



Market Report

Global Carbon Fiber Composite Market

3rd Edition

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Abstract

Carbon fiber composite market experienced steady growth in the last years. Driven by technological innovations and new applications, the market is expected to show modest growth worldwide in the next years. Despite of various challenges like increasing raw material costs, there is strong confidence that the medium- and long-term trend of the market will not change and remain upward. New business opportunities will emerge in major and novel applications. Technological advances in composite materials in turn massively boost their applications in downstream markets.

The global demand on carbon fiber composites was estimated at around US\$15.75 billion in 2015. The market is expected to approach US\$23.11 billion by 2021 and to reach US\$38.0 billion by 2024 in the forecast, following a growth rate of about 6.6% annually. Strongest demand is expected in aircraft / aerospace, automotive and wind energy applications.

Acmite Market Intelligence has updated a most comprehensive report on global carbon fiber composite market. It is ready for order.

The report examines the current products and application areas, provides extensive market data of 2015, and market forecast through 2021 to 2024. It also outlines the competition landscape, evaluates market chances and risks, and anticipates future trends based on a series of influence factors.

- 215 pages analyzing the market
- 70 figure tables
- 275 carbon fiber composite company profiled

With a multi-dimensional and in-depth view of world carbon fiber composite market, this report is ideal help for you with decisions about international market penetration, business expansion or project feasibility analysis.

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Note:

Regions:

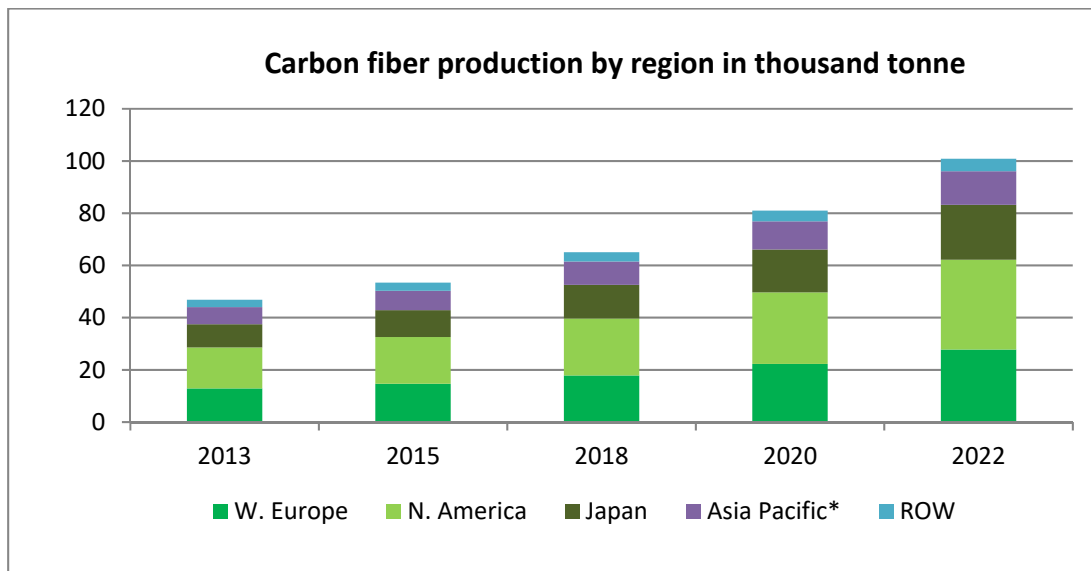
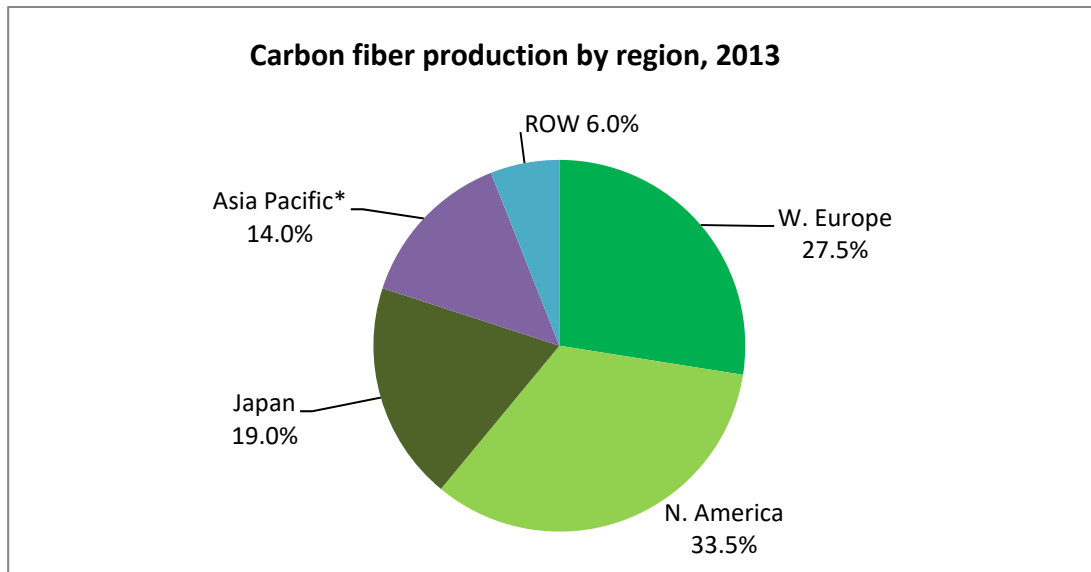
North America: US, Canada, Mexico (NAFTA region)

Asia Pacific: Countries of Asia, Australia, New Zealand

Asia Pacific*: Asia Pacific excluding Japan

Carbon fiber production by region in thousand tonne

	2015	2016	2018	2021	2024	CAGR
Europe	13.76	14.68	16.71	20.28	24.61	6.7%
N. America	17.02	18.18	20.76	25.33	30.89	6.9%
Japan	9.76	10.50	12.16	15.15	18.87	7.6%
Asia Pacific*	7.01	7.46	8.45	10.20	12.30	6.5%
ROW	2.50	2.62	2.88	3.32	3.82	4.8%
Total	50.05	53.45	60.97	74.27	90.48	6.8%



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(MRCFAC) in USA. MRCFAC plans to install new facilities capable of 2,000 tons of annual carbon fiber production at its existing site in Sacramento, California. The site expansion, scheduled to be completed by mid-2016, will double the annual production capacity of currently 2,000 tons up to 4,000 tons.

Toray to acquire Saati's carbon fiber fabric and prepreg business in Europe

Toray Industries, Inc. announced that it had reached a basic agreement with Saati S.p.A to acquire its European carbon fiber fabric and prepreg business. Toray will take over the assets of Saati's plant in January 2015, which would start operation as Composite Materials (Italy) S.r.l., (CIT), a wholly-owned subsidiary of Toray, while Saati's American composite business will still belong to the Saati Group.

SGL started production of carbon fibers in Scotland

SGL Group started production of thermoplastic-compatible carbon fibers at its Muir of Ord site in Scotland. The heavy tow carbon fiber SIGRAFIL® C 50k is to be produced and delivered to the automotive industry from this plant. The thermoplastic carbon fiber composites combine the properties of carbon fibers with the typical processing advantages of thermoplastics.

Hexcel to invest in new R&T facility and capacity expansions at Duxford, UK

Hexcel celebrated the ground-breaking for a new £6 million R&T facility and additional investments for capacity expansions at Duxford, UK. These investments will add up to 100 jobs to the Duxford workforce by 2017. Duxford is Hexcel's largest center for research into resin systems and adhesives. It is also Hexcel's center of excellence for process technology including product scale-up and research into new process methods for making composite materials, including quality control methods. Additional investments at Hexcel Duxford include the expansion of our state of the art mixing and filming systems to support large scale production of the composite materials required for the Airbus A350 XWB program.

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4.2 Carbon fiber metal-matrix composites

4.2.1 Products, properties and applications

The reinforcement of light metals, aluminium, magnesium and light alloys has been considered at the early stages of carbon composites development. The metal-matrices used for carbon fiber composites include:

- Aluminium: Aluminum is by far the most widely used matrix metal because of its low density, low melting temperature (which makes composite fabrication and joining relatively convenient), low cost, and good machinability.
- Magnesium: Magnesium is comparably low in melting temperature, but its density is even lower than aluminum.
- Copper
- Nickel
- Tin alloys
- Silver-copper
- Lead alloys

Carbon fibers used for metal-matrix composites are mostly in the form of continuous fibers, but short fibers are also used.

Properties

Compared to the metal itself, a carbon fiber metal-matrix composite is characterized by

- a higher strength-to-density ratio (i.e., specific strength)
- a higher modulus-to-density ratio (i.e., specific modulus)
- better fatigue resistance
- better high temperature mechanical properties (a higher strength and a lower creep rate)... ..

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Year of foundation: 1835

Number of employees: 2,094

Revenue 2015: CHF 359.4 million

Company profile

Gurit Holding AG, formerly Gurit-Heberlein AG, is a Switzerland-based company engaged in the development, production and distribution of advanced composite materials, related technologies and finished parts and components.

The company's main product portfolio includes

- fiber reinforced glass and carbon prepregs
- structural foam materials
- gel coats
- adhesives
- resins
- consumables

Gurit Holding AG serves the global markets of wind energy; transportation in the field of aerospace, automotive and rail, winter sport, civil engineering, as well as marine.

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M0802	Global Carbon Fiber Composite Market, Volume II	350	<input type="checkbox"/> EUR 790	<input type="checkbox"/> EUR 990	<input type="checkbox"/> EUR 1290
M0800	Global Carbon Fiber Composite Market, Total (Volume I + II)	565	<input type="checkbox"/> EUR 1990	<input type="checkbox"/> EUR 2390	<input type="checkbox"/> EUR 3390
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