

MANUFACTURING FACILITY FOR THE KEY WIND TURBINE COMPONENTS ASSEMBLY



NOVAWIND
ROSATOM

Production is organized in **Volgodonsk, Rostov Region**, on the basis of **Atomash**, which is considered as the center of Rosatom's power engineering capacities.

MAIN MANUFACTURING AREAS:



1 Stator manufacturing



2 Manufacturing of rotor and the main bearing of the wind turbine



3 Nacelle manufacturing



4 Generator manufacturing



5 Hub and platform manufacturing

Finished products warehouse

Own VR training technology for employees

30 000 m²

Total area of the manufacturing facility

UP TO 120
TURBINES
PER YEAR

Annual production rate

OVER 320 JOBS

OVER
1 BLN RUBLES

of investments

1 STATOR
Cylindrical stationary part in the wind turbine generator, which drives the rotor. To create a stator, **72** coils of copper wire are needed.

2 ROTOR
The rotating part that ensures the operation of blades. In order to assemble one rotor, **126** standard and **6** special poles lined with electrical plates are required. The rotor uses **63** neodymium magnets.

2 WIND TURBINE MAIN BEARING
Subassembly supporting the movable rotor structure. Before installation, the assembled bearing is tested on a special stand.

3 NACELLE
The key element of the wind turbine, where the main parts of the plant are located. The frame is made of **steel beams**. A hydraulic system of nacelle supplies lubricants to the moving parts and provides **filtration of the main bearing oil**.

4 GENERATOR
The most complex and technically advanced unit of the wind turbine. The weight of the finished product is **49.5** tons.

5 HUB
The central element of the rotating part of the wind turbine.

PLATFORM
The main supporting element of the wind turbine. The hub is equipped with a drive system for blade rotation, which is **responsible for their inclination and ensures the required work speed of the wind turbine**. A transformer installed in the base platform **ensures the operation of all electrical systems of the wind turbine**.