Physical Vapor Deposition (Pvd) Coatings Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 150 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00
- Team License (1-7 Users) $5250.00
- Site License $6500.00
- Corporate License $8750.00

Report description:

The global physical vapor deposition market is expected to reach USD 9,280.66 million by the end of this year. It is projected to register a CAGR of over 6% during the forecast period.

The COVID-19 pandemic had a negative impact on the market but is projected to grow steadily in the forecast period owing to growth in the electronics and automotive sectors globally.

Key Highlights
Over the medium term, one of the main factors driving the market is the growing demand from the electronics sector.
On the flip side, the slowdown in machine tool production is expected to hinder the market's growth.
Ongoing research and development in the field of PVD coatings are likely to act as an opportunity for the market studied in the coming years.
Asia-Pacific has dominated the market, and it is expected to continue dominating the market through the forecast period.

Physical Vapor Deposition (PVD) Coatings Market Trends

Metals to Dominate the Substrate Segment

Metals are naturally occurring chemical elements, which are usually hard, lustrous, and opaque, and they are also well known for their excellent electrical and thermal conductivity. Out of 118 known chemical elements in existence, 88 elements are metals.

Some extensively used commercial applications include iron, steel, aluminum, copper, brass, titanium, bronze, zinc, tin, chromium, and nickel.
PVD coatings can be applied directly to most metals and their alloy substrates. However, some materials may require a base layer of chromium and nickel to achieve improved corrosion resistance and durability.
PVD coating helps produce metal vapors (chromium, titanium, and aluminum), which are deposited on the metal substrate as thin, highly adhered pure metal or alloy coatings.
The coating of metals such as titanium, graphite, and stainless steel can be coated without base layers. In contrast, metals such as steel, brass, and copper generally need to be electroplated with nickel/chromium metal before PVD processing to achieve better corrosion resistance.
Metal substrates of aluminum or zinc castings require a special process for physical vapor deposition coating, i.e., the Low-Temperature Arc Vapor Deposition (LTAVD) process.
Therefore, with vast applications of metal substrates, the demand for the application of PVD coating on metal substrates is also huge, which is further expected to grow significantly in the forecast period.

Asia-Pacific Region is Expected to Dominate the Market

Asia-Pacific was found to be the major market for the consumption of PVD coatings, owing to increasing consumption from countries such as China, India, and Japan.
China is one of the largest aircraft manufacturers and one of the largest markets for domestic air passengers. Moreover, the country's aircraft parts and assembly manufacturing sector has been growing rapidly, with over 200 small aircraft parts manufacturers increasing the usage and demand of physical vapor deposition (PVD) coatings.
According to the Boeing Commercial Outlook 2021-2040, around 8,700 new deliveries in China are expected to be made by 2040, with a market service value of USD 1,800 billion. In addition, Chinese airline companies are planning to purchase about 7,690 new aircraft in the next 20 years, valued at approximately USD 1.2 trillion, which is further expected to raise the market demand for PVD coatings. PVD coatings are hard and have minimal friction, making them an ideal functional metal coating in the aerospace industry.
In the aerospace sector, according to the India Brand Equity Foundation (IBEF), the country's aviation industry is expected to witness INR 35,000 crore (USD 4.99 billion) investment in the next four years.
The automotive sector is another significant user of physical vapor deposition (PVD) coating. According to OICA, around 4,399,112 vehicles were produced in 2021, which increased by 30% compared to 3,381,819 units manufactured in 2020 in India.
Japan's electrical and electronics industry is one of the leading global industries. The country is a world leader in terms of the production of computers, gaming stations, cell phones, and various other key computer components. Consumer electronics account for one-third of the Japanese economic output.
In Japan, according to Japan Electronics and Information Technology Industries Association (JEITA), the domestic production by the Japanese electronics industry witnessed a growth rate of 10.8% Y-o-Y in 2021 and reached JPY 10,954.34 billion (USD 103.33 billion), thereby enhancing the demand for PVD coatings from various electronics segment.
Moreover, in the first four months of 2022, the production by the Japanese electronics industry accounted for JPY 3,656.44 billion (USD 32.60 billion), registering a growth rate of around 0.2% compared to the same period in 2021.
The factors mentioned above are likely to ascend the demand for PVD coatings across the application industries in Asia-Pacific.

Physical Vapor Deposition (PVD) Coatings Market Competitor Analysis

The global physical vapor deposition (PVD) coatings market is fragmented with the extensive availability of international and local PVD coating material manufacturers and service providers. Some of the market's major players include the Voestalpine Eifeler

Group, OC OerlikonManagement AG, IHI Corporation, Impact Coatings, and HEF, among others (not in any particular order).

Additional Benefits:

The market estimate (ME) sheet in Excel format
3 months of analyst support

Table of Contents:

Physical Vapor Deposition (Pvd) Coatings Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 150 pages | Mordor Intelligence

To place an Order with Scotts International:

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

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-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*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-02-27
		Signature