



# S88 Mk II - 2.25 MW

## **S88 Mark II - 2.25 MW**

Building on over 15 years' experience manufacturing wind turbines and their components, as well as operating wind farms around the globe with a total installed capacity of 10GW, Suzlon has continuously improved its wind turbine generator product portfolio. Suzlon now introduces the S88 Mark II 2.25 MW, a product developed exclusively for China.

## **TECHNOLOGY OPTIMIZATION BASED ON PROVEN S88 TECHNOLOGY PLATFORM**

The S88 Mark II 2.25MW builds on Suzlon's successful S88 technology platform, which has already deployed a fleet of 1500 turbines worldwide. The S88 Mark II 2.25MW introduces an enhanced control system in the S88 platform via an industry standard converter system (DFIG), thereby further improving yield, performance, and reliability. This variable speed model ensures excellent grid compliance, prioritizes reliability and serviceability, and continues our focus on delivering quality, robust turbines that are tried, tested and fit for purpose.

## **IMPROVED \$/kWh RETURN ON INVESTMENT**

Our systematic approach, plus the proven reliability of the S88 technology, reduces the risks normally associated with the introduction of any new product. You can be assured of high performance and availability, backed up by warranties - right from the outset of the twenty years' lifespan of the wind turbine generators - ensuring a higher return on investment.

## **STATUS**

The S88 Mark II 2.25MW will be launched and manufactured in China early 2011. As is customary for Suzlon turbines, the launch of our S88 Mark II 2.25MW will have been preceded by successful prototype operations in different climatic conditions. Our prototypes go through testing, measuring and validation of all components to satisfy our own high quality and safety ISO9001, ISO14001 and OHSAS 18001 standards, plus the stringent requirements of Germanischer Lloyd (GL) to enable certification to relevant IEC standards.

## PRODUCT FEATURES

### Updated Control Philosophy

- Incorporation of a second grid feed via a power electronics converter (DFIG - Doubly Fed Induction generator)
- Improved grid compatibility and connection, compatible with latest EON grid code
- Allows dynamic control of reactive power – reduces Balance of Plant costs
- Allows variable speed operation
- Improved loads - reduces component wear and tear



### S88 Mk II - 2.25 MW

- 88m rotor diameter
- Wind Class - IEC IIa / IIb
- Pitch regulated with variable speed

## TECHNICAL OVERVIEW



### OPERATING DATA

- Rated Power 2.25 MW • Cut-in Wind 4 m/s
- Cut-out wind speed 25 m/s • Tower 80M
- Wind Class IIa / IIb • Rotational Speed 12.0-18.0 rpm

### ROTOR

- Power regulator: DFIG Inverter • Diameter 88m
- Swept Area 6,082 m<sup>2</sup>

### BLADES

- Type AE43 - V3A • Length: 43.25m

### GENERATOR

- Induction generator with slip rings (modified for Doubly Fed Induction Generator)
- Rated power: 2.25 MW • Rated Voltage: 690V

### GEARBOX

- 1 planetary stage, 2 helical stages

World's 3rd\* largest and fastest growing integrated wind turbine manufacturer | Customer base of over 1600 | Installed capacity of over 14 GW across the globe | Above 13,000 employees from 27 nationalities | Manufacturing units in 3 continents | R&D facilities in Denmark, Germany, India and The Netherlands

*\*Combined (Suzlon with REpower) Source : BTM Consult ApS March 2010*