



**SWP-19.8kW**  
JAPAN WIND TURBINE

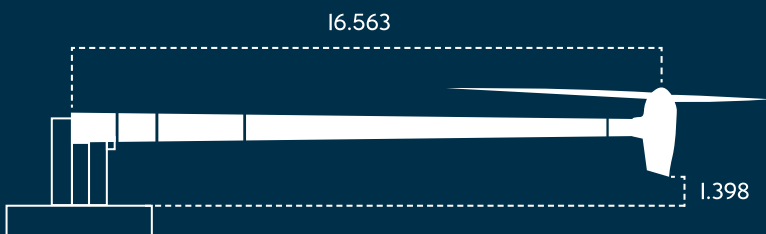
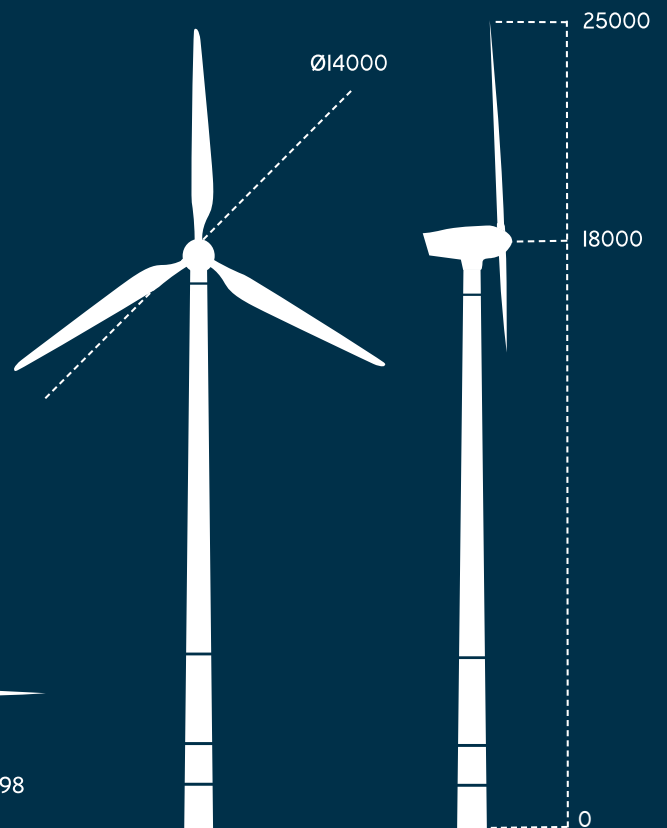
 **Solid** wind power

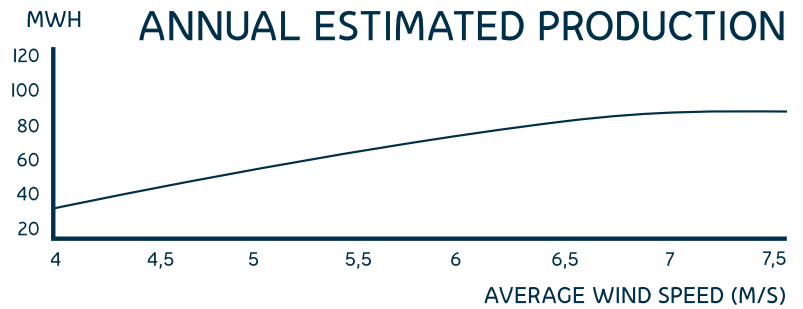
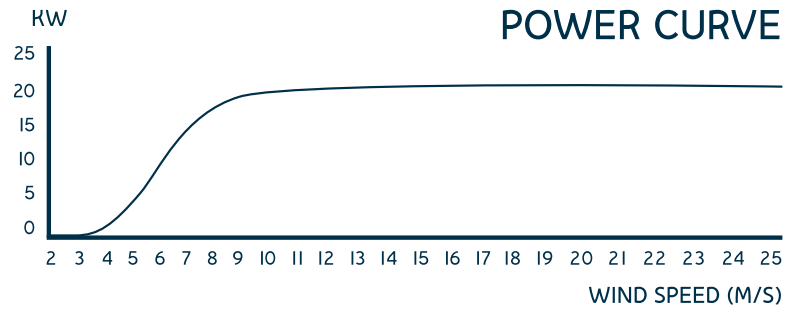
**Solid** wind power offers our customers a **proven and well-tested technology.**

More than 600 turbines have been installed and more than 3 million production hours of data have been collected and analyzed.



The result of our R&D is an innovative **SWP-19.8kW** wind turbine which is reliable, efficient, silent and **ClassNK certified**.





## JET-TEST

The voluntarily JET-test - simulation for grid connection for SWP 19,8kW - is completed.

## OUR BLADES

### Ensuring high performance

Blades are the most important part of a wind turbine as they determine how much power will be harvested from the wind. To optimize the turbine, **Solid** wind power has developed its own state-of-the-art blade technology and designed high performing blades. The blades are equipped with a lightning protection system. **Solid** wind power has developed and implemented a lightning protection system (blade tip and nacelle receptor, 600 columns), which is intercepting direct lightning strikes in order to prevent the turbine for mechanical damages. The system has been tested by third party.

## OUR LAYOUT

### Ensuring low sound emission

In the wind turbines, sound emission is also created by vibrating parts (gearbox, generators). To reduce vibrations, **Solid** wind power has adopted innovative technology from the automotive industry, where it has been used for many years. The SWP-19.8 nacelle is divided in two parts - top and bottom - which are separated by vibration dampers.

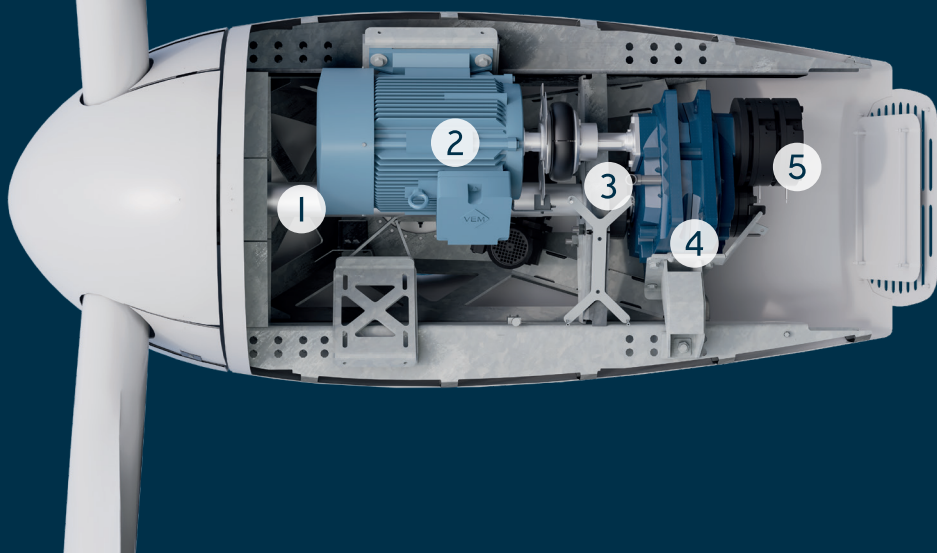
## OUR SCADA SYSTEM

### Ensuring easy maintenance

An advanced SCADA system has been created and tailored for **Solid** wind power wind turbines and is available in Japanese language. The SCADA system is remote controllable and adjustable, by either the SCADA-APP or web access. Service technicians can easily restart turbines either using a PC or a cell phone. This maximises up time of the turbine.

## Components

- 1 Main Shaft
- 2 Generator
- 3 Main Bearing
- 4 Gearbox
- 5 Brake System



## TECHNICAL DATA

Windclass	IEC Class III
Rated power	19.8kW
Rotor diameter	14 m
Hub height	18 m
Swept area	154 m <sup>2</sup>
Nominal wind speed	10 m/s
Starting wind speed	3 m/s
Cut-out wind speed	25 m/s
Survival wind speed	52.5 m/s
Rotations per minute	Up to 50 RPM

## GENERATOR

Manufacturer Germany

## GEARBOX

Manufacturer Sweden

## BLADES

Manufacturer Solid production - Denmark

## CONTROLLER/INVERTER

Manufacturer Controller Orbital - Denmark

Manufacturer Inverter DVE Technologies - Denmark

## YAWING SYSTEM

Manufacturer BJ gear - Denmark

## WEIGHT

Nacelle	1450 kg
Rotor	390 kg
Controller/Inverter complete	360 kg
Tower (18 m) on tilt foot	3100 kg



Certificate No. INT WT21681  
Micro and Small Wind Turbines



IEC 61400-2



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Produced   
in denmark 

Please visit  
[www.solidwindpower.com](http://www.solidwindpower.com)  
for more in depth  
information about the  
**SWP-19.8kW**

**Solid** wind power  
Ståltevej 8  
6900 Skjern, Denmark  
+45 97 32 33 22  
[mail@solidwindpower.com](mailto:mail@solidwindpower.com)

**Solid** wind technology Japan KK  
Level 28 Shinagawa  
Intercity Tower A  
2-15-1 Konan Minato-ku  
Tokyo 108-6028, Japan

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