

Synthetic Diamond - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

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Report description:

The Synthetic Diamond Market is expected to register a CAGR of greater than 7.5% during the forecast period.

The synthetic diamond market is expected to reach USD 20,277.90 million by the end of this year.

The COVID-19 pandemic affected the synthetic diamond market because of supply chain and market disruption. Various end-user activities were temporarily stopped during the government-imposed lockdowns. However, the market rebounded back in 2021.

Key Highlights

- Over the short term, increasing demand from electronics and semiconductors applications and growing demand for super abrasives are some driving factors stimulating the market demand.
- The complex manufacturing process of synthetic diamonds is hindering the market's growth.
- Applications in additive manufacturing and orthopedic medical devices and the introduction of thin and wide CVD diamond plates are likely to create opportunities for the market in the future.
- The Asian-Pacific region is expected to dominate the market and is also likely to witness the highest CAGR during the forecast period.

Synthetic Diamond Market Trends

Construction Segment to Dominate the Rough Type

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- Synthetic diamonds are widely used in the stone and construction industry. They are used in cutting blade solutions for all abrasive surfaces. Other applications of synthetic diamonds in the construction industry include sawing, cutting, grinding, diaphragm wall cutting, tunneling, etc.
- The extreme hardness of synthetic diamond makes it particularly apt for cutting dimension stones, such as granite and marble. Synthetic diamonds can also be used for boring applications, which help rapidly drill holes.
- The construction industry in Asia-Pacific is expected to become the largest and fastest-growing industry in the world, with approximately 45% share of global construction spending.
- For instance, the Chinese government rolled out massive construction plans, including making provisions for the movement of 250 million people to new megacities over the next ten years, creating a major scope for construction materials in the future to enhance the building properties.
- The Japanese construction industry is expected to bloom due to events that will be hosted in the country. Osaka will host the World Expo in 2025. Construction is mostly driven by redevelopment and recovery from natural disasters. Two high-rise towers for Tokyo Stations, a 37-story, 230m tall office tower, were expected to be completed in 2021, and a 61-story, 390m tall office tower is due for completion in 2027.
- Apart from Asia-Pacific, the United States has one of the world's largest construction industries. According to the United States Census Bureau, the annual value for new construction put in place in the United States accounted for USD 1,626,444 million in 2021, compared to USD 1,499,570 million in 2020.
- Owing to all these factors, the market for synthetic diamonds is likely to grow globally during the forecast period.

Asia-Pacific Region to Dominate the Market

- The Asian-Pacific region dominated the global market share. Owing to the high manufacturing activities by numerous end-user industries in the country, synthetic diamonds have a huge market in China.
- According to China's five-year plan unveiled in January 2022, the construction industry in the country is estimated to register a growth rate of approximately 6% in 2022. China plans to increase the construction of prefabricated buildings to reduce pollution and waste from construction sites.
- The country serves the domestic demand for electronics and exports electronic output to other countries. With an increase in disposable incomes of the middle-class population, the demand for electronic products is projected to increase. This factor is expected to drive the market studied. China is a net importer of semiconductor chips, manufacturing less than 20% of the semiconductors used. As part of the country's ambitious 'Made in China 2025' plan, the Chinese government has announced its decision to reach an output of USD 305 billion by 2030 and meet 80% of its domestic demand.
- The rising electronics sector is driving the demand for synthetic diamonds for heat sinks. India is also expected to become the fifth-largest consumer electronics and appliances industry globally by 2025.
- Moreover, the domestic production by the Japanese electronics industry was estimated to witness a growth rate of 11% Y-o-Y in 2021 to reach JPY 10,932.2 billion (~USD 99.76 billion). Domestic industry production is estimated to reach JPY 11,161.4 billion (~USD 90.22 billion) in 2022, with a growth rate of 2% Y-o-Y, which may enhance the demand for synthetic diamonds from the country's electronics sector.
- Due to all such factors, the market for synthetic diamonds in the Asian-Pacific region is expected to have steady growth during the forecast period.

Synthetic Diamond Industry Overview

The synthetic diamond market is fragmented in nature. Some of the major players in the market include Zhongnan Diamond Co.

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Ltd, Henan Huanghe Whirlwind Co. Ltd, Zhengzhou Sino-Crystal Diamond Co. Ltd, Element Six UK Ltd, and Sumitomo Electric Industries, Ltd, amongst others (not in any particular order).

Additional Benefits:

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

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