

# Powder Metallurgy – A Global Market Overview

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## **Abstracts**

#### **REPORT SYNOPSIS**

Powder Metallurgy is a technique utilized for processing powdered raw materials and producing a variety of components based on iron & steel powders (ferrous) and aluminum, cobalt, copper, nickel and titanium, among others (non-ferrous). The components made using powder metallurgy are very strong and can withstand working environments that conventionally produced parts cannot. The demand for this procedure has been exhibiting quite impressive growth over the recent past, though the advent of COVID-19 has changed the scenario to some extent.

The global demand for Powder Metallurgy components and parts is anticipated to be the largest for the Automotive sector, though the fastest growing for the Aerospace sector. Advancements in material technology have enabled in producing metal powders that can act as replacements for traditionally used bulky metal components to reduce space and weight, thereby enhancing efficiency of the final product in its applicable area.

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

Powder Metallurgy's Green Credentials Expand the Technology's Adoption

Studies on Flake Powder Metallurgy (FPM), an Emerging Technology, Show



#### **Good Prospects**

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 - 34

The industry guide includes the contact details for 272 companies

#### **PRODUCT OUTLINE**

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

Ferrous

Iron Powder

Steel Powder

Non-Ferrous Aluminum

Cobalt

Copper

Nickel

Titanium

Other Non-Ferrous Metals



Application Areas of Powder Metallurgy analyzed comprise the following:

Aerospace Automotive Electrical & Electronics Industrial Machinery

Medical

Others

Analysis Period, Units and Growth Rates

The report reviews, analyzes and projects the global Powder Metallurgy market for the period 2018-2027 in terms of market value in US\$ and the compound annual growth rates (CAGRs) projected from 2022 through 2027

Geographic Coverage

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



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American Chemet Corporation (United States) Royal Metal Powders, Inc. (United States) AMETEK, Inc. (United States) AMETEK Specialty Metal Products (United States) AMETEK Specialty Metal Products Eighty Four (United States) BASF SE (Germany) Carl Schlenk AG (Germany) Carpenter Technology Corp (United States) Daido Steel Co Ltd. (Japan) Fine Sinter Co Ltd (Japan) Fukuda Metal Foil & Powder Co., Ltd. (Japan) GKN Powder Metallurgy (United States) **GKN Hoeganaes (United States)** H.C. Starck GmbH (H.C. Starck Tungsten Powders) (Germany) H.C. Starck Solutions (United States) Hoganas AB (Sweden) Kennametal Inc. (United States)



Kobe Steel, Ltd. (Japan) Kymera International (United States) Makin Metal Powders (UK) Ltd. (United Kingdom) Miba AG (Austria) Molyworks Materials Corp (United States) Oerlikon Metco Switzerland (Switzerland) Pometon S.p.A (Italy) Rio Tinto Metal Powders (Canada) Sandvik AB (Sweden) Sandvik Materials Technology (Sweden) Showa Denko Materials Co Ltd (Japan) Sumitomo Electric Industries Ltd (Japan)

### 4. KEY BUSINESS & PRODUCT TRENDS

Allegheny Technologies Incorporated | ATI Completes Sale of Sheffield, UK Operation Hoganas to close Hoganas Environment Solutions, LLC. to focus on its core business | Hoganas

Miba: Miba acquires majority interest in battery specialist Voltlabor - Growth to be further accelerated under new name "Miba Battery Systems"

Sandvik to acquire Spain-based Preziss, a solutions provider for aluminum and composite machining — Sandvik Group

Sandvik to acquire US based custom tooling manufacturer Peterson Tool Company — Sandvik Group

Hoganas now offers titanium powders for additive manufacturing | Hoganas

Sandvik introduces 3D-printed cemented carbide — Sandvik Group

Materials authority Sandvik introduces 3D printed components in cemented carbide – enabled by patented process — Sandvik Additive Manufacturing

Allegheny Technologies Incorporated | ATI Announces Termination of Joint Venture with Russian-Based VSMPO

University of Waterloo and Rio Tinto look to water atomised powder for low-cost Binder Jetting

Sandvik co-launches guidelines for testing additively manufactured stainless steels — Sandvik Additive Manufacturing

Hoganas joins the Additive Manufacturing Green Trade Association as a founding member | Hoganas

News: POLEMA doubles the output of AM metal powders in 2021 (polema-rus.com) A partnership between Hoganas and Piab is set to make additive manufacturing more sustainable and efficient | Hoganas



News: POLEMA supplied products for a thermonuclear reactor in France Announcement of the Contract Conclusion to Transfer Showa Denko Materials' Ceramics Business

Showa Denko Materials Develops Its Own MI Platform for Functional Materials to Offer Speedy Materials Recommendations

Sandvik increases manufacturing capacity in metal powders for Additive Manufacturing — Sandvik Additive Manufacturing

Showa Denko Materials' Anode Materials for Lithium-ion Batteries Adopted for Toyota's New "Aqua"

GaN Semiconductors are Enabling New X-band Radars | Sumitomo Electric Industries Hoganas expands production capabilities in Laufenburg | Hoganas

Hoganas closes its production in Niagara Falls, USA due to hydrogen gas supply shortage | Hoganas

Showa Denko Materials Establishes the "JOINT2" Consortium for

Showa Denko Materials to Launch the Mass Production of "MCL-E-795G,"

H.C. Starck Tungsten patents an innovative reverse osmosis process | H.C. Starck Tungsten Powders

First Swedish plant with large-scale water treatment using by-products from the steel industry | Hoganas

Hoganas settles supply agreement with US-based KBM Advanced Materials that launches new sales platform for additive manufacturing powder | Hoganas

Hoganas' fine powder atomisation building in Johnstown supports the growing demand for high alloy products | Hoganas

News: POLEMA increased the production output in the first half of 2021

GKN Additive develops 3D printing process for low alloy dual-phase steels DPLA and FSLA

Miba: Miba sputter technology is awarded Supplier Gold certification by Pratt and Whitney

News: POLEMA has mastered new powder grades for AM and weld-deposition Rio Tinto develops new water atomised steel powder

Announcement of Transfer of Printed Wiring Board Business

Rio Tinto develops new steel powder for 3-D printing

Announcement of Acquiring 100% Ownership of Hitachi Chemical Diagnostics System Allegheny Technologies Incorporated | ATI Completes Sale of Flowform Products to Consolidated Boring, Inc.

Miba: Miba products for medical devices

News: POLEMA became the first Russian supplier of powders for 3D printing of ship and aircraft engine parts

Experience Refractory Metals Innovations in a Brand-New Virtual Environment



(hcstarcksolutions.com)

Showa Denko Materials to Boost Its Production Capacity for CMP Slurries, Laminate Materials for Printed Wiring Boards, and Photosensitive Solder Resists in Taiwan Hoganas lands major Cleanit EC test project in China | Hoganas Hoganas and Lincotek sign cooperation agreement | Hoganas Hoganas launches powder mix FORECAST 3D reaches 1 million shipped nasal swab milestone for COVID-19 testing GKN Powder Metallurgy business FORECAST 3D launches face shields, stopgap masks, nasal swabs, and other critical PPE products to battle COVID-19 FORECAST 3D partners with specialty chemicals expert Lubrizol to industrialize 3D applications through thermoplastic powder (gknpm.com) GKN Powder Metallurgy Acquires FORECAST 3D, Expands Additive Manufacturing Capabilities to Include Plastics (gknpm.com) Sumitomo Electric Acquires Two Companies of European Powdered Metal Components Manufacturer Sinterwerke Group

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Advantage Metal Powders, Inc. (United States)

Allegheny Technologies, Inc. (United States)

American Chemet Corporation (United States)

Royal Metal Powders, Inc. (United States)

AMETEK, Inc. (United States)

AMETEK Specialty Metal Products (United States)

AMETEK Specialty Metal Products Eighty Four (United States)

Carpenter Technology Corp (United States)

GKN Hoeganaes (United States)

GKN Powder Metallurgy (United States)

H.C. Starck Solutions (United States)

Kennametal Inc. (United States)

KYMERA International (United States)

Molyworks Materials Corp (United States)

RIO Tinto Metal Powders (Canada)

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7.4 Major Market Players

BASF SE (Germany)

Carl Schlenk AG (Germany)

H.C. Starck Gmbh (H.C. Starck Tungsten Powders) (Germany)

Hoganas AB (Sweden)

Makin Metal Powders (UK) Ltd. (United Kingdom)

MIBA AG (Austria)

Oerlikon Metco Switzerland (Switzerland)

Polema JSC (Russia)

Pometon SpA (Italy)



Sandvik AB (Sweden)

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Advanced Engineering Metals Ltd. (China)

Advanced Technology & Materials Co Ltd (AT&M) (China)

Daido Steel Co Ltd. (Japan)

Fine Sinter Co Ltd (Japan)

Fukuda Metal Foil & Powder Co., Ltd. (Japan)

Kobe Steel, Ltd. (Japan)

Showa Denko Materials Co Ltd (Japan)

Sumitomo Electric Industries Ltd (Japan)

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