



**Global and China Carbon Fiber Industry
Report, 2012-2015**

Jan. 2013

STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- ◆ To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- ◆ To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- ◆ To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications.

Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

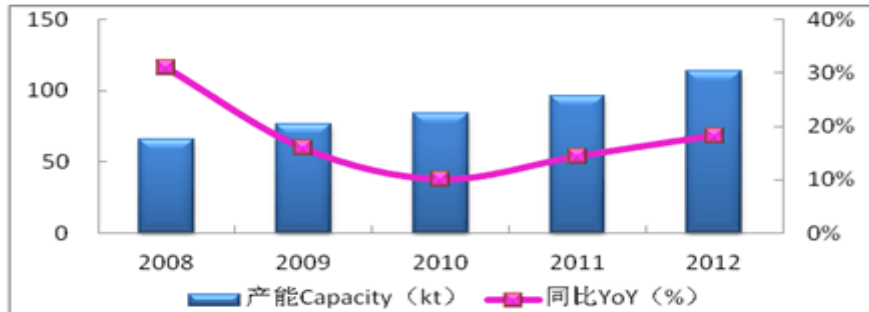
The primary information sources include Company Reports, China Customs, and National Bureau of Statistics of China etc.

Abstract

Carbon fiber is a new generation of reinforced fiber, mainly used in the fields of aerospace, wind power, automotive, sports and leisure. Industrial applications like wind power, automotive and pressure vessel account for the largest demand for carbon fiber, which is more than 60%, followed by aerospace, with enhanced application and hence steadily increased demand; the growth of demand from sports and leisure has been relatively slow. The global carbon fiber demand maintained a CAGR of 14.1% in 2008-2012, and hit 54,500 tons in 2012.

In 2010-2012, as the demand for carbon fiber has been recovered, global leading carbon fiber manufacturers have accelerated the capacity expansion of carbon fiber. In 2012, the global carbon fiber capacity reached 114,000 tons, a year-on-year growth of 18.3%.

Global Carbon Fiber Capacity and Growth Rate, 2008-2012



Source: ResearchInChina Global and China Carbon Fiber Industry Report, 2012-2015

Due to the complex process and high technical content of carbon fiber production, global carbon fiber capacity is mainly concentrated in Japanese and U.S. enterprises. Japan's Toray, Toho and Mitsubishi Rayon, mainly engaged in the production of PAN-based small-tow ($\leq 24K$) carbon fiber, accounted for 2/3 of the global total small-tow carbon fiber capacity in 2012. Toray is the largest carbon fiber manufacturer in the world, with an annual capacity of 18,900 tons in 2012.

U.S. Zoltek and German SGL, mainly engaged in the production of large-tow ($>24K$) PAN-based carbon fiber, accounted for about 3/4 of the global large-tow carbon fiber capacity in 2012. Japanese Kureha, mainly engaged in the production of pitch-based carbon fiber, is the largest pitch-based carbon fiber producer in the world, with an annual capacity of 1,800 tons in 2012.

Stimulated by incentive policies and the gap between supply and demand, coupled with the gradual progress of industrial technology, China's carbon fiber industry is ushering in rapid development. China's carbon fiber capacity maintained a CAGR of 46.2% in 2008-2012, and reached 14,521 tons in 2012. As China's carbon fiber production technology hasn't been mature and most production lines are in the initial stage of production, the plant operating rate has been generally low. In 2012, the actual output was only 3,500 tons, and the import dependency rate was about 70%.

Copyright 2012 ResearchInChina

In 2012, China's major producers of carbon fiber include ZhongFuShenYing, Jiangsu Hengshen, Tianhua Excel-Way, Weihai Tuozhan Fiber, HNCC Yongmei, etc. Among which, only ZhongFuShenYing and Jiangsu Hengshen each boast an annual carbon fiber output of about 1,000 tons, and an annual capacity of 3,000 tons at present.

In addition, there are about 38,000 tons of carbon fiber capacities under planning/construction in China. The projects to be put into production in 2013 include 2,000 t/a carbon fiber project of Kingfa, 1,500 t/a carbon fiber project of Sinosteel Jiangcheng Carbon Fiber, and 1,500 t/a carbon fiber project of Sinopec Shanghai Petrochemical.

Global and China Carbon Fiber Industry Report, 2012-2015 of ResearchInChina mainly covers the followings:

- Global carbon fiber industry supply and demand, competition pattern and price;
- China carbon fiber industry supply and demand, import & export and price;
- China carbon fiber industry competition pattern, projects under planning/construction, supply and demand, consumption structure forecasts, etc.;
- Operation, carbon fiber business and development trends of nine carbon fiber production enterprises overseas;
- Operation, carbon fiber business and development forecasts of nine carbon fiber production enterprises as well as the development trends of 20 carbon fiber producers in mainland China.

1. Carbon Fiber

- 1.1 Definition and Properties
- 1.2 Process
- 1.3 Classification
- 1.4 Application

2. Global Carbon Fiber Market

- 2.1 Development Status
- 2.2 Competition Pattern
- 2.3 Supply and Demand
 - 2.3.1 Supply
 - 2.3.2 Demand
- 2.4 Price

3. Chinese Carbon Fiber Market

- 3.1 Development Status
- 3.2 Supply and Demand
 - 3.2.1 Supply
 - 3.2.2 Demand
- 3.3 Import and Export
 - 3.3.1 Carbon Fiber
 - 3.3.2 Other Carbon Fiber Products
- 3.4 Price
- 3.5 Development Prospects and Forecasts
 - 3.5.1 Supply and Demand
 - 3.5.2 Demand Structure

4. Key Overseas Companies

- 4.1 Toray
 - 4.1.1 Profile
 - 4.1.2 Operation of Carbon Fiber Business
 - 4.1.3 Development of Carbon Fiber Business
- 4.2 Toho
 - 4.2.1 Profile
 - 4.2.2 Operation of Carbon Fiber Business
 - 4.2.3 Development of Carbon Fiber Business
- 4.3 Mitsubishi Rayon
 - 4.3.1 Profile
 - 4.3.2 Operation of Carbon Fiber Business
 - 4.3.3 Development of Carbon Fiber Business
- 4.4 Kureha
 - 4.4.1 Profile
 - 4.4.2 Carbon Fiber Business
 - 4.4.3 Development of Carbon Fiber Business
- 4.5 Hexcel
 - 4.5.1 Profile
 - 4.5.2 Operation
 - 4.5.3 Carbon Fiber Business
 - 4.5.4 Development of Carbon Fiber Business
- 4.6 Zoltek
 - 4.6.1 Profile
 - 4.6.2 Operation
 - 4.6.3 Carbon Fiber Business
 - 4.6.4 Development of Carbon Fiber Business
- 4.7 Cytec
 - 4.7.1 Profile
 - 4.7.2 Operation
 - 4.7.3 Carbon Fiber Business
 - 4.7.4 Development of Carbon Fiber Business
- 4.8 SGL
 - 4.8.1 Profile
 - 4.8.2 Operation
 - 4.8.3 Carbon Fiber Business
 - 4.8.4 Development of Carbon Fiber Business
- 4.9 Formosa Plastics
 - 4.9.1 Profile
 - 4.9.2 Operation of Carbon Fiber Business
 - 4.9.3 Output and Sales Volume of Carbon Fiber
 - 4.9.4 Development of Carbon Fiber Business

5. Key Mainland Chinese Companies

- 5.1 ZhongFuShenYing Carbon Fiber Limited Liability Company
 - 5.1.1 Profile
- 5.2 Sinosteel Jilin Carbon Co., Ltd.
- 5.3 Jilin Qifeng Chemical Fiber Co., Ltd.
- 5.4 Ningxia Dayuan Chemical Co., Ltd.
- 5.5 Jilin Jiyan High-tech Fibers Co., Ltd.
- 5.6 Shanxi Hengtian New Textile Fiber Tech Co., Ltd.
- 5.7 Weihai Tuozhan Fiber Co., Ltd.
- 5.8 Jilin Petrochemical
- 5.9 Anshan Sinocarb Carbon Fibers Co., Ltd.
- 5.10 Other Manufacturers

- PAN-based Carbon Fiber Production Process
- Classification of Carbon Fiber Products by Number of Carbon Fibers per Tow
- Classification of Carbon Fiber by Mechanical Properties
- Classification and Main Application of Carbon Fiber and its Composites
- Specific Applications of Deep-processed Carbon Fiber Composite Products
- Global Carbon Fiber Capacity Structure by Manufacturer (by Capacity of Carbon Fiber Tow), 2012
- Global Carbon Fiber Capacity and Growth Rate, 2008-2012
- Global Carbon Fiber Demand and Growth Rate, 2008-2012
- Global Carbon Fiber Application Structure, 2012
- Global ST Carbon Fiber Average Price, 1985-2011
- China's Carbon Fiber Capacity and Growth Rate, 2008-2012
- China's Major Carbon Fiber Manufacturers and Their Capacities, 2012
- China's Carbon Fiber Projects under Planning/Construction, 2012
- China's Carbon Fiber Demand and YoY Growth, 2008-2012
- China's Carbon Fiber Consumption Structure, 2012
- China's Carbon Fiber Import and Export Volume, 2009-2012
- China's Carbon Fiber Import and Export Average Prices, 2009-2012
- China's Carbon Fiber Import Source Structure (by Volume), Jan.-Nov. 2012
- China's Carbon Fiber Export Destination Structure (by Volume), Jan.-Nov. 2012
- China's Import and Export Volume of Other Carbon Fiber Products, 2009-2012
- Import Source Structure of China's Other Carbon Fiber Products (by Volume), Jan.-Nov. 2012
- Export Destination Structure of China's Other Carbon Fiber Products (by Volume), Jan.-Nov. 2012
- Quotations of China's Major Carbon Fiber Suppliers, Dec. 2012
- Supply and Demand of China's Carbon Fiber Industry, 2012 & 2015
- China's Carbon Fiber Consumption Structure, 2012, 2015 & 2020
- Toray's Sales Structure (bv Business). FY2010-FY2011

- Net Sales and Operating Income of Toray's Carbon Fiber Business, FY2008-FY2012
- Toray's Carbon Fiber Sales (by Application), FY2009-FY2011
- Toray's Carbon Fiber Sales Structure (by Application), FY2009-FY2011
- Toray's Carbon Fiber Capacity Development, 2012-2015
- Teijin's Sales Structure (by Business), FY2009-FY2011
- Teijin's Carbon Fiber Subsidiaries
- Main Applications of Toho's Carbon Fiber
- Teijin's High-performance Fiber Sales and Operating Income, FY2009-FY2012
- Sales of Mitsubishi Rayon (by Business), FY2008-FY2010Q1
- Carbon Fiber Subsidiaries of Mitsubishi Rayon
- Main Applications of Mitsubishi Rayon's Carbon Fiber
- Mitsubishi Rayon's Sales and Operating Income from Carbon Fiber and Composites, FY2007-FY2010Q1
- Mitsubishi Rayon's Sales from Carbon Fiber and Composites (by Region), FY2008-FY2009
- Mitsubishi Rayon's R&D Expenditure on Carbon Fiber and Composites, FY2007-FY2009
- Kureha's Sales Structure (by Business), FY2010-FY2012
- Sales and Operating Income of Kureha's Advanced Materials Division, FY2008-FY2012
- Sales Kureha's Advanced Materials Division by Product, FY2010-FY2012
- Hexcel's Sales and Operating Income, 2008-2012
- Hexcel's Sales Structure (by Market), 2010-2012
- Hexcel's Sales Structure (by Region), 2009-2011
- Hexcel's Defense & Aerospace Sales and YoY Growth, 2006-2012
- Hexcel's Business Aviation Customer Structure, 2012
- Hexcel's Business Aviation Sales and YoY Growth, 2006-2012
- Application of Hexcel's Composites in Aircraft, 2009 & 2013
- Hexcel's Industrial Sales and YoY Growth, 2006-2012
- Zoltek's Sales and Operating Income. FY2008-FY2012

- Zoltek's Sales Structure (by Product), FY2010-FY2012
- Zoltek's Sales Structure (by Region), FY2010-FY2012
- Zoltek's Carbon Fiber Sales and Operating Income, FY2008-FY2012
- Zoltek's Carbon Fiber Pre-oxidized Fiber and Special Carbon Fiber Sales and Operating Income, FY2008-FY2012
- Cytec's Sales and Operating Income, 2008-2012
- Cytec's Sales Structure (by Product), 2010-2012
- Cytec's Sales Structure (by Region), 2009-2011
- Cytec's Sales Structure (by Market), 2010-2011
- Sales and Growth Rate of Cytec's Engineering Materials Business, 2008-2012
- Sales Structure of Cytec's Engineering Materials Business (by Region), 2009-2011
- SGL's Sales and EBITDA, 2008-2012
- SGL's Sales Structure (by Product), 2010-2012
- SGL's Sales Structure (by Region), 2009-2011
- SGL's Sales Structure (by Market), 2010-2011
- Sales and Growth Rate of SGL's Carbon Fiber Business, 2008-2012
- Divisions and Main Businesses of Formosa Plastics
- Revenue Structure of Formosa Plastics (by Business), 2009-2011
- Sales and Average Price of Formosa Plastics' Carbon Fiber, 2007-2011
- Sales Structure of Formosa Plastics' Carbon Fiber Business (by Region), 2009-2011
- Carbon Fiber Capacity, Output and Operating Rate of Formosa Plastics, 2007-2011
- Formosa Plastics' Carbon Fiber Sales Volume and Sales-Output Ratio, 2007-2011
- ZhongFuShenYing's Main Products
- Application of ZhongFuShenYing's Main Products
- Main Operating Indicators of ZhongFuShenYing, 2008-2009
- Revenue and Net Income of Sinosteel Jilin Carbon, 2008-2012
- Revenue of Sinosteel Jilin Carbon (by Product). 2009-2011

- Revenue Structure of Sinosteel Jilin Carbon (by Product), 2012H1
- Revenue of Sinosteel Jilin Carbon (by Region), 2009-2012
- Revenue Structure of Sinosteel Jilin Carbon (by Region), 2012H1
- Gross Margin of Sinosteel Jilin Carbon by Product, 2008-2012
- Revenue Contribution of Sinosteel Jilin Carbon's Top 5 Customers, 2009-2012
- Name List, Revenue Contribution and % of Revenue of Sinosteel Jilin Carbon's Top 5 Customers, 2012H1
- Revenue and Operating Income of Sinosteel Jilin Carbon's Carbon Fiber Business, 2008-2011
- Revenue and Net Income of Sinosteel Jilin Carbon, 2010-2014
- Revenue and Net Income of Jilin Qifeng Chemical Fiber, 2008-2012
- Revenue of Jilin Qifeng Chemical Fiber (by Product), 2010-2012
- Revenue Structure of Jilin Qifeng Chemical Fiber (by Product), 2010-2012
- Gross Margin of Jilin Qifeng Chemical Fiber by Product, 2008-2012
- Output, Sales Volume and Sales-Output Ratio of Jilin Qifeng Chemical Fiber, 2009-2012
- Sales Volume of Jilin Qifeng Chemical Fiber by Product, 2010-2012
- Average Selling Price, Acrylonitrile Procurement Price and Price Difference of Jilin Qifeng Chemical Fiber, 2009-2012
- Average Selling Price of Main Products of Jilin Qifeng Chemical Fiber, 2010-2012
- Revenue and Net Income of Jilin Qifeng Chemical Fiber, 2010-2014
- Revenue and Net Income of Ningxia Dayuan Chemical, 2008-2012
- Revenue of Ningxia Dayuan Chemical (by Product), 2010-2012
- Revenue Structure of Ningxia Dayuan Chemical (by Product), 2010-2012
- Revenue of Ningxia Dayuan Chemical (by Region), 2011
- Gross Margin of Ningxia Dayuan Chemical by Product, 2010-2012
- Revenue Contribution of Ningxia Dayuan Chemical's Top 5 Customers, 2009-2012
- Name List, Revenue Contribution and % of Revenue of Ningxia Dayuan Chemical's Top 5 Customers, 2012H1
- Carbon Fiber Prepreg Products of Jiaying Sino-Dia Carbon Fiber
- Revenue and Net Income of Ningxia Dayuan Chemical, 2010-2014

- Carbon Fiber Products of Jilin Jiyan High-tech Fibers
- Main Operating Indicators of Jilin Jiyan High-tech Fibers, 2008-2009
- Main Operating Indicators of Shanxi Hengtian New Textile Fiber Tech, 2007-2009
- Main Downstream Customers of Raw Carbon Fiber of Shanxi Hengtian New Textile Fiber Tech
- Carbon Fiber Products of Weihai Tuozhan Fiber
- Carbon Fiber and Composite Products of Anshan Sinocarb Carbon Fibers

You can place your order in the following alternative ways:

1. Order online at www.researchinchina.com
2. Fax order sheet to us at fax number: +86 10 82601570
3. Email your order to: report@researchinchina.com
4. Phone us at +86 10 82600828/ 82601561

Party A:			
Name:			
Address:			
Contact Person:		Tel	
E-mail:		Fax	

Party B:			
Name:	Beijing Waterwood Technologies Co., Ltd (ResearchInChina)		
Address:	Room 502, Block 3, Tower C, Changyuan Tiandi Building, No. 18, Suzhou Street, Haidian District, Beijing, China 100080		
Contact Person:	Liao Yan	Phone:	86-10-82600828
E-mail:	report@researchinchina.com	Fax:	86-10-82601570
Bank details:	Beneficial Name: Beijing Waterwood Technologies Co., Ltd Bank Name: Bank of Communications, Beijing Branch Bank Address: NO.1 jinxiyuan shijicheng, Landianchang, Haidian District, Beijing Bank Account No #: 110060668012015061217 Routing No #: 332906 Bank SWIFT Code: COMMCNSHBJG		

Title	Format	Cost
<i>Total</i>		

Choose type of format

- PDF (Single user license)2,200 USD
- Hard copy 2,300 USD
- PDF (Enterprisewide license)..... 3,400 USD

※ Reports will be dispatched immediately once full payment has been received.
Payment may be made by wire transfer or credit card via PayPal.