

Application Success Stories

Enercon Wind energy plants



Economic process

Saving of energy

Efficiency

Application Success Stories

Technical Data

Parts:

Ring generator

Part size:

∅ 12'000 mm

Conveying system:

Rotating device

Scope of Delivery:

1 x MagicControl CM-22

1 x OptiFlex A2 12P incl. CANbus-Modul

10 x OptiGun GA02

2 x OptiSelect GM02

12 x Application pump OptiSpray DPP 01

2 x Powder hopper HF02-100

2 x Fresh powder supply FPS 16

2 x Powder pump PP 06



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Enercon is one of the world's leading manufacturers of wind energy plants. The huge wind generators harness the energy of the future and are designed for maximum efficiency and continuous operation.

The electricity-generating ring generator inside the power house has a 12-meter diameter. During manufacture, the winding is reinforced and impregnated by heat. Enercon wanted to use the residual heat to coat the housing and installed an automated powder coating system using robots for the hot coating process.

Instead of long cooling and heating phases using the 40 ton component, two industrial robots with five automatic OptiGun GA02 guns each are coating the outside of the ring generator which is over 1m high. The special powder is transported from two BigBag fresh powder stations via PP06 OptiFeed fresh powder pumps to two HF02-100 powder hoppers. From here, 12 OptiSpray DPP 01 application pumps continuously convey the powder over a distance of up to 30 meters to the robots' application guns. The whole process is controlled by the CM-22 MagicControl.

The new coating configuration offers various advantages. The use of residual heat is an enormous benefit from an environmental and power engineering perspective. It is also consistent with Enercon's energy conservation philosophy. Using the fresh powder systems and application pumps, the special functional powder is reliably transported in high quantities, over distances of up to 30 meters, to the application guns. This is a unique configuration with high profitability and efficiency levels.