

**Global and China Carbon Fiber Industry
Report, 2010-2011**

Sep. 2011

This report

- ◆ **Analyzes global and China's carbon fiber market.**
- ◆ **Focuses on the supply and demand, price, national policy and market dynamics**
- ◆ **Highlights the operation of key enterprises of global and China carbon fiber industry.**

Please visit our website to order this report and find more information about other titles at www.researchinchina.com

Related Products

China BOPP Film Industry Report, 2010-2011

China Plastic Products and Modified Plastics Market Report, 2011

China Coal Tar Industry Report, 2010-2011

China Phosphorite and Phosphorous Chemical Industry Report, 2010-2011

China Polymer Foam Material Industry Report, 2010-2011

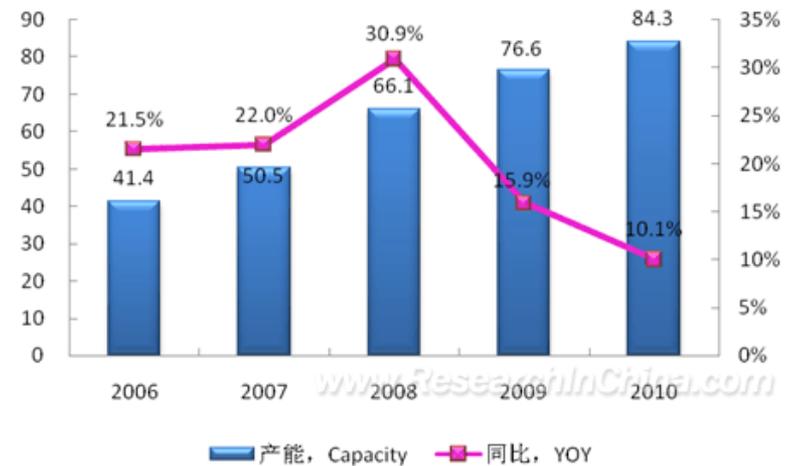
China Feed Amino Acid Industry Report, 2010

Abstract

Carbon fiber, as a kind of reinforcing material, is mainly used in aerospace, wind power, automobile, sports and leisure fields, of which aerospace as a traditional application field of carbon fiber has witnessed a rising application ratio of carbon fiber in recent years; and the demand for carbon fiber from the emerging areas such as wind power, automobile and pressure vessel has been boosting as well. From 2006 to 2010, the annual growth rate of global demand for carbon fiber averaged 12.9%, soaring to nearly 40,000 tons in 2010.

In order to meet the increasingly growing demand, the global carbon fiber capacity has expanded rapidly, at an annual average growth rate of 26.4% in 2006-2008. Affected by financial crisis, most of the major carbon fiber manufacturers cancelled or suspended capacity expansion projects, lowering the capacity growth rate to 15.9% and 10.1% in 2009 and 2010 respectively. When the demand picked up in 2010, the carbon fiber expansion projects were started again one after another.

Capacity and YoY Growth Rate of Global Carbon Fiber, 2006-2010 (Unit: kt)



Source: ResearchInChina

Since the production of carbon fiber requires sophisticated processes and high technology, the capacity of global carbon fiber is mainly concentrated in Japanese and American enterprises. Japan-based Toray, Toho and Mitsubishi Rayon mainly engage in the production of PAN-based small-tow ($\leq 24K$) carbon fiber, together accounting for 69.3% of the total capacity of small-tow products in 2010. Among them, Toray is the largest carbon fiber manufacturer in the world, with capacity of 17,900 tons.

Since the production of carbon fiber requires sophisticated processes and high technology, the capacity of global carbon fiber is mainly concentrated in Japanese and American enterprises. Japan-based Toray, Toho and Mitsubishi Rayon mainly engage in the production of PAN-based small-tow ($\leq 24K$) carbon fiber, together accounting for 69.3% of the total capacity of small-tow products in 2010. Among them, Toray is the largest carbon fiber manufacturer in the world, with capacity of 17,900 tons.

U.S.-based Zoltek specializes in manufacturing PAN-based large-tow ($> 24K$) carbon fiber, with its capacity making up 54.1% of the total capacity of large-tow products in 2010. And Japan-based Kureha devotes itself to producing pitch-based carbon fiber and achieved capacity of 1,450 tons in 2010, ranking as the largest manufacturer of pitch-based carbon fiber in the world.

China's carbon fiber industry is still in its infancy. Because of lack in core technology, the carbon fiber in China has been in short supply for a long time. In 2010, the capacity of China's carbon fiber amounted to 6,855 tons, but the actual output was only over 1,000

tons, so 90% of carbon fiber relied on imports. The wide supply-demand gap in Chinese carbon fiber market has spurred the mushrooming of research programs and kiloton-level industrialization projects. As of August 2011, the planned capacity of carbon fiber in China has soared to 70,000-80,000 tons.

Currently, major carbon fiber producers in China include ZhongFuShenYing, Sinosteel Jilin Carbon and Jilin Qifeng Chemical Fiber. ZhongFuShenYing is the largest carbon fiber enterprise in China, with capacity reaching 1,200 tons in 2010. In 2011, the company newly launched 2,000 tons of capacity and has a total carbon fiber capacity of 3,200 tons at present.

1. Overview of Carbon Fiber

- 1.1 Definition and Property
- 1.2 Process Flow
- 1.3 Classification
- 1.4 Application

2. Overview of Global Carbon Fiber Market

- 2.1 Current Development
- 2.2 Competition Pattern
- 2.3 Supply & Demand
 - 2.3.1 Supply
 - 2.3.2 Demand
- 2.4 Price Trend
- 2.5 Major Countries and Regions
- 2.6 Development Trend
 - 2.6.1 With Global Carbon Fiber Market Picking Up, Enterprises Resume Capacity Expansion
 - 2.6.2 Expanding Global Carbon Fiber Application Field and Increasing Enterprise Cooperation
 - 2.6.3 Continuously Rising Proportion of Global Industrial Carbon Fiber

3. Overview of China Carbon Fiber Market

- 3.1 Current Development
- 3.2 Supply & Demand
 - 3.2.1 Supply
 - 3.2.2 Demand
- 3.3 Import & Export
 - 3.3.1 Carbon Fiber
 - 3.3.2 Other Carbon Fiber Products

- 3.4 Price Trend
- 3.5 National Policies and Market Dynamics
 - 3.5.1 National Policies
 - 3.5.2 Accelerated Development of Carbon Fiber Industrial Cluster in Jilin
 - 3.5.3 Dalian to Deploy Carbon Fiber Industrial Chain
- 3.6 Development Trend & Outlook

4. Major Overseas Enterprises of Carbon Fiber

- 4.1 Toray
 - 4.1.1 Profile
 - 4.1.2 Carbon Fiber Business
 - 4.1.3 Outlook of Carbon Fiber Business
- 4.2 Toho
- 4.3 Mitsubishi Rayon
- 4.4 Kureha
- 4.5 Hexcel
- 4.6 Zoltek
- 4.7 Cytec
- 4.8 SGL
- 4.9 Formosa Plastics Corporation

5. Major Chinese Mainland Enterprises of Carbon Fiber

- 5.1 ZhongFu ShenYing Carbon Fiber
 - 5.1.1 Profile
 - 5.1.2 Carbon Fiber Products
 - 5.1.3 Operation
 - 5.1.4 Development Outlook & Construction of Carbon Fiber Business

- 5.2 Sinosteel Jilin Carbon
- 5.3 Jilin Qifeng Chemical Fiber
- 5.4 Ningxia Dayuan Chemical
- 5.5 Jilin Jiyan High-tech Fibers
- 5.6 Shanxi Hengtian New Textile Fiber
- 5.7 Weihai Tuozhan Fiber
- 5.8 CNPC Jilin Chemical Group
- 5.9 Anshan Sinocarb Carbon Fibers
- 5.10 Development of Other Carbon Fiber Manufacturers in China
 - 5.10.1 Jiangsu Hengshen Fiber Material put its carbon fiber project phase I into operation....
 - 5.10.2 Anhui Xinfeng Carbon Fiber signed a cooperative agreement with Anhui University...
 - 5.10.3 Harbin Tianshun Chemical successfully passed through expert's review and technical achievement assessment
 - 5.10.4 Handan Silicon Valley was granted national subsidy for its high-performance carbon fiber ...
 - 5.10.5 Shanghai Petrochemical started the construction of its carbon fiber project ...
 - 5.10.6 Henan Coal and Chemical Industry Group's kiloton-level carbon fiber project produced ...
 - 5.10.7 Shenyang Zhongheng New Material put its carbon fiber project phase I into trial production
 - 5.10.8 Sichuan Xinwanxing put its carbon fiber project into operation in Sep. 2011
 - 5.10.9 Xi'an Kangben passed provincial appraisal of its high performance carbon fiber in May 2011
 - 5.10.10 Ordos Jashin Carbon Fiber started the construction of carbon fiber project ...
 - 5.10.11 Zhejiang Juxin put its carbon fiber project
 - 5.10.12 Dalian Befut Wire & Cable successfully settled its carbon fiber project.....
 - 5.10.13 Shanxi Hongte started the ...

- Process Flow of PAN-based Carbon Fiber
- Classification of Carbon Fiber Products by Number of Strands per Tow
- Classification of Carbon Fiber by Mechanical Property
- Categories and Major Applications of Carbon Fiber and Its Composites
- Application of Deep-Processed Carbon Fiber Composites
- Capacity Percentage of Carbon Fiber Manufacturers Worldwide by Capacity of Carbon Fiber Tow, 2010Capacity Percentage of Global Small-tow ($\leq 24K$) PAN-based Carbon Fiber Manufacturers, 2010
- Capacity Percentage of Global Large-tow ($>24K$) PAN-based Carbon Fiber Manufacturers, 2010
- Capacity & YoY Growth Rate of Global Carbon Fiber, 2006-2010
- Demand & YoY Growth Rate of Global Carbon Fiber, 2003-2010
- Consumption Structure of Carbon Fiber (by Region) Worldwide, 1997-2007
- Proportions for Application Fields of Global Carbon Fiber, 2010
- Average Price of Global ST Carbon Fiber, 1985-2011
- Proportions for Application Fields of Global Carbon Fiber, 2010-2014E
- Capacity & Growth Rate of China Carbon Fiber, 2008-2011
- Demand for Carbon Fiber in China, 2006-2010
- Carbon Fiber Consumption Structure in China, 2010
- Import and Export Volume of Carbon Fiber in China, 2008-2011H1
- Import and Export Value of Carbon Fiber in China, 2008-2011H1
- Import and Export Average Price of Carbon Fiber in China, 2008-2011H1
- Import of Chinese Carbon Fiber by Origin, 2010
- Export of Chinese Carbon Fiber by Destination, 2010
- Import and Export Volume of Other Carbon Fiber Products in China, 2008-2011H1
- Import of Chinese Other Carbon Fiber Products by Origin, 2010
- Export of Chinese Other Carbon Fiber Products by Destination, 2010
- Quotations of Major Carbon Fiber Suppliers in China, Aug. 2011

- Proportion of Three Consumption Fields of Carbon Fiber in China, 2010 and 2015
- Sales Revenue Structure of Toray (by Sector), FY2008-FY2010
- Net Sales & Operating Income of Toray's Carbon Fiber Business, FY2008-FY2010
- Sales of Toray's Carbon Fiber Business (by Company), FY2007-FY2009
- Operating Income of Toray's Carbon Fiber Business (by Company), FY2007-FY2009
- Sales of Toray's Carbon Fiber Business (by Sector), FY2007-FY2009
- Sales Revenue Structure of Teijin (by Sector), FY2009-FY2011Q1
- Subordinated Carbon Fiber Companies of Teijin
- Sales, Operating Income and Operating Margin of High Performance Fiber Business of Teijin, FY2009-FY2011Q1
- High Performance Fiber R&D Expenditure of Teijin, FY2005-FY2010
- Carbon Fiber Product Category and Performance of Toho Tenax
- Short Fiber Product Category and Performance of Toho Tenax
- Carbon Fiber Weaved Cloth Category and Performance of Toho Tenax
- Nickel-plated Carbon Fiber Products and Performance of Toho Tenax
- Sales of Mitsubishi Rayon (by Sector), FY2008-FY2010Q1
- Subordinated Carbon Fiber Companies of Mitsubishi Rayon
- Sales & Operating Income of Carbon Fiber of Mitsubishi Rayon, FY2007-FY2010Q1
- Sales of Carbon Fiber and Its Composite Business of Mitsubishi Rayon (by Region), FY2008-FY2009
- R&D Expenditure of Carbon Fiber & Its Composites and the Proportion in Total R&D Expenditure of Mitsubishi Rayon, FY2007-FY2009
- Sales of Kureha (by Business), FY2008-FY2010H1
- Sales & Growth Rate of Carbon Fiber Business of Kureha, FY2008-FY2010H1
- KRECA Silver/Yarn Carbon Fiber Performance of Kureha Chemicals (Shanghai)
- Sales & Operating Income of Hexcel, 2008-2011H1
- Sales Revenue Structure of Hexcel (by Market), 2009-2011H1
- Sales Structure of Hexcel (by Region), 2008-2010

- Sales of Space & Defense Market of Hexcel, 2004-2010
- Client Structure of Business Aviation of Hexcel, 2009
- Sales of Business Aviation of Hexcel, 2004-2010
- Application Proportion of Hexcel's Composites in Airplane, 2009 vs.2013
- Sales of Industrial Market of Hexcel, 2004-2010
- Sales & Operating Income of Zoltek, FY2006-FY2011
- Sales Revenue Structure of Zoltek (by Product), FY2008-FY2011
- Sales & Operating Income of Carbon Fiber Business of Zoltek, FY2008-FY2011
- Sales & Operating Income of Carbon Fiber Pre-oxidation Filament and Special Carbon Fiber of Zoltek, FY2008-FY2011
- Performance of Zoltek Panex ?35 Carbon Fiber Tow
- Performance of Zoltek Unidirectional Carbon Fiber Prepreg Tape
- Sales and Operating Income of Cytec, 2008-2011H1
- Sales Revenue Structure of Cytec by Business, 2008-2011H1
- Sales Revenue Structure of Cytec by Region, 2008-2010
- Sales Revenue Structure of Cytec by Market, 2010
- Sales & YoY Growth of Cytec, 2007-2011H1
- Sales & EBITDA of SGL, 2008-2011H1
- Sales Revenue Structure of SGL (by Region), 2009
- Sales of SGL (by Sector), 2008-2011H1
- Sales of SGL by Market, 2009-2010
- Sales & YoY Growth of Carbon Fiber Business of SGL, 2007-2011H1
- Operating Revenue Structure of Formosa Plastics Corporation (by Sector), 2009-2010
- Capacity, Output and Operating Rate of Carbon Fibers of Formosa Plastics Corporation, 2007-2010
- Sales Volume and Sales-output Ratio of Carbon Fibers of Formosa Plastics Corporation, 2007-2010
- Sales and Average Price of Carbon Fibers of Formosa Plastics Corporation, 2007-2010

- Major Products of ZhongFu ShenYing
- Application Fields of Main Products of ZhongFu ShenYing
- Major Operating Indices of ZhongFu ShenYing, 2008-2009
- Operating Revenue & Total Profit of Sinosteel Jilin Carbon, 2007-2010H1
- Operating Revenue Structure of Sinosteel Jilin Carbon (by Product), 2009
- Carbon Fiber Performance of Sinosteel Jilin Carbon
- Plain Woven Carbon Fiber Cloth Performance of Sinosteel Jilin Carbon
- Carbon Felt Performance of Sinosteel Jilin Carbon
- Operating Revenue & Operating Income of Carbon Fiber Business of Sinosteel Jilin Carbon, 2008-2009
- Operating Revenue & Operating Income of Jilin Qifeng Chemical Fiber, 2006-2010
- Revenue Structure of Jilin Qifeng Chemical Fiber by Product, 2009-2010
- Operating Revenue and Total Profit of Ningxia Dayuan Chemical, 2008-2011H1
- Operating Revenue of Ningxia Dayuan Chemical by Product, 2008-2011H1
- Carbon Fiber Prepreg Products of Jiaxing Sino-Dia Carbon Fiber
- Output and Sales Volume of Carbon Fiber Prepreg Products of Jiaxing Sino-Dia Carbon Fiber, 2008-2010
- Products of Jilin Jiyan High-tech Fibers
- Major Operating Indices of Jilin Jiyan High-tech Fibers, 2008-2009
- Major Operating Indices of Shanxi Hengtian New Textile Fiber Tech, 2007-2009
- Carbon Fiber Products of Weihai Tuozhan Fiber
- Carbon Fiber and Its Composites 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/ 82600893

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

Party B:			
Name:	Beijing Waterwood Technologies Co., Ltd (ResearchInChina)		
Address:	Room 1008, A2, Tower A, 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

- Hard copy2300 USD
- PDF (Single user license)2200 USD
- PDF (Enterprisewide license).....3300 USD

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