+357 96 030922
info@marketpublishers.com

Fiber Reinforced Polymer Rebars Market Assessment, By Product Type [Glass (GFRP) Rebar, Carbon (CRFP) Rebar, Aramid (ARFP) Rebar, Basalt (BFRP) Rebar, Others], By Size [Less than 10 mm, 10 mm to 20 mm, More than 20 mm], By Resin Type [Vinyl Ester, Polyester, PA6 & PA6,6, Epoxy, Others], By Application [Ship Building, Building and Construction, Power Plants, Water Treatment Plants, MRI Rooms, Others], By Region, Opportunities and Forecast, 2017-2031F

https://marketpublishers.com/r/F989013148C6EN.html
Date: March 2025
Pages: 221
Price: US$ 4,500.00 (Single User License)
ID: F989013148C6EN

Abstracts

Global fiber reinforced polymer rebars market is projected to witness a CAGR of 10.1% during the forecast period 2024-2031, growing from USD 111 million in 2023 to USD 239.67 million in 2031. The building and construction industry held the leading share in the global fiber reinforced polymer rebars market. According to the latest forecast period published by the Construction Products Association, the construction industry at the global level registered a significant annual growth rate of 2.8% in 2022.

The increasing regulatory standards for the superior quality of fiber reinforced polymer (FRP) rebars will accelerate product adoption, thereby driving the market growth. For illustration, in May 2023, ASTM International, an international standard organization, approved the D8505 standard to integrate FRP rebar into infrastructure applications.

The growth of the building and construction activities is attributed to determinants such as the rising development of high-rise buildings, increasing emphasis on replacing aging

+357 96 030922
info@marketpublishers.com

infrastructure, technological innovations, and surging investments in commercial construction projects. Thus, the booming construction activities are boosting the adoption of fiber reinforced polymer rebars, such as glass (GFRP) rebar and carbon (CRFP) rebar, to ensure chemical resistance, thereby accelerating the market growth. Moreover, the rise in international trade has increased demand for various commercial vessels, such as bulk carriers, tankers, and container ships. Therefore, shipbuilding activities are increasing at the global level, which, in turn, is fueling the demand for fiber reinforced polymer rebars to increase the life span of marine structures, thereby propelling the market growth.

Furthermore, the strict regulatory norms associated with the treatment of wastewater and the growing awareness about the need for water conservation and reuse, along the development of new plants for water treatment, are creating a lucrative opportunity for the fiber reinforced polymer rebars market growth. For exemplifier, the wastewater treatment plant located in Waitsfield, Vermont, the United States is under the design phase and the plan is to begin construction in 2024. Nevertheless, the high manufacturing cost related to fiber reinforced polymer rebars is posing a major roadblock for the market's growth.

Rising Adoption of Fiber Reinforced Polymer Rebars in Construction Activities

FRP rebars are deployed in building and construction activities as a non-corrosive alternative to traditional steel rebars. They ensure superior benefits, such as corrosion-resistance, lightweight, non-conductive, and a long service lifespan, since FRP rebars are made of a polymer matrix reinforced with fibers such as glass, basalt, carbon, or aramid. As a result, FRP rebars are ideal for various structural and architectural applications such as bridges, highways, and dams. The increasing investment in road construction projects in developing economies, rising public-private partnerships in dam construction projects, and ongoing upgradations of tunnels are driving the growth of the building and construction industry, thereby positively impacting the global fiber reinforced polymer rebars market.

For example, various road projects are under the construction phase, including the Garden City Road improvement project in the United States (completion year 2025), 23 projects in India (completion year 2025) undertaken by the National Highways Authority of India (NHAI), and VINCI Highways in Germany (completion year 2025). Hence, the rise in construction activities is fostering the utilization of fiber reinforced polymer rebars to ensure long-term cost savings and contribute to environmental sustainability due to their non-corrosive nature and reduced carbon dioxide (CO_2) emissions during

+357 96 030922
info@marketpublishers.com

production and transport. This, in turn, is proliferating the market growth.

Increasing Application of Glass (GFRP) Rebar is Supplementing the Market Growth

Glass fiber reinforced polymer (GFRP) rebars are highly resistant to corrosion, making then ideal for use in corrosive environments such as seawalls, dams, and power plants. They are also more durable and cost-effective than steel as they extend the lifespan of concrete structures and reduces maintenance and rehabilitation costs. Apart from this, GFRP rebars are comparatively a lighter material, making them easier to handle and transport. Thus, due to the above benefits, GFRP rebar manufacturers are expanding their manufacturing basis to increase their market share in the global market.

For instance, in September 2020, Saudi Aramco, a materials manufacturer in Saudi Arabia launched a new GFRP rebar manufacturing facility in Saudi Arabia. Hence, the increasing expansion of GFRP rebar production facilities due to the rising product deployment in various applications is fostering the market growth.

The Dominance of the North America in the Global Fiber Reinforced Polymer Rebars Market

The demand for FRP rebars in various applications, such as bridges, buildings, marine structures, waterfronts, and water treatment plants, has been increasing in North America, which is accelerating the market growth in the region. In addition, the leading players having a presence in the North American region dealing in the production of FRP rebar are deploying strategies, such as acquisitions, partnerships, and collaborations, to build their business portfolios.

For illustration, as of December 2023, construction projects such as Southeast Connector, USD 1.6 billion Dallas-Fort Worth Area in the United States (project completion year 2027), USD 4.5 Gordie Howe International Bridge, Detroit, MI in North America (project completion year 2026), USD 1 billion American Legion Bridge Replacement, Bethesda, MD in the United States (project completion year 2029), and USD 3.8 billion Hudson Tunnel Project, New York City, NY, in the United States (project completion year 2035) are under the development phase. As a result, the rise in the key building & construction projects in the North American region is boosting the demand for fiber reinforced polymer rebars, thereby supplementing the market growth in the region.

Impact of COVID-19

+357 96 030922
info@marketpublishers.com

The COVID-19 pandemic in 2020 disrupted global supply chains, affecting the availability of materials and delaying construction, thereby slowing FRP rebar adoption. For illustration, according to the European Construction Industry Federation, the European Union building and construction investment registered a decline of 3.0% in 2020. Thus, the diminished growth rate of building and construction activities at the global level led to a decline in the revenue growth of FRP rebars market in 2020.

However, the COVID-19 pandemic also highlighted the advantages of FRP rebars, such as their resistance to corrosion. This, in turn, enhanced their application, especially in healthcare infrastructure and other critical facilities, in response to the growing need for rapid construction and reduced maintenance, thereby augmenting the growth of the market.

Impact of Russia Ukraine War

The war between Russia and Ukraine resulted in record prices of oil, which significantly heightened transportation costs and ensued supply chain limitations and the closure of manufacturing units. The countries such as Russia, Ukraine, Poland, and several other European nations were impacted by the Russia-Ukraine war, thereby limiting the growth of the fiber reinforced polymer rebars industry.

For instance, in March 2022, Composite Group Chelyabinsk, a Russia-based manufacturer of FRP rebars, faced sanctions from the European countries. However, the increased sourcing of raw materials from local suppliers, along with positive trajectory shown in developing countries such as India and China, accelerated the growth of the fiber reinforced polymer rebars market.

Key Players Landscape and Outlook

The leading players involved in the manufacturing of fiber reinforced polymer rebars, such as Owens Corning., FiReP, Sch?ck Bauteile GmbH, Dextra Group, Pultron Composites, Armastek, MRG-Composites, R?chling, TUF-BAR Inc., and SFTec Inc, have highly advanced infrastructure to ensure the production in bulk quantity. The market for FRP rebars is growing due to the increasing demand for lighter, non-corrosive, and high strength rebars, as well as rising government spending for construction and maintenance in developing countries. Therefore, the manufacturers of fiber reinforced polymer rebars are adopting new product innovation, acquisition andmergers, and research and development (R&D) initiatives to expand their revenue share in the global market.

+357 96 030922
info@marketpublishers.com

In October 2023, Technofast Industries, that is headquartered in Australia and is involved in the distribution of engineering solutions, launched a new range of rebar in Australia, with the South Korean-sourced Dong Shin Materials Glass Fibre Reinforced Polymer (GFRP) rebar, which ensures weight savings of up to 75% as opposed to traditional steel rebar. Hence, the increasing distribution of fiber reinforced polymer rebars in Australia is boosting the market growth in the country.

In August 2023, Tampa Steel & Supply, a leading distributor in the United States, introduced its latest product, FRP Rebar, a fiberglass rebar alternative ideal to offer superior durability, strength, and resilience against harsh elements. The launch of FRP Rebar, a glass fiber reinforced polymer (GFRP), will ensure superior performance for a wide range of projects, including seawalls, bridges, dams, piers, low to mid-rise buildings, power plants, and flatwork in corrosive climates. Therefore, the increasing supply of fiber reinforced polymer rebars in the global market is benefiting the industry growth.

In July 2020, Pultron Composites, a New Zealand-based manufacturer of fiber reinforced polymer rebars formed a strategic collaboration with Geosynthetic Partners Ltd to distribute Mateenbar, a range of FRP rebar in the New Zealand market. The prime aim of the partnership was to increase the distribution of FRP rebar in the Asia-Pacific region.

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

8. FIBER REINFORCED POLYMER REBARS MARKET OUTLOOK, BY REGION, 2017-2031F

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

9. SUPPLY SIDE ANALYSIS

10. MARKET MAPPING, 2023

11. MACRO ENVIRONMENT AND INDUSTRY STRUCTURE

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

*Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Fiber Reinforced Polymer Rebars Market Assessment, By Product Type [Glass (GFRP) Rebar, Carbon (CRFP) Rebar, Aramid (ARFP) Rebar, Basalt (BFRP) Rebar, Others], By Size [Less than 10 mm, 10 mm to 20 mm, More than 20 mm], By Resin Type [Vinyl Ester, Polyester, PA6 & PA6,6, Epoxy, Others], By Application [Ship Building, Building and Construction, Power Plants, Water Treatment Plants, MRI Rooms, Others], By Region, Opportunities and Forecast, 2017-2031F

Product link: https://marketpublishers.com/r/F989013148C6EN.html

Price: US$ 4,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/F989013148C6EN.html