Southern Wind Farms Ltd

**ONE STOP** 

### **SHOP SOLUTION FOR**

WIND TURBINE

# GWL 225 KW







www.swl.co.in

### PROFILE

**Southern Wind Farms Limited (SWL)** is a company incorporated in 2005, with a goal of manufacturing, marketing, installing and commissioning (complete EPC/Turnkey project) 225 kW, 750 kW and other MW class Wind Turbine Generators.

Our key competence is installation of wind turbines on turnkey basis for individuals and to large corporations. The company has installed over 3500 Wind Electric Generators, Powering over 500 MW at present, in the State's of Tamil Nadu, Karnataka, Andhra Pradesh, Rajasthan, Maharashtra, Madhya Pradesh and Gujarat.

SWL has propelled this evolution of a professionally managed team of highly qualified technical personnel, providing high quality, competitive price with low maintenance cost, has expedited the demand of repeat orders from satisfied clients.

Let the Wind pay your bill

Go Wind !!

The company manufactures a full range of 225 kW Wind Energy equipment:

- Robust, simple design
- ➢ 98% Indigenization
- Type certified by NIWE, India
- Economical Operation and Maintenance
- Proven and leader in this segment of capacity

# TURNKEY SERVICES

Southern Wind Farms Limited (SWL) has the capacity to deliver at every phase starting from Feasibility study to Erection, Commissioning and up to long term Operation and Maintenance.



GWL 225 KW
Technical Specifications
<u> Type – GWL 225 kW</u>

#### **Overall Data**

Cut in Wind speed	: Approx. 4 m/s
Cut out Wind Speed	: Approx. 25 m/s
Rated Wind Speed	: 15 m/s
Hub Height	:48.7 m
Power Regulation	: Stall

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#### **Gear Box**

Туре	: Heli
Gear Ratio	· 1·/10

#### **Generator**

Туре	: Asynchronous	
Revolution	: 1500/1000 RPM	

Frequency : 50 Hz

#### <u>Tower</u>

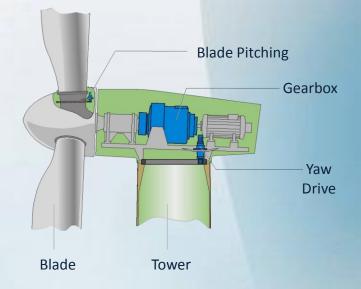
Туре	: Tubular		
Material	: Steel Plate		

Sections : 7

#### <u>Rotor</u>

No. of Blades	: 3	
Diameter	: 29.8 m	
Swept Area	: 698 sq. m	
Pitch	: Fixed	
Power Regulation: Stall		

## KEY DESIGN FEATURES



### SAFETY SYSTEMS

- Hydraulic Activated Blade Tip brakes
- Electro-mechanical "fail-safe" disc brake
- Over speed control on rotor that activates disc brake

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- Thermo detector in generator
- Vibration Control Switch
- Thermo relay of yaw-gear motor
- ➢ 90° yaw of Nacelle, in case of malfunction
- Automatic stop for worn-out brake pads
- Automatic stop at wind speeds above 25 m/s
- Effective Power factor control

# Certifications



#### NATIONAL INSTITUTE OF WIND ENERGY

(An autonomous institution under the Ministry of New and Renewable Energy (MNRE), Government of India)

#### Type Certificate

Certificate Number This certificate is issued to

M/s. Southern Wind Farms Limited No.14, First floor, Brindhavan Street Extension, West Mambalam, Chennai-600 033, India.

for the Wind Turbine Model GWL 225
This certificate attests compliance with IEC 61400-1 Edition 3.1, dated: 2014-04, Class S, concerning
the Design, Manufacturing and Type test. It is based on the following reference documents:

Reference Document	Document Number	Dated	Issued by
Design Evaluation Conformity Statement	DE-CS-1523-01 / Rev.00	01.07.2021	NIWE
Type Test Conformity Statement	TT -CS-1523-02 / Rev.00	01.07.2021	NIWE
Manufacturing Conformity Statement	ME-CS-1523-03 / Rev.00	01.07.2021	NIWE
Final Evaluation Report	TC-FER-1523 / Rev.00	23.07.2021	NIWE

The conformity evaluation was carried out according to IS/IEC 61400-22: 2010 "Wind Turbines - Part 22: Conformity Testing and Certification", Published in June 2018 by Bureau of Indian Standards (BIS), New Delhi, India. The Technical specifications of the wind turbine are given in the attached Annex of this certificate.

Any changes in the design or manufacturer's quality system are to be approved by National Institute of Wind Energy (NIWE), Product Certification Body (PCB). Without approval, this certificate loses its validity.

This type certificate is valid until 26.07.2026.

Place: Chennai, India. Date: 27.07.2021



Velachery - Tamburam Main Road, Pallikaranai, Chennai - 600 100. Tamil Nadu, INDIA Website : http://niwe.res.in



### **REACH US**

### Southern Wind Farms Ltd

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### Wind Today, Green Tomorrow

Committed to superior quality and results Reliable and easy to set up