

# The Global Market for Carbon Fibers to 2025

https://marketpublishers.com/r/G9038F0EA62EN.html

Date: December 2018

Pages: 95

Price: US\$ 1,900.00 (Single User License)

ID: G9038F0EA62EN

## **Abstracts**

Carbon fiber (CF) is used as a reinforcement material in composites. Carbon fiber reinforced plastic (CFRP) composites, offer a higher strength-to-weight ratio and stiffness-to-weight ratio than many structural materials. Lightweight, high-strength, and high-stiffness composite materials are crucial for the development of an energy efficient transportation industry, enabling vastly improved power generation, new mechanisms for storing and transporting reduced carbon fuels, and enhancing renewable power production.

They are also increasingly used in wind turbines, aerospace (commercial and military aircraft, space launch vehicles), and pressure vessel industries for increased strength to weight and stiffness. Other markets are sports & leisure composites (skis and snowboards, bicycles and hockey sticks) and construction. Their demand in aviation and automotive industries is growing fast, especially in Asia.

Demand for CF will continue to grow, with global demand exceeding 77,000 tons in 2018 and growing to more than 150,000 tons by 2025. Combined global production capacity is currently more than 140,000 tons.

A number of producers have increased capacity in 2018, and Kangde (66,000 tons), Toray (62,000 tons) and SGL Group (49,000 tons) will greatly grow their capacity over the next few years. Other companies with expansion plans include Hexcel, DowAska and Hyosung. Toray purchased CF components manufacturer TenCate Advanced Composites Holding in March 2018 for \$1 billion.

# Report contents include:

In depth technology assessment including materials, manufacturing methods and competitive landscape.



Quantitative carbon fiber market forecasts to 2025, globally, by end users markets and regions.

Global production capacities, by producer, current and planned.

Market trends 2016-2018 including deals, mergers, acquisitions and all major news.

Market drivers challenges, by end user markets.

In-depth key player profiles, include products, current capacities and plans for new capacities. Companies profiled include Toray, Hexcel, DowAska, Hyosung and Mitsubishi



## **Contents**

### 1 EXECUTIVE SUMMARY

- 1.1 The current market
- 1.2 Innovation in the carbon fiber market
- 1.3 Carbon fiber capacities
- 1.4 Capacity expansion in the near future
- 1.5 End user markets for CF
- 1.6 Global market size and revenues, 2015 to 2025
- 1.6.1 Carbon fiber demand
- 1.6.2 Global demand for carbon composites
- 1.7 Key market trends 2016 to 2018

#### 2 RESEARCH METHODOLOGY

- 2.1 Scope of the report
  - 2.1.1 Objective of the report
  - 2.1.2 Methodology

## **3 INTRODUCTION**

- 3.1 Carbon fiber: materials and manufacturing
  - 3.1.1 Structure and properties
  - 3.1.2 Composites
  - 3.1.3 Types of carbon fibers
  - 3.1.4 Matrix materials
  - 3.1.5 Reinforcement materials
  - 3.1.6 Semi-Finished Products
  - 3.1.7 Manufacturing processes
  - 3.1.8 Applications

### **4 THE CARBON FIBER INDUSTRY**

- 4.1 The market in 2017
- 4.2 The market in 2018
- 4.3 Growth to 2025
- 4.4 Markets for carbon fiber
  - 4.4.1 Traditional markets



	<ul> <li>4.4.2 Growth markets</li> <li>4.4.3 Pricing</li> <li>4.5 MARKET SUPPLY CHAIN</li> <li>4.6 MARKET DRIVERS</li> <li>4.7 MARKET CHALLENGES</li> <li>4.8 COMPETITIVE LANDSCAPE FOR CARBON-BASED ADDITIVES WITH NANOMATERIALS</li> </ul>				
	5 CARBON FIBER MARKET, BY APPLICATIONS				
	<ul> <li>5.1 Automotive</li> <li>5.2 Aerospace and aviation</li> <li>5.3 Wind turbines</li> <li>5.4 Sport and leisure equipment</li> <li>5.5 Civil engineering</li> <li>5.6 Compressed gas storage</li> <li>5.7 Other</li> </ul>				
6 CARBON FIBER MARKET, BY REGION					
	<ul><li>6.1 Europe</li><li>6.2 North America</li><li>6.3 Asia-Pacific</li><li>6.3.1 Japan</li><li>6.3.2 China</li></ul>				
	7 CARBON FIBER MARKET BUSINESS TRENDS 2016 TO 2018				
	8 COMPETITIVE ANALYSIS				
	8.1 Key players 8.2 Market share analysis				
	9 CARBON FIBER PRODUCER PROFILES				
	10 REFERENCES				



## **List Of Tables**

#### LIST OF TABLES

- Table 1 Global carbon fiber capacities, by company 2018
- Table 2. Planned carbon fiber capacity expansions
- Table 3 Global carbon fiber market revenues and forecast, 2010-2025
- Table 4 Types of carbon fiber, based on properties
- Table 5. Manufacturing Techniques for Carbon Fiber Reinforced Polymer
- Table 6. Properties of CF and applications thereof
- Table 7 Market supply chain for carbon fiber
- Table 8 Market drivers for the carbon fiber industry
- Table 9. Market challenges for CF market
- Table 10. Comparative prices of competive materials in composites
- Table 11. Key players in carbon nanotubes
- Table 12. Key players in graphene
- Table 13 Global carbon fiber production and capacity, forecast to 2030
- Table 14. Market drivers for use of CFs in the automotive market
- Table 15. Applications of CF in the automotive market
- Table 16. Demand for CF in the automotive market to 2025 in tons
- Table 17. Market drivers for use of CFs in the aerospace and aviation market
- Table 18. Applications of CF in the aerospace and aviation market
- Table 19. Demand for CF in the aerospace and aviation market to 2025 in tons
- Table 20. Market drivers for use of CFs in the wind turbines market
- Table 21. Applications of CF in the wind turbines market
- Table 22. Demand for CF in the wind turbines market to 2025 in tons
- Table 23. Market drivers for use of CFs in the sports equipment market
- Table 24. Applications of CF in the sport and leisure equipment market
- Table 25. Demand for CF in the sport and leisure equipment market to 2025 in tons
- Table 26. Market drivers for use of CFs in the civil engineering market
- Table 27. Applications of CF in the civil engineering market
- Table 28. Demand for CF in the civil engineering market to 2025 in tons
- Table 29. Market drivers for use of CFs in the compressed gas storage market
- Table 30. Applications of CF in the compressed gas storage market
- Table 31. Demand for CF in the compressed gas storage market to 2025 in tons
- Table 32. Market drivers for use of CFs in other markets
- Table 33. Applications of CF in the other markets
- Table 34. Demand for CF in other markets to 2025 in tons
- Table 35. Demand for carbon fiber in Europe in tons 2015-2025



- Table 36. Demand for carbon fiber in North America in tons 2015-2025
- Table 37. Demand for carbon fiber in Asia-Pacific in tons 2015-2025
- Table 38. Demand for carbon fiber in Japan in tons 2015-2025
- Table 39. Demand for carbon fiber in China in tons 2015-2025
- Table 40: Carbon fiber market business trends 2016-2018
- Table 41: Carbon fiber market share, by leading producers
- Table 42. Key players in carbon fibers, location and capacities



# **List Of Figures**

#### LIST OF FIGURES

- Figure 1 Carbon fiber capacity by company 2018
- Figure 2 Global carbon fiber market demand in 2018, by end user markets
- Figure 3. Global market for carbon fiber (metric tons), 2015 to 2025
- Figure 4. Global demand for carbon composites
- Figure 5 Global market for carbon fiber (revenues), 2014 to 2025
- Figure 6. Specific stiffness and specific strength for various materials
- Figure 7. Global CF market by matrix materials
- Figure 8. Carbon fiber composite manufacturing technologies and their applications
- Figure 9. Current carbon fiber production steps
- Figure 10. Global demand for carbon fiber in 2017, by end user market
- Figure 11. Global demand for carbon fiber in 2018, by end user market
- Figure 12. Global demand for carbon fiber in 2025, by end user market
- Figure 13 Global carbon fiber production and capacity, forecast to 2025
- Figure 14 Global carbon fiber market by application in 2017
- Figure 15. Demand for CF in the automotive market to 2025 in tons
- Figure 16. Demand for CF in the aerospace and aviation market to 2025 in tons
- Figure 17. Demand for CF in the wind turbines market to 2025 in tons
- Figure 18. Demand for CF in the sport and leisure equipment market to 2025 in tons
- Figure 19. Demand for CF in the civil engineering market to 2025 in tons
- Figure 20. Demand for CF in the compressed gas storage market to 2025 in tons
- Figure 21. Demand for CF in other markets to 2025 in tons
- Figure 22 Global carbon fiber regional demand in tons, 2015 to 2025
- Figure 23. Demand for carbon fiber in Europe in tons 2015-2025
- Figure 24. Demand for carbon fiber in North America in tons 2015-2025
- Figure 25. Demand for carbon fiber in Asia-Pacific in tons 2015-2025
- Figure 26. Demand for carbon fiber in Japan in tons 2015-2025
- Figure 27. Demand for carbon fiber in China in tons 2015-2025
- Figure 28 Main global rubber carbon fiber producers market share by capacity



### I would like to order

Product name: The Global Market for Carbon Fibers to 2025

Product link: https://marketpublishers.com/r/G9038F0EA62EN.html

Price: US\$ 1,900.00 (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 <a href="https://marketpublishers.com/r/G9038F0EA62EN.html">https://marketpublishers.com/r/G9038F0EA62EN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:		
Last name:		
Email:		
Company:		
Address:		
City:		
Zip code:		
Country:		
Tel:		
Fax:		
Your message:		
	**All fields are required	
	Custumer signature	

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970