

Analyzing the Global Market for Wind Turbine Rotor Blades

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Abstracts

A wind turbine rotor blade is a fundamental constituent of a wind turbine. The rotor forms the central base of the turbine and harbors multiple rotor blades attached to a hub. The rotor blades serve as a motor in the turbine and extract energy by capturing wind energy and transforming it into the rotation of the hub. The most popular rotor consists of a horizontal axis with three blades with a diameter ranging from 37-128 meters.

The wind turbine rotor blade market is developing in sync with the growing demand for turbines used to produce wind energy. The global wind energy market has been developing gradually due to a rise in energy demand, raising concerns over environmental impact of power generation through fossil fuel as a result of the Production Tax Credit (PTC) policy expiring in the United States and low investments in Europe respectively.

China leads the wind energy market primarily due to government impetus on wind power generation. Other Asia-Pacific countries like India, Japan and Australia are also portraying significant growth trends in wind power generation powered by government initiatives. The Middle East and Africa remain at a very nascent phase of the wind energy market and presently bear the lowest market share among the regions.

The key market players in the wind turbine rotor blade market are Siemens AG (Germany), Vestas Wind System AS (Denmark), Suzlon Energy Limited (India), Acciona S.A. (Spain), and Gamesa Corporacion Tecnologica (Spain).

In 2014, the market for wind turbine rotor blades was ruled by Asia-Pacific, which accounted for nearly 55% of the total installed blades in the world. The region is

expected to remain the most attractive market across 2020, even as South America along with the Middle East and Africa are geared up to witness promising growth rates.

Despite the costs for generating wind power declining over the years, the capital costs required in establishing a functional wind power project still remain high. Apart from construction and installation of wind turbines, costs may also rise, depending on the load factor and capacity factor of the turbines, which differ according to the location of the project and the quality of wind resource.

Aruvian Research analyzes the global market for wind turbine rotor blades in this research offering, *Analyzing the Global Market for Wind Turbine Rotor Blades*. Divided into 5 sections, this report is a comprehensive insight into the market for wind turbine rotor blades.

Section 1 of the report is an overview of wind energy and an overview of the global wind energy industry. We look at how wind turbines work, wind power technology, power generation from wind, types of turbines, airborne wind turbine, wind turbine's power output and many other factors are analyzed.

The global wind energy industry is analyzed through a market profile, market statistics, market analysis by regions, wind power in the European Union and a look at the global offshore wind market.

Section 2 of the report analyzes the global wind turbine industry. Introduction to wind turbines looks at components of wind turbines, global installations of wind turbines, market size, cost of turbines, average turbine size and market share.

Section 3 analyzes the global market for wind turbine rotor blades and provides an overview of rotor blades and the manufacturing process.

The global market for wind turbine rotor blades is analyzed through an industry overview, industry size, production of roller blades by overall yearly production, independent production of rotor blades and in-house production of rotor blades by manufacturers. Cost of wind turbine rotor blades is also analyzed.

Industry trends and industry competition are also analyzed.

Major manufacturers of wind turbine rotor blades are analyzed through a corporate

profile, business segment analysis, financial analysis and a SWOT analysis. The report analyzes 16 major manufacturers of wind turbine rotor blades.

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N. GUODIAN UNITED POWER TECHNOLOGY CO., LTD.

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