

3D Concrete Printing Market Worth 1,480.5 Million USD by 2023

The 3D Concrete Printing Market is estimated to grow from USD 1.2 million in 2018 to USD 1,480.5 million by 2023, at a CAGR of 317.3%. The market is projected to witness exponential growth in the next few years due to the rise in demand for complex structures at affordable rates, rapid urbanization, and rise in demand for new construction projects across regions. The potential of 3D concrete printing technology in terms of mass customization and enhanced architectural flexibility, and its sustainable nature are some of the key factors that are expected to propel the growth of the 3D Concrete Printing Market.

The extrusion-based technique is projected to grow at the highest CAGR during the forecast period.

The extrusion-based segment is the most widely employed technique in the construction industry. Its capability to produce large-scale building components with complex geometries, cost-effectiveness in comparison to powder-based technique, ease of use, and usage of conventional construction materials such as geopolymer, concrete, cement, plaster, and clay, contribute toward its fastest growth in the 3D Concrete Printing Market. This technique includes various concrete printing technologies such as Contour Crafting, CONPrint3D, Concrete Printing, and Large-Scale 3DCP using Ultra-High Performance Concrete (UHPC). Some of the finest examples of extrusion-based 3D concrete printed structures include Winsun's 10 basic houses in China of 200 square meters each, Winsun's 5-story apartment building of 1,100 square meters, Huashang Tengda (China) 400-square-meter two-story villa on-site, and Apis Cor's 38-square-meter 'on-site' house in Russia.

The building sector is estimated to dominate the market, in terms of value, through 2023.

The building sector dominated the market in 2017 and this trend is projected to continue through 2023, as a result of the rise in demand for affordable homes and growing trend toward the development of complex building structures. The demand for new construction projects has increased steadily in the recent past and is expected to further increase in the coming years, owing to the rapid urbanization and the rising population. These factors are expected to fuel the demand for 3D concrete printing in the building sector.

The Middle Eastern market for 3D concrete printing is projected to grow at the highest CAGR from 2018 to 2023.

The Middle East is projected to be the fastest-growing market for 3D concrete printing during the forecast period. The growth in the region can be attributed to the supportive government initiatives such as "Dubai 3D Printing Strategy" and the demand for affordable houses within the region. The UAE is projected to grow at the highest CAGR

in the Middle Eastern 3D Concrete Printing Market during the forecast period. The Asia Pacific market is projected to grow at the second-highest CAGR between 2018 and 2023.

The key players operating in the **3D Concrete Printing Market** include Winsun (China), XtreeE (France), Monolite UK (UK), Apis Cor (Russia), CSP s.r.l. (Italy), CyBe Construction (Netherlands), and Sika (Switzerland). These players possess enhanced 3D concrete printing capabilities and focus on creating awareness about this dynamic technology. New projects, agreements, partnerships, joint ventures, and expansions are some of the major strategies adopted by key players operating in the 3D Concrete Printing Market.