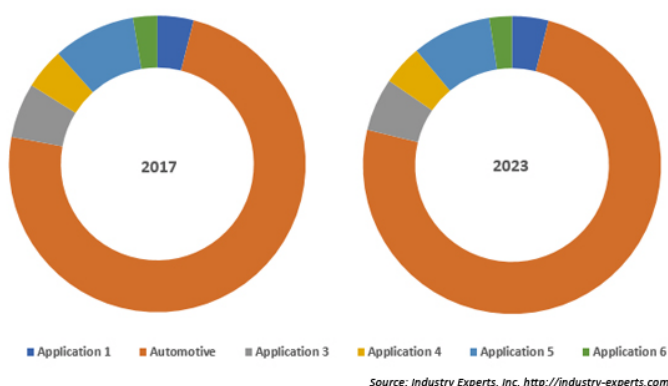
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### Report Synopsis

Demand for Powder Metallurgy parts in automobiles is likely to surge over the coming years because of concerns regarding reducing vehicle weight and increasing fuel economy. One major factor intrinsic to the Powder Metallurgy industry is its low energy consumption and superior utilization of raw materials compared to other technologies. Parts produced using this technology can use up to 95% of input raw materials, with the same for machining being 50%, a clear difference of 45 percentage points. Also, several Powder Metallurgy players are engaged in research and development efforts aimed at further increasing raw material utilization rates to up to 98-99%. Some restraining factors for the market include high capital investment, complexity in obtaining 3D shapes and the requirement for expensive metal powder feed stocks.

Globally, Automotive forms the largest, as also the fastest growing, application for Powder Metallurgy, the market for which is slated to compound annually at 6.5% over 2017-2023 in reaching a projected US\$7.8 billion by 2023. The overall Powder Metallurgy market is estimated to reach \$7.8 billion in 2018.

Global Powder Metallurgy Market by Application - 2017 and 2023



### Research Findings & Coverage

- Powder Metallurgy global market is explored in this report with respect to metal types and key applications

- The study extensively analyzes each metal type and key application of powder metallurgy in all major regions for the analysis period
- Future of Powder Metallurgy in Auto Industry Secure
- Powder Metallurgy Set to Gain Traction in Medicine
- 3D Printing to Revolutionize Powder Metallurgy but Challenges Remain
- Key business trends focusing on product innovations/developments, M&As, JVs and other recent industry developments
- Major companies profiled – 43
- The industry guide includes the contact details for 208 companies

### Product Outline

The report analyzes the market for key metal types of Powder Metallurgy including:

- Ferrous
- Non-Ferrous
  - Aluminum
  - Cobalt
  - Copper
  - Nickel
  - Titanium
  - Other Non-Ferrous Metals

Application Areas of Powder Metallurgy analyzed comprise the following:

- Aerospace
- Automotive
- Business Machines
- Electrical & Electronics
- Industrial
- Other Applications

### Analysis Period, Units and Growth Rates

- The report reviews, analyzes and projects the global Powder Metallurgy market for the period 2014-2023 in terms of market value in US\$ and the compound annual growth rates (CAGRs) projected from 2017 through 2023

### Geographic Coverage

Furfural market is analyzed for the following geographical regions/countries:

- **North America** (The United States, Canada and Mexico)
- **Europe** (France, Germany, Italy, Russia, Spain, the United Kingdom and Rest of Europe)
- **Asia-Pacific** (China, India, Japan, South Korea and Rest of Asia-Pacific)
- **South America** (Argentina, Brazil and Rest of South America)
- **Rest of World**

## SAMPLE COMPANY PROFILE

### AMERICAN CHEMET CORPORATION

740 Waukegan Road, Suite 202, Deerfield, Illinois 60015  
 United States  
 Phone: 1-847-948-0800, Fax: 847-948-0811  
 Website: www.chemet.com

#### Business Overview

Established in 1946 with headquarters in Illinois, United States, American Chemet Corporation is a privately-owned producer and marketer of metal-based chemicals, comprising cuprous oxide, cupric oxide, zinc oxide, copper powder, cuprous oxide based agricultural fungicides, and related products. The company is a global leader in copper oxides and offered its cuprous oxides and cupric oxides for use in antifouling coatings, agricultural applications, catalysts, ceramics, copper chemical production, and ferrite production. Besides headquarters, the company has manufacturing locations in Montana and Tennessee; and sales and executive offices in Illinois. The Montana facility is engaged in the production of cuprous oxides, cupric oxides, and fine particle size copper powders. American Chemet has broadened its business operations by acquiring US Metal Powders' copper assets and forming Royal Metal Powders Inc. in 2010 and further broadened Royal by purchasing Horsehead Corporation's copper business in 2013. The company made investment in new cupric oxide production technology to further expand its business in 2014. The product line offered by the company encompasses copper products, comprising cuprous oxide, cupric oxide, copper powder, and cuprous oxide agricultural (AG) fungicide; and zinc oxide.

#### Product Portfolio

Product	Particulars
Cuprous Oxide (Cu <sub>2</sub> O)	Products include LoLo Tint®, Red Copp 97n, Red Premium, Purple Copp 97N Applications encompass anti-fouling coatings, mineral supplement for animal diets; colorant for porcelain, glazes, and glass; catalyst, brazing pastes, agricultural foliar fertilizer, and agricultural fungicide and seed dressing
Cupric Oxide (CuO)	Products include various grades of cupric oxide such as 13600B Applications comprise colorant in glass, ceramics glazes and enamels; as a catalyst and in catalyst preparation; ferrite production; wood treatment chemicals; copper plating; mineral supplement for animal diets; and preparation of other copper chemicals
Copper Powder	Products include copper powders of various particle sizes, such as Chem Copp 1700 Applications cover powder metallurgy (PM), metal injection molding (MIM), friction components, thermal management, diamond cutting tools, lubricants, carbon brush, coatings, catalyst, and brazing paste
Cuprous Oxide AG Fungicide	Products encompass two formulated agricultural fungicides based on cuprous oxide, Chem Copp 50 (50% copper) and AG Copp 75 (75% copper) for controlling fungal and bacterial diseases on various crops, such as almonds, apples, apricots, avocado, citrus, cocoa, coffee, conifers, grapes, kiwi fruit, mangoes, nectarines, olives, stone fruits, tomatoes, walnuts
Zinc Oxide	Products include Zinc Oxide - Zinox 430™ Applications encompass activator in rubber compounding; brick and ceramic colorant; specialty coatings; trace element for animal feed; nutrient in agriculture fertilizers; production of zinc chemicals

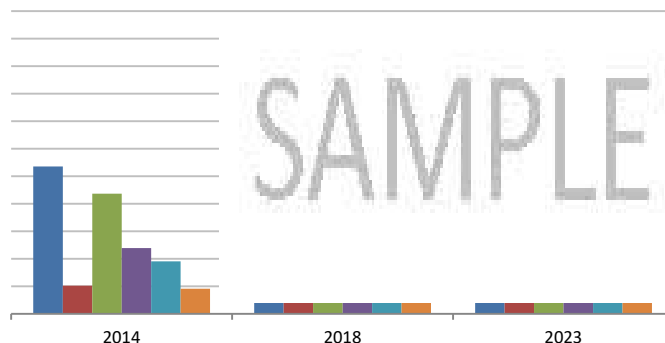
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## SAMPLE TABLE/CHART

Glance at 2018 Global Powder Metallurgy Market Share (%) by Geographic Region – North America, Europe, Asia-Pacific, South America and Rest of World



North American Powder Metallurgy Market Analysis (2014-2023) by Non-Ferrous Metal Sub Type – Aluminum, Cobalt, Copper, Nickel, Titanium and Other Non-Ferrous Metals in USD Million



## KEY PLAYERS PROFILED

- American Chemet Corporation
- Ametek, Inc.
- ATI
- BASF SE
- Carpenter Technology Corporation
- Daido Steel Co., Ltd.
- Diamet Corporation
- DORST Technologies GmbH & Co. KG.
- Federal-Mogul Holdings Corporation
- Fukuda Metal Foil & Powder Co., Ltd.
- GKN Plc
- H.C. Starck GmbH
- Hitachi Chemical Company, Ltd.
- Hoganas AB
- Kennametal Inc.
- Kobe Steel, Ltd.
- Kymera International
- Lonza Group Ltd
- Miiba AG
- Oerlikon Metco Switzerland
- Rio Tinto Metal Powders
- Sandvik AB
- SMC Powder Metallurgy, Inc.
- Sumitomo Electric Industries, Ltd.

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