

Global and China Wind Turbine Blade Industry Report, 2015-2017

<https://marketpublishers.com/r/G1D6BBDE85EEN.html>

Date: October 2015

Pages: 88

Price: US\$ 2,000.00 (Single User License)

ID: G1D6BBDE85EEN

Abstracts

China's wind power industry gradually came out of the 2011&2012 slowdowns from 2013 on, and witnessed rapid growth in 2014 with full-year erected wind power equipment capacity of 23,196MW, up 44.2% from a year ago, reaching a new record.

As the wind power industry heats up rapidly, wind turbine blade is much sought after in the market. In 2014, China needed about 13,000 sets of wind turbine blade, while it was capable of manufacturing only 11,000 sets.

During the 13th Five-Year Plan period (2016-2020), China will add more than 100 million kW of wind power capacity, creating an estimated annual average demand of over 14,000 sets of wind turbine blade.

Wind turbine blade, one of key parts of wind turbine, accounts for about 22% of total costs. Blade materials make up more than 90% of manufacturing costs of blade. Wind turbine blade materials now include mainly glass fiber reinforced polyester resin, glass fiber reinforced epoxy resin, and carbon fiber reinforced epoxy resin, with the middle one finding the widest applications. As blade materials become ultra-large and lightweight, carbon fiber reinforced epoxy resin will be vigorously developed and used in the future.

At present, most of major large wind turbine manufacturers in the world produce blades by themselves, like Siemens, Vestas, and Gamesa. The world's largest independent wind turbine blade manufacturer is LM Wind Power, whose blades are installed in 1/3 of global wind turbines. By the end of 2014, LM Wind Power had set up 13 wind turbine blade production bases around the globe, of which 3 factories were located in China, separately in Tianjin, Qinhuangdao, and Jiangyin.

After years of intense competition among Chinese wind turbine blade companies, capacity tends to converge. Over 30 manufacturers now can supply goods in batches, and several firms including Sinoma Science & Technology, AVIC Huiteng Windpower Equipment, and Lianyungang Zhongfu Lianzhong Composites Group take the lion's share.

Sinoma Science & Technology: The company specializes in composite wind turbine blade, high-pressure composite cylinder, and membrane materials. Wind turbine blade business is operated by Sinomatech Wind Power Blade, which now has eight production bases (Kangzhuang and Badaling in Beijing, Jiuquan, Baicheng, Dali, Funing, Xilin, and Pingxiang). Pingxiang base produced its first set of blade in January 2015, and will be capable of manufacturing 400 sets of 2.0MW-3.0MW low-wind-speed large wind turbine blades annually after reaching designed capacity.

AVIC Huiteng Windpower Equipment: The company, one of the largest wind turbine blade suppliers in China, provides 14 series and more than 50 models of products with single blade covering 65kW to 5.0MW and blade length ranging from 8m to 63.5m. It has powerful R&D strength and three R&D centers respectively in Baoding, Beijing and the Netherlands. Blades produced by the company primarily adopt the independently developed vacuum suction & injection forming process.

Lianyungang Zhongfu Lianzhong Composites Group: The company, a leading MW wind turbine blade manufacturer in China, is capable of producing 10,000 pieces of wind turbine blades annually, with power ranging from 1.25MW to 6MW and length from 31m to 75m. It has set up companies in Thuringia (Germany), and Liaoning, Inner Mongolia, Gansu, Xinjiang, and Guizhou in China, and R&D center in Europe. In August 2015, Lianyungang factory obtained the certificate issued by DNV?GL, becoming China's first blade manufacturer to secure the certificate.

Global and China Wind Turbine Blade Industry Report, 2015-2017 by ResearchInChina highlights the followings:

Global installed wind capacity, distribution, wind turbine blade supply & demand, major companies, etc.;

Wind turbine blade supply & demand, competition, and technical status in China;

Status quo of the Chinese wind turbine blade materials (EP, UPR, GF, and CF)

market and applications in blade;

Wind turbine market capacity & distribution, and major wind turbine manufacturers in China;

Operation, wind turbine blade business, and R&D of 8 global and 15 Chinese wind turbine blade manufacturers.

Contents

1. INTRODUCTION TO WIND TURBINE BLADE

- 1.1 Basic Concept
- 1.2 Forming Process
- 1.3 Industry Chain

2. DEVELOPMENT OF GLOBAL WIND TURBINE BLADE INDUSTRY

- 2.1 Status Quo of Wind Power Industry
 - 2.1.1 Installed Capacity and Distribution
 - 2.1.2 Wind Turbine Manufacturers
- 2.2 Status Quo of Wind Turbine Blade Industry
 - 2.2.1 Market Supply
 - 2.2.2 Market Demand

3. DEVELOPMENT OF WIND TURBINE BLADE INDUSTRY IN CHINA

- 3.1 Market Supply & Demand
 - 3.1.1 Supply
 - 3.1.2 Demand
- 3.2 Competition
- 3.3 Technical Status

4. CHINESE WIND TURBINE BLADE MATERIALS MARKET

- 4.1 Overview
- 4.2 Epoxy Resin (EP)
 - 4.2.1 Status Quo of Market
 - 4.2.2 Major Companies
 - 4.2.3 EP for Wind Turbine Blade
- 4.3 Unsaturated Polyester Resin (UPR)
 - 4.3.1 Status Quo of Market
 - 4.3.2 Major Companies
 - 4.3.3 UPR for Wind Turbine Blade
- 4.4 Glass Fiber (GF)
 - 4.4.1 Status Quo of Market
 - 4.4.2 Major Companies

- 4.4.3 GF for Wind Turbine Blade
- 4.5 Carbon Fiber (CF)
 - 4.5.1 Status Quo of Market
 - 4.5.2 Major Companies
 - 4.5.3 CF for Wind Turbine Blade
- 4.6 Others
 - 4.6.1 Core Materials
 - 4.6.2 Wind Turbine Blade Coatings
 - 4.6.3 Wind Turbine Blade Adhesives

5. STATUS QUO OF CHINA'S WIND POWER INDUSTRY

- 5.1 Overview
- 5.2 Installed Windpower Capacity and Distribution
 - 5.2.1 Installed Capacity
 - 5.2.2 By Region
 - 5.2.3 By Power
- 5.3 Major Wind Turbine Manufacturers

6. KEY WIND TURBINE BLADE MANUFACTURERS WORLDWIDE

- 6.1 LM Wind Power
 - 6.1.1 Profile
 - 6.1.2 Operation
 - 6.1.3 Wind Turbine Blade Business
- 6.2 Vestas
 - 6.2.1 Profile
 - 6.2.2 Operation
 - 6.2.3 Wind Turbine Blade Business
- 6.3 Enercon
 - 6.3.1 Profile
 - 6.3.2 Operation
- 6.4 TPI Composites
 - 6.4.1 Profile
 - 6.4.2 Wind Turbine Blade Business
- 6.5 Suzlon
 - 6.5.1 Profile
 - 6.5.2 Operation
 - 6.5.3 Wind Turbine Blade Business

6.6 Tecsis

6.6.1 Profile

6.6.2 Wind Turbine Blade Business

6.7 EUROS

6.7.1 Profile

6.7.2 Wind Turbine Blade Business

6.8 Inox Wind

6.8.1 Profile

6.8.2 Operation

7. MAJOR CHINESE WIND TURBINE BLADE MANUFACTURERS

7.1 AVIC Huiteng Windpower Equipment

7.1.1 Profile

7.1.2 Operation

7.1.3 R&D

7.2 Lianyungang Zhongfu Lianzhong Composites Group

7.2.1 Profile

7.2.2 Operation

7.2.3 R&D

7.3 Sinoma Science & Technology

7.3.1 Profile

7.3.2 Operation

7.3.3 Main Projects

7.4 Zhuzhou Times New Material Technology

7.4.1 Profile

7.4.2 Operation

7.4.3 Wind Turbine Blade Business

7.5 Shanghai FRP Research Institute

7.5.1 Profile

7.5.2 Operation

7.6 Dongfang Electric (Tianjin) Wind Blade Engineering

7.6.1 Profile

7.6.2 Wind Turbine Blade Business

7.7 Guodian United Power Technology

7.7.1 Profile

7.7.2 Wind Turbine Blade Business

7.8 Ming Yang Wind Power

7.8.1 Profile

- 7.8.2 Operation
- 7.9 Sino-wind Energy
 - 7.9.1 Profile
 - 7.9.2 Wind Turbine Blade Business
- 7.10 Shanghai Aeolon Wind Energy Technology Development
 - 7.10.1 Profile
 - 7.10.2 Wind Turbine Blade Business
- 7.11 Jilin Chongtong Chengfei New Material
 - 7.11.1 Profile
 - 7.11.2 Wind Turbine Blade Business
- 7.12 Energin Wind Power Equipment
 - 7.12.1 Profile
 - 7.12.2 Wind Turbine Blade Business
- 7.13 Dawntine
 - 7.13.1 Profile
 - 7.13.2 Wind Turbine Blade Business
- 7.14 Sany Electric
 - 7.14.1 Profile
 - 7.14.2 Operation
- 7.15 Miracle Automation Engineering
 - 7.15.1 Profile
 - 7.15.2 Wind Turbine Blade Business

8. SUMMARY AND FORECAST

- 8.1 Summary
 - 8.1.1 Market
 - 8.1.2 Enterprise
- 8.2 Trend Forecast

Selected Charts

SELECTED CHARTS

Composition of Wind Turbine Generator System
Wind Turbine Blade Industry Chain in China
Global Newly Installed Windpower Capacity, 2007-2017E
Global Cumulative Installed Windpower Capacity, 2007-2017E
Global Installed Windpower Capacity Breakdown by Region, 2014
Global Installed Offshore Windpower Capacity, 2011-2014
Market Share of Global Wind Turbine Manufacturers, 2014
Distribution of Major Wind Turbine Blade Manufacturers and Production Bases Worldwide, 2015
Global Demand for Wind Turbine Blade, 2009-2017E
Companies that Have Retreated from Wind Turbine Blade Industry in Recent Years
China's Wind Turbine Blade Capacity and Utilization Rate, 2010-2015
China's Demand for Wind Turbine Blade, 2009-2015
China's Wind Turbine Blade Sales Volume, 2013-2015
Distribution of Major Wind Turbine Blade Manufacturers and Production Bases in China, 2015
Technological Paths of Major Wind Turbine Blade Manufacturers in China
Materials Used by and Process Characteristics of Major Blade Manufacturers in China
Product Series of Major Wind Turbine Blade Manufacturers in China, 2015
Application of Three Composites in 34m Wind Turbine Blade
Performance Comparison of Traditional Blade Materials
Epoxy Resin (EP) Capacity in the World's Major Countries/Regions, 2013
China's EP Output, 2009-2017E
China's Apparent Consumption of EP, 2009-2017E
China's EP Imports and Exports, 2009-2015
China's Import Volume and Value of EP by Country/Region, 2015H1
Major EP Companies and Capacity in China, 2015H1
China's Demand for EP Structural Adhesive for Wind Turbine Blade, 2009-2017
China's UPR Output and YoY Growth, 2007-2015
China's UPR Consumption Structure, 2013-2015
Major UPR Manufacturers and Capacity in China, 2015H1
China's GF Output and YoY Growth in China, 2010-2017E
Operating Revenue and Total Profit of GF Industry in China, 2010-2015
China's GF Imports and Exports, 2010-2015
Major GF Companies and Capacity in China, 2015H1

China's CF Output, 2010-2017E
China's CF Demand and YoY Growth, 2009-2017E
China's CF Imports and Exports, 2010-2015
Major CF Companies and Capacity in China, 2014
Application of CF in Wind Turbine Blade
Foreign and Domestic Wind Turbine Blade Manufacturers Adopting CF
Major Manufacturers of Wind Power Equipment Coatings
Development History of Wind Turbine in China, 1980-2015
China's Newly Installed and Cumulative Windpower Capacity, 2004-2015
China's Installed Offshore Windpower Capacity, 2009-2015
China's Newly Installed Wind Capacity Breakdown by Region, 2014
China's Cumulative Wind Capacity Breakdown by Region, 2014
China's Newly Installed Wind Capacity Breakdown by Power, 2014
China's Cumulative Wind Capacity Breakdown by Power, 2014
Newly Installed Windpower Capacity and Market Share of Wind Turbine Manufacturers in China, 2014
Cumulative Windpower Capacity and Market Share of Wind Turbine Manufacturers in China, 2014
Revenue and Profit of LM Wind Power, 2011-2015
Wind Turbine Blade Products of LM Wind Power, 2015
Production Bases of LM Wind Power, 2014
Wind Turbine Blade Output of LM Wind Power, 2010-2015
Wind Turbine Blade Factories of LM Wind Power in China, 2015
Main Economic Indicators of Vestas, 2012-2015
Revenue Breakdown of Vestas by Business, 2012-2014
Production Bases of Vestas, 2014
Subsidiaries of Vestas in China, 2015
Global Market Share of Enercon, 2014
Wind Turbine Blade Production Bases of Enercon, 2014
Wind Turbine Blade Production Bases of Suzlon, 2015
Wind Turbine Blades of EUROS, 2015
Wind Turbine Blade Production Bases and Capacity of EUROS, 2015
Production Bases and Capacity of IWL, 2015
Main Economic Indicators of IWL, FY2015
Wind Turbine Blade Production Bases of AVIC Huiteng Windpower Equipment, 2015
Revenue and Net Income of AVIC Huiteng Windpower Equipment, 2011-2015
Wind Turbine Blade Production Bases of Lianyungang Zhongfu Lianzhong Composites Group, 2015
Revenue and Net Income of Sinoma Science & Technology, 2011-2015

Wind Turbine Blade Output and Sales Volume of Sinoma Science & Technology, 2012-2014

Wind Turbine Blade Production Bases and Capacity of Sinoma Science & Technology, 2015H1

Wind Turbine Blades of Sinoma Science & Technology, 2015

Revenue and Net Income of Sinomatech Wind Power Blade, 2012-2015

Revenue and Net Income of Zhuzhou Times New Material Technology, 2011-2015

Operating Revenue and Gross Margin of Zhuzhou Times New Material Technology by Business, 2013-2015

Wind Turbine Blade Bases of Zhuzhou Times New Material Technology, 2015H1

Main Economic Indicators of Shanghai FRP Research Institute, 2012-2015

Revenue and Net Income of Dongfang Electric (Tianjin) Wind Blade Engineering, 2013-2015

Main Production Bases and Businesses of Guodian United Power Technology, 2015H1

Main Production Bases and Capacity of Ming Yang Wind Power at the end of 2014

Revenue and Profit of Ming Yang Wind Power, 2011-2015

Wind Turbine Blade Production Bases of Sino-wind Energy, 2015H1

Main Wind Turbine Blade Production Bases and Capacity of Aeolon, 2015H1

Products of Jilin Chongtong Chengfei New Material, 2015

Production Bases of Jilin Chongtong Chengfei New Material, 2015H1

Operating Revenue Breakdown of Miracle Automation Engineering by Business, 2013-2015

Wind Turbine Blade Companies and Business Indicators of Miracle Automation Engineering, 2014

China's Wind Turbine Blade Capacity and Demand, 2010-2020E

Market Share of Major Wind Turbine Blade Companies in China by Sales Volume, 2014

I would like to order

Product name: Global and China Wind Turbine Blade Industry Report, 2015-2017

Product link: <https://marketpublishers.com/r/G1D6BBDE85EEN.html>

Price: US\$ 2,000.00 (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/G1D6BBDE85EEN.html>

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**

Customer signature _____

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

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