

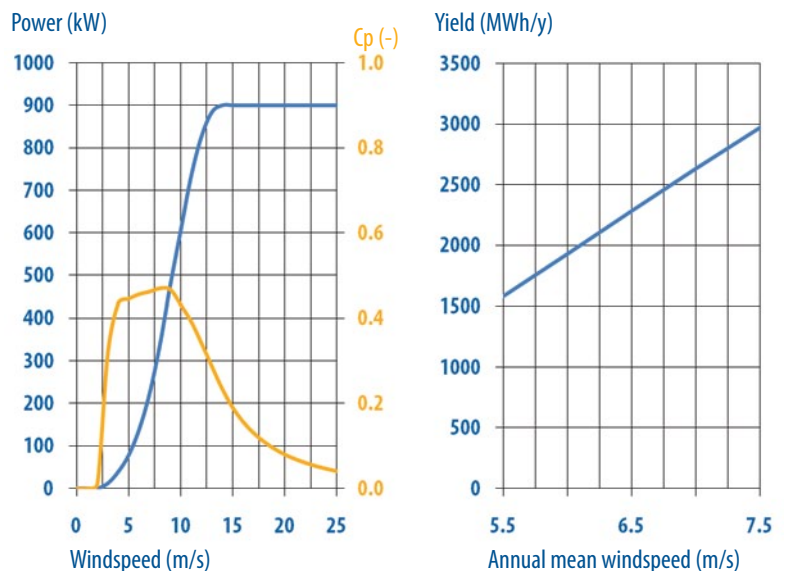


Proven robust **900kW** Direct Drive Wind Turbine

The **DIRECTWIND 52/54 – 900kW** is a pitch controlled variable speed wind turbine that combines continuous market driven innovation with highly advanced direct drive technology. The **DIRECTWIND 52/54 – 900kW** turbine boasts a track record over 400 operating turbines in many different wind climates.

Specifications

Rotor diameter	52 or 54m
IEC Wind Class	IIA & IIIA
Rotor speed	Variable, 12 - 28 rpm
Nominal power output	900 kW
Hub heights	35, 40, 50 and 75 m
Cut-in wind speed	2.5 m/s
Rated wind speed	13.5 m/s
Cut-out wind speed	25 m/s, 10 min. avg.
Survival wind speed	59.5 m/s
Power output control	Pitch controlled variable speed
Generator	Synchronous multi-pole wound-rotor
Power converter	IGBT-controlled





Direct Drive Wind Technology

In EWT turbines the rotor directly drives the synchronous generator, without the use of a gearbox. This is important because various studies have concluded that the dominant cause of downtime is malfunctioning of gearboxes. The generated energy is fed into the grid via a modern back-to-back full-power converter which controls the output, so grid requirements can be met. This makes the **DIRECTWIND** turbine suitable to operate in weak grids.

Advantages of EWT's Direct Drive Technology:

- Superior availability levels
- No need to replace gearboxes
- High yields / return on investment
- Low maintenance costs
- Reduced noise levels
- Low cost of ownership

Power quality & Site conditions

The **DIRECTWIND** turbine feeds generator power into the grid by means of a modern 'back-to-back' type full-converter system. This converter contains a number of programmable functions like a capability to control the reactive power output. Built-in grid-fault-ride-through technology is available on demand.

All the advanced grid-connection features combined make the **DIRECTWIND** the perfect choice for solitary applications, weak grids and demanding locations with constraints in site access.

The combination of advanced control features and proven wind technology makes the **DIRECTWIND** also a first-class choice with regard to energy yield. Fewer components, high reliability, reduced maintenance and excellent energy yield ensure an optimal return on investment. We are looking forward to showing you what our **DIRECTWIND** systems can offer.

DSP - **DIRECTWIND** Service Program

EWT stands for high-quality direct drive turbines characterized by reliability and cost efficiency. To ensure optimal performance and trouble-free operation of our **DIRECTWIND** turbines, we have an extensive service and maintenance program in place. The **DIRECTWIND** Service Program offers:

- Preventive maintenance
- Availability guarantee
- Extended product warranty
- Corrective maintenance
- Power curve guarantee
- Business Interruption compensation

The company

EWT is a designer and manufacturer of direct drive wind turbines active in Europe, North America and Asia. EWT was established in 2004 and is based in the Netherlands. The company has an extensive product line, an engineering department covering all relevant disciplines and a dedicated service and maintenance organisation.

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