

# MITSUBISHI WIND TURBINE GENERATOR

# MWT 102/2.4



The photo is for illustrative purposes only.

## Technical Data

### Operation Data

Cut-in	3.0 m/s
Rated	11.5 m/s
Cut-out	25.0 m/s
Wind Class	IEC Class II A

### Rotor

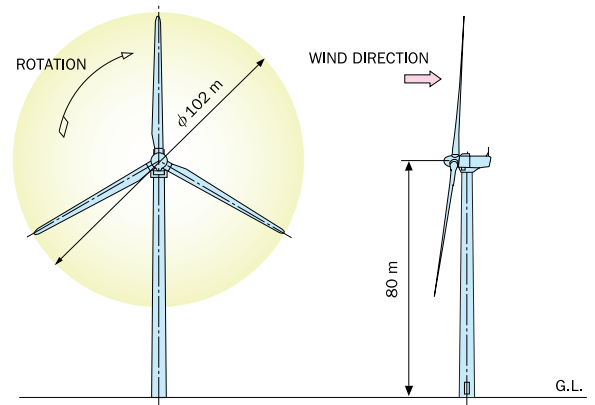
Diameter	102 m
Swept Area	8,171 m <sup>2</sup>
Rotational Speed (rated)	15.0 rpm
Rotational Speed (interval)	9.0 ~ 16.9 rpm (variable)
Blade Length	49.7 m
Aerodynamic Brake	Individual Pitch Brake

### Generator

Type	Doubly Fed Asynchronous Generator + IGBT Converter
Rated Power	2,400 kW
Voltage	690 V
Frequency	50 Hz/60 Hz
Power Factor Range	0.9 (inductive) ~ 0.95 (capacitive)

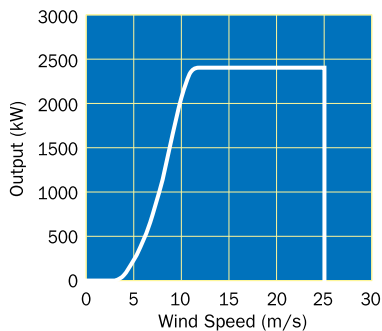
### Tower

Hub Height	80 m
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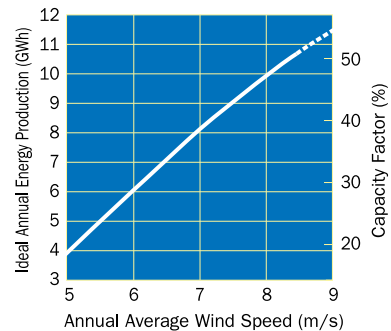
## Impressive Performance

### Power Curve



- Air Density: 1.225 kg/m<sup>3</sup>
- Wind conditions with 10% turbulence
- Calculated at the output of inverter

### Ideal Annual Energy Production and Capacity Factor



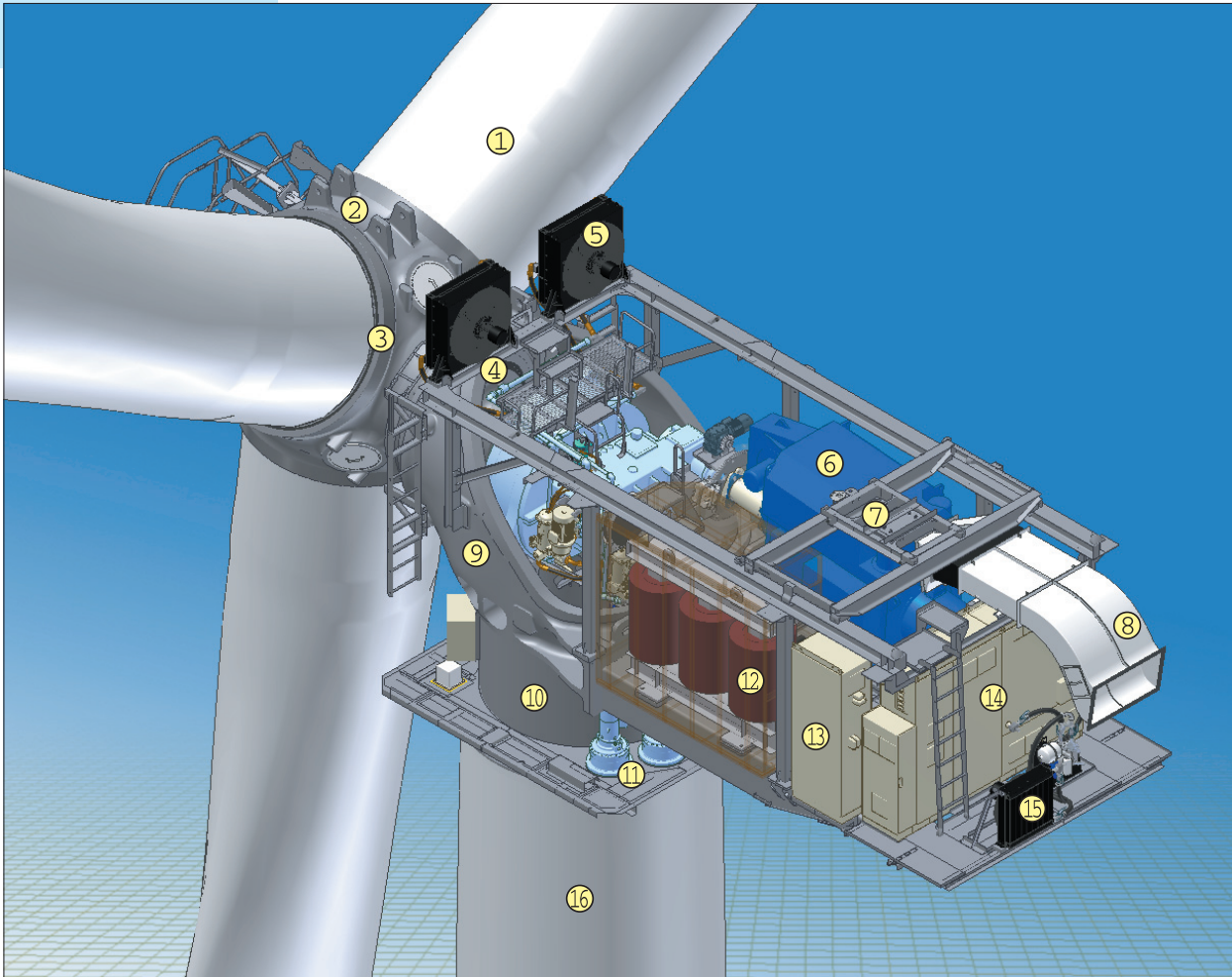
- Calculated on Rayleigh distribution
- Calculated at the output of inverter
- Site conditions may vary capacity factor

Superior Technology for A Brighter Future

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- High performance in moderate wind speed area (IEC Class IIA)
- Individual pitch control



Schematic Diagram

- |                 |                              |                     |                       |
|-----------------|------------------------------|---------------------|-----------------------|
| ① Blade         | ⑤ Oil Cooler                 | ⑨ Nacelle Bed Plate | ⑬ Control Panel       |
| ② Hub           | ⑥ Generator                  | ⑩ Yaw Bearing       | ⑭ Inverter            |
| ③ Blade Bearing | ⑦ Service Winch              | ⑪ Yaw Gear          | ⑮ Cooler for Inverter |
| ④ Main Bearing  | ⑧ Exhaust Duct for Generator | ⑫ Transformer       | ⑯ Tower               |



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