

WIND TECHNIK NORD

DEVELOPMENT, PRODUCTION AND DISTRIBUTION OF WIND TURBINE GENERATORS SINCE 1986

YOUR PARTNER FOR WIND ENERGY

German Energy Solutions Energy solutions – made in Germany



Enge-Sande, December 2018 Dieter Guschewski (CFO)

CONTENT

- General information about Wind Technik Nord GmbH (WTN)
- Product overview
- Service overview
- Our energy solution
- WTN Impressions
- Search for new business partners

GENERAL INFORMATION

- Founded in 1986 by Norbert Wippich
- Manufacturer of wind turbine generators in the mid-size range (200-250 kW, 600 kW, 1000 kW, 1500 kW)
- Small-sized company in Northern Germany with international experiences
- Subsidiary in the UK (Wind Technik Nord UK Ltd.)
- Partners in Northern Ireland and Turkey

 \rightarrow High Quality, Efficiency and Economy



PRODUCT OVERVIEW



WTN200 (refurbished)



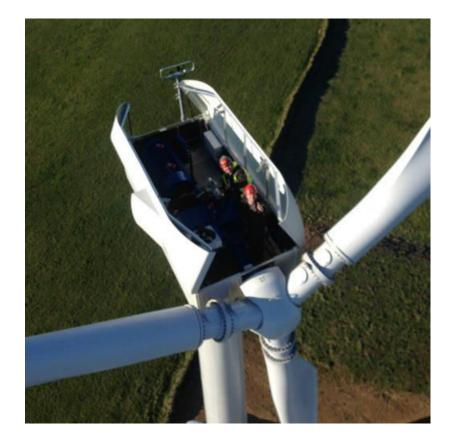
WTN250

WTN500/600

Wind turbines made in Germany

SERVICE OVERVIEW

- Support from the beginning
- Due diligence and Planning advisory
- Production
- Transport
- Installation
- Commissioning
- Service & Maintenance
- SCADA remote monitoring 24/7
- Training of local people (for O&M and more)



OUR ENERGY SOLUTION

- Why WTN wind turbines ?
 - Long-term experience in wind energy
 - Reliable technology with low investment costs
 - Off-grid solutions, especially for remote areas / districts
 - Individual power supply for factories incl. storage possibilities
 - Hybrid Solutions available
 - Easy transport, all WTN250 components fit into standard 40^{ext} containers
 - Only small cranes needed for installation
 - Use the total wind energy potential (around 1100MW)
 - Simple, but solid turbines, easy service and maintenance



OUR ENERGY SOLUTION

- Aims and results:
 - Availability and Reliability of electrical power supply for your business
 - Local renewable and economical value added
 - Education, Qualification and gain Experience for local people
 - Increase the share of wind energy in the national electricity generation mix
 - Upgrade old turbines with climbing support



OUR ENERGY SOLUTION – WTN250

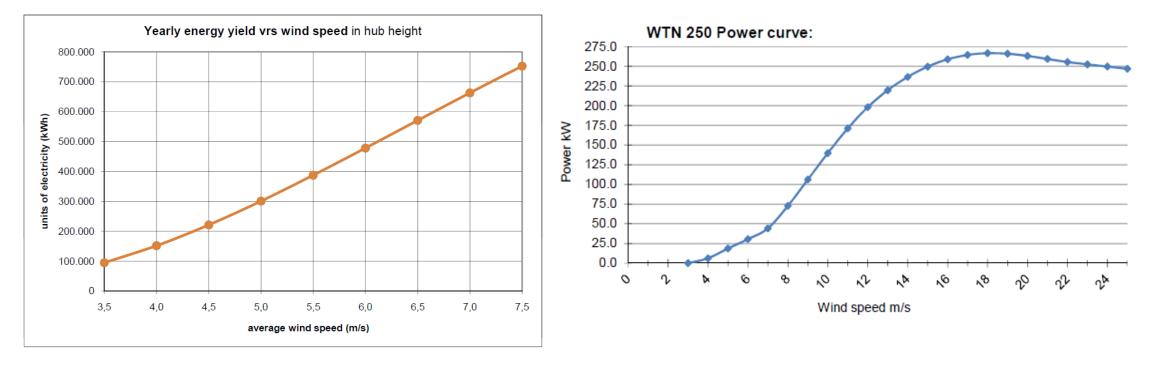
- WTN250 turbine:
 - Nominal output: 250kW
 - Hub height: 30, 40, 46 or 50m
 - Rotor diameter: 29 or 30m
 - Blades type:WTN 13.4
 - Gear type: helical spur gear
 - Yaw system (kind): active
 - Generator output: 50 / 250kW
 - Aerodynamic brakes: Tip brakes
 - Towers: tubular, edged or lattice

 \rightarrow A simple, but solid turbine for at least 20 years \rightarrow Easy installation, just one crane day



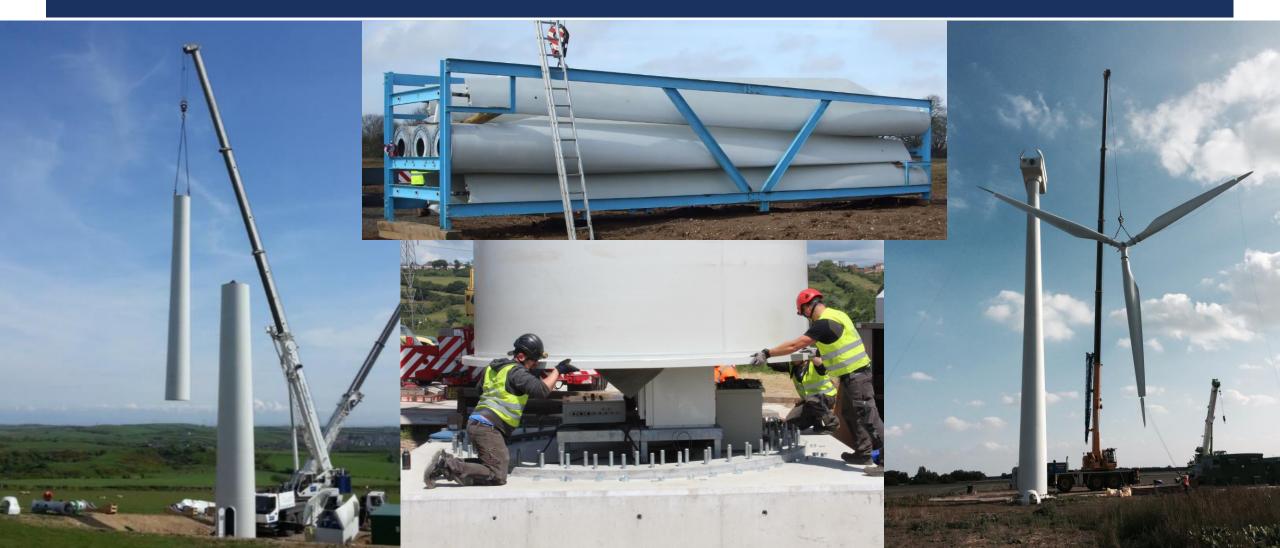
WTN250

delivery time is 4-5 months



Yearly energy yield can vary dependent on actual site conditions.

WTN IMPRESSIONS



WTN IMPRESSIONS 2



SEARCH FOR NEW BUSINESS PARTNERS

WTN is looking for:

- Distributors
- Reliable partners with country-specific and technical know-how
- Licensees and Joint Venture partners (local production)
- Other forms of cooperation and partnerships
- Achieving brand awareness

We are open for proposals \bigcirc

THANKS FOR YOUR ATTENTION! QUESTIONS?

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