

Powder Metallurgy - A Global Market Overview

Market Report | 2025-05-14 | 346 pages | Industry Experts

AVAILABLE LICENSES:

- Single user licence (PDF) \$4860.00
- Enterprise Electronic (PDF) \$7560.00

Report description:

Global Powder Metallurgy Market Trends and Outlook

Powder Metallurgy (PM) can be defined as the process involving the production of metal powders from metal parts, followed by making parts and components from the obtained powders via compaction and sintering. Powders are compressed into a desired shape using a die, following which they are heated (sintered) below their melting points to bond particles and fashion a solid component. Using this technique enables in achieving complex geometries with negligible waste and precise material properties.

The global market for Powder Metallurgy is expected to maintain a CAGR of 8.5% between 2024 and 2030 and reach a projected US\$37.2 billion by 2030 from an estimated US\$22.8 billion in 2024. Some of the factors driving the market for Powder Metallurgy include increasing vehicle production & a discernable shift towards electric vehicles (EVs), demand for lightweight, high-strength components in the aerospace & defense sector, unmet need for customized medical implants & dental components, increasing demand for consumer electronics and growth in renewable energy & oil & gas exploration activities.

A major trend shaping the market for Powder Metallurgy has been the growing adoption of additive manufacturing (AM) across sectors, such as aerospace, automotive and healthcare. This technique involves using 3D printing with metal powders to make lightweight, complex parts with minimal waste, as in the case of intricate turbine components for the aerospace sector or personalized implants for the medical industry. Integrating PM with AM technologies has resulted in the development of near-net-shape components, thereby minimizing machining costs and lead times. The need of the hour for the aerospace and automotive industries has been lightweight components that improve fuel efficiency and reduce emissions. The use of PM to produce high-strength, lightweight parts with materials, such as titanium and aluminum goes a long way in resolving this issue. PM parts are much in demand in EVs for gear and motor components that help improve battery efficiency.

Powder Metallurgy Regional Market Analysis

Asia-Pacific, in addition to being the leading global market for Powder Metallurgy with an estimated share of 40% in 2024, is also poised to be the fastest growing at a 2024-2030 CAGR of 11.3%. The region's robust industrial base is a major contributing factor for this, with countries, such as China, Japan, India and South Korea having massive automotive, electronics and machinery

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

industries. All these sectors make extensive use of powder metallurgy for components, including gears, bearings and engine parts. The growth in Asia-Pacific's automotive sector is being driven by increasing vehicle production and demand for lightweight, fuel-efficient components, owing to which PM adoption is on the rise. China and India have now emerged as major automotive hubs with greater emphasis on electric vehicle production that needs specialized parts made using PM. Additive manufacturing/3D printing is also being widely adopted for PM in Asia-Pacific to produce parts and components for sectors, such as aerospace, healthcare and automotive, adding to an already burgeoning market. Growth in population levels and rise in disposable incomes in regions, such as China and India are propelling consumer demand for vehicles (especially of the electric variety), electronics and appliances, which has a bearing on the market for PM used to make components for the same.

Powder Metallurgy Market Analysis by Material Type

The demand for Ferrous Metals in PM applications is larger, cornering an estimated share of 55.5% in 2024. This can be attributed to their wider utilization in the automotive industry, which is a major consumer of PM parts and components. Iron and steel are materials extensively employed to fabricate automotive components, such as gears, bearings and connecting rods due to their cost-effectiveness, as they are relatively inexpensive compared to non-ferrous metals, making them highly suited for high-volume production in the machinery and appliance industries. The market for Non-Ferrous Metals in PM applications, however, is likely to register a faster growth, forecast at a CAGR of 9.2%, over the 2024-2030 analysis period, for which several factors come into play. The aerospace and medical sectors need lightweight, corrosion-resistant and high-performance components that can be made with titanium, aluminum and nickel alloys using additive manufacturing.

Powder Metallurgy Market Analysis by Technology

Among the various technologies used in Powder Metallurgy to create parts and components, the market for Hot Isostatic Pressing (HIP) is the largest, estimated to account for 44% in 2024. This technology finds wide application in making critical parts, such as turbine blades, engine components and structural parts with exceptional mechanical properties, which are further utilized in the aerospace, automotive and oil & gas sectors. On the other hand, the demand for Additive Manufacturing (AM) in Powder Metallurgy is likely to witness the fastest CAGR of over 10% during the analysis period. AM, especially 3D printing with metal powders, has been on the rise in aerospace, medical and automotive sectors, owing to its ability to create complex, lightweight and customized components, such as implants, lattice structures and parts for EVs.

Powder Metallurgy Market Analysis by Application

With an estimated share of 45%, Automotive applications lead the global market for Powder Metallurgy, key reasons for which include the ability to produce lightweight, high-performance parts, cost-effectiveness and the requirement for increased fuel efficiency and reduced emissions. With regard to growth, though, the global demand for Powder Metallurgy in Aerospace & Defense applications is likely to clock the fastest 2024-2030 compounded annual rate of 10.7%. Again, major contributors for this growth include the sector's requirement of lightweight, high-strength and complex components, along with the capacity of producing near-net-shape parts with improved properties and minimization of waste.

Powder Metallurgy Market Report Scope

This global report on Powder Metallurgy analyzes the market based on material type, technology and application for the period 2021-2030 with forecasts from 2024 to 2030 in terms of value in US\$. In addition to providing profiles of major companies operating in this space, the latest corporate and industrial developments have been covered to offer a clear panorama of how and where the market is progressing.

Key Metrics

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Historical Period: 2021-2023

Base Year: 2024

Forecast Period: 2024-2030

Units: Value market in US\$

Companies Mentioned: 49

Powder Metallurgy Market by Geographic Region

- North America (United States, Canada and Mexico)
- Europe (France, Germany, Italy, Russia, Spain, 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 Latin America)
- Middle East & Africa

Powder Metallurgy Market by Material Type

- Ferrous Metal Powders
 - o□Iron Powder
 - o□Steel Powder
- Non-Ferrous Metal Powders
 - o□Aluminum Powder
 - o□Cobalt Powder
 - o□Copper Powder
 - o□Molybdenum Powder
 - o□Nickel Powder
 - o□Titanium Powder
 - o□Other Non-Ferrous Metal Powders

Powder Metallurgy Market by Technology

- Additive Manufacturing (AM)
- Hot Isostatic Pressing (HIP)
- Metal Injection Molding (MIM)
- Other Technologies [Incl. Cold Isostatic Pressing (CIP), Conventional Press & Sinter, Powder Forging & Sintering]

Powder Metallurgy Market by Application

- Aerospace & Defense
- Automotive
- Electrical & Electronics
- Industrial Machinery
- Medical & Dental
- Other Applications (Primarily Consumer Goods & Tooling)

Table of Contents:

PART A: GLOBAL MARKET PERSPECTIVE

1. Introduction

- Product Outline
- Powder Metallurgy Defined
- Powder Metallurgy Material Types

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- o Ferrous Metals
 - Iron Powder
 - Steel Powder
- o Non-Ferrous Metals
 - Aluminum Powder
 - Cobalt Powder
 - Copper Powder
 - Molybdenum Powder
 - Nickel Powder
 - Titanium Powder
 - Other Non-Ferrous Powders
- Powder Metallurgy Technologies
- o Additive Manufacturing (AM)
- o Hot Isostatic Pressing (HIP)
- o Metal Injection Molding (MIM)
- o Other Technologies
 - Powder Metallurgy Applications
- o Aerospace & Defense
- o Automotive
- o Electrical & Electronics
- o Industrial Machinery
- o Medical & Dental
- o Other Applications
- 2. Key Market Trends
- 3. Key Market Players
 - Advanced Technology & Materials Co Ltd. (AT&M)
 - Alcoa Corp
 - Allegheny Technologies, Inc.
 - American Axle & Manufacturing, Inc.
 - AMES Group Sintering SA
 - ATI Materials
 - Aubert & Duval
 - BASF SE
 - Burgess-Norton Manufacturing Co
 - Carpenter Technology Corp
 - Catalus Corp
 - CNPC Powders
 - Comtec Mfg LLC
 - CRS Holdings, Inc.
 - ExOne GmbH
 - Fine Sinter Co Ltd
 - GKN Powder Metallurgy, Inc.
 - H.C. Starck GmbH
 - Hitachi Chemical Co Ltd
 - Hoganas AB
 - Horizon Technology, Inc.
 - JFE Steel Corp

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- [] SC POLEMA
- [] Kennametal, Inc.
- [] Kymera International
- [] Kyocera Corp
- [] Liberty House Group
- [] Materialise NV
- [] Melrose Industries PLC
- [] Metal Powder Products Co
- [] Metaldyne Performance Group
- [] Miba AG
- [] Molyworks Materials Corp
- [] Nippon Piston Ring Co Ltd
- [] Perry Tool & Research, Inc.
- [] Phoenix Sintered Materials LLC
- [] PMG Holding GmbH
- [] Porite Corp
- [] Porite Europe SAS
- [] Precision Sintered Parts Pvt Ltd
- [] Proterial Ltd
- [] Rio Tinto Metal Powders
- [] Rusal
- [] Sandvik AB
- [] Schunk Group
- [] Showa Denko Materials Co Ltd
- [] SHW AG
- [] Stackpole International
- [] Sumitomo Electric Company Ltd

4. Key Business & Product Trends

5. Global Market Overview

- [] Global Powder Metallurgy Market Overview by Material Type
 - o [] Powder Metallurgy Material Type Market Overview by Global Region
 - o [] Ferrous Metals
 - [] Iron Powder
 - [] Steel Powder
 - o [] Non-Ferrous Metals
 - [] Aluminum Powder
 - [] Cobalt Powder
 - [] Copper Powder
 - [] Molybdenum Powder
 - [] Nickel Powder
 - [] Titanium Powder
 - [] Other Non-Ferrous Powders
- [] Global Powder Metallurgy Market Overview by Technology
 - o [] Powder Metallurgy Technology Market Overview by Global Region
 - [] Additive Manufacturing (AM)
 - [] Hot Isostatic Pressing (HIP)
 - [] Metal Injection Molding (MIM)

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- Other Technologies
- Global Powder Metallurgy Market Overview by Application
- o□ Powder Metallurgy Applications Market Overview by Global Region
- Aerospace & Defense
- Automotive
- Electrical & Electronics
- Industrial Machinery
- Medical & Dental
- Other Applications

PART B: REGIONAL MARKET PERSPECTIVE

- Global Powder Metallurgy Market Overview by Geographic Region

REGIONAL MARKET OVERVIEW

6. North America

- North American Powder Metallurgy Market Overview by Geographic Region
- North American Powder Metallurgy Market Overview by Material Type
- North American Powder Metallurgy Market Overview by Technology
- North American Powder Metallurgy Market Overview by Application
- Country-wise Analysis of North American Powder Metallurgy Market
 - o□ The United States
 - United States Powder Metallurgy Market Overview by Material Type
 - United States Powder Metallurgy Market Overview by Technology
 - United States Powder Metallurgy Market Overview by Application
 - o□ Canada
 - Canadian Powder Metallurgy Market Overview by Material Type
 - Canadian Powder Metallurgy Market Overview by Technology
 - Canadian Powder Metallurgy Market Overview by Application
 - o□ Mexico
 - Mexican Powder Metallurgy Market Overview by Material Type
 - Mexican Powder Metallurgy Market Overview by Technology
 - Mexican Powder Metallurgy Market Overview by Application

7. Europe

- European Powder Metallurgy Market Overview by Geographic Region
- European Powder Metallurgy Market Overview by Material Type
- European Powder Metallurgy Market Overview by Technology
- European Powder Metallurgy Market Overview by Application
- Country-wise Analysis of European Powder Metallurgy Market
 - o□ France
 - French Powder Metallurgy Market Overview by Material Type
 - French Powder Metallurgy Market Overview by Technology
 - French Powder Metallurgy Market Overview by Application
 - o□ Germany
 - German Powder Metallurgy Market Overview by Material Type
 - German Powder Metallurgy Market Overview by Technology
 - German Powder Metallurgy Market Overview by Application
 - o□ Italy
 - Italian Powder Metallurgy Market Overview by Material Type
 - Italian Powder Metallurgy Market Overview by Technology

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- [] Italian Powder Metallurgy Market Overview by Application
- o [] Russia
- [] Russian Powder Metallurgy Market Overview by Material Type
- [] Russian Powder Metallurgy Market Overview by Technology
- [] Russian Powder Metallurgy Market Overview by Application
- o [] Spain
- [] Spanish Powder Metallurgy Market Overview by Material Type
- [] Spanish Powder Metallurgy Market Overview by Technology
- [] Spanish Powder Metallurgy Market Overview by Application
- o [] United Kingdom
- [] United Kingdom Powder Metallurgy Market Overview by Material Type
- [] United Kingdom Powder Metallurgy Market Overview by Technology
- [] United Kingdom Powder Metallurgy Market Overview by Application
- o [] Rest of Europe
- [] Rest of Europe Powder Metallurgy Market Overview by Material Type
- [] Rest of Europe Powder Metallurgy Market Overview by Technology
- [] Rest of Europe Powder Metallurgy Market Overview by Application

8. Asia-Pacific

- [] Asia-Pacific Powder Metallurgy Market Overview by Geographic Region
- [] Asia-Pacific Powder Metallurgy Market Overview by Material Type
- [] Asia-Pacific Powder Metallurgy Market Overview by Technology
- [] Asia-Pacific Powder Metallurgy Market Overview by Application
- [] Country-wise Analysis of Asia-Pacific Powder Metallurgy Market
- o [] China
- [] Chinese Powder Metallurgy Market Overview by Material Type
- [] Chinese Powder Metallurgy Market Overview by Technology
- [] Chinese Powder Metallurgy Market Overview by Application
- o [] India
- [] Indian Powder Metallurgy Market Overview by Material Type
- [] Indian Powder Metallurgy Market Overview by Technology
- [] Indian Powder Metallurgy Market Overview by Application
- o [] Japan
- [] Japanese Powder Metallurgy Market Overview by Material Type
- [] Japanese Powder Metallurgy Market Overview by Technology
- [] Japanese Powder Metallurgy Market Overview by Application
- o [] South Korea
- [] South Korean Powder Metallurgy Market Overview by Material Type
- [] South Korean Powder Metallurgy Market Overview by Technology
- [] South Korean Powder Metallurgy Market Overview by Application
- o [] Rest of Asia-Pacific
- [] Rest of Asia-Pacific Powder Metallurgy Market Overview by Material Type
- [] Rest of Asia-Pacific Powder Metallurgy Market Overview by Technology
- [] Rest of Asia-Pacific Powder Metallurgy Market Overview by Application

9. South America

- [] South American Powder Metallurgy Market Overview by Geographic Region
- [] South American Powder Metallurgy Market Overview by Material Type
- [] South American Powder Metallurgy Market Overview by Technology

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- South American Powder Metallurgy Market Overview by Application
- Country-wise Analysis of South American Powder Metallurgy Market
 - o□Argentina
 - Argentine Powder Metallurgy Market Overview by Material Type
 - Argentine Powder Metallurgy Market Overview by Technology
 - Argentine Powder Metallurgy Market Overview by Application
 - o□Brazil
 - Brazilian Powder Metallurgy Market Overview by Material Type
 - Brazilian Powder Metallurgy Market Overview by Technology
 - Brazilian Powder Metallurgy Market Overview by Application
 - o□Rest of South America
 - Rest of South American Powder Metallurgy Market Overview by Material Type
 - Rest of South American Powder Metallurgy Market Overview by Technology
 - Rest of South American Powder Metallurgy Market Overview by Application
- 10. Middle East & Africa
 - Middle East & Africa Powder Metallurgy Market Overview by Material Type
 - Middle East & Africa Powder Metallurgy Market Overview by Technology
 - Middle East & Africa Powder Metallurgy Market Overview by Application

PART C: GUIDE TO THE INDUSTRY

PART D: ANNEXURE

1. RESEARCH METHODOLOGY
2. FEEDBACK

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Powder Metallurgy - A Global Market Overview

Market Report | 2025-05-14 | 346 pages | Industry Experts

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scott's-international.com

ORDER FORM:

Select license	License	Price
	Single user licence (PDF)	\$4860.00
	Enterprise Electronic (PDF)	\$7560.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scott's-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-23"/>
		Signature	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scott's-international.com

www.scott's-international.com