

Rotor blade inspections

Maximum performance for your rotor blades

The rotor blades must withstand enormous loads during the operating of a wind turbine.

They are permanently exposed to an extremely dynamic load spectrum. They are directly exposed to constant environmental influences such as temperature changes, precipitation, UV light and lightning. Due to their shape and size, rotor blades place high demands on production and maintenance. If damage to rotor blades is discovered too late, high repair costs and long downtimes can quickly arise.

Continuous monitoring of the rotor blades – already during manufacturing and in operation – prevents this. In the context of regular inspections for condition-based maintenance, initial damages can be detected within reasonable time. These can usually be repaired with little effort before they expand uncontrollably. Repairs can thus be planned and carried out under favourable conditions. This also reduces costly downtimes. Continuous monitoring ensures trouble-free operation and reduces maintenance costs.

We climb high for you. Our innovative rope access technology for rotor blades allows quick and flexible responses to individual requirements:

- Suitable for any turbine type, size and hub height
- Applicable everywhere – for onshore and offshore turbines
- Optimum access to all outer areas of the rotor blade
- Low technical effort
- Short downtimes



Our services

We inspect rotor blades from manufacturing to operation:

- Manufacturing surveillance
- Technical inspection of rotor blades
- Assessment of lightning protection and earthing
- Rotor blade angle measurement
- Rotor blade inspection from the ground using a camera system
- Internal blade inspection in non-accessible areas by means of camera system
- Root Cause Analysis
- Preparation of detailed expert reports including photographic documentation (factory acceptance tests, construction supervision and inspection after commissioning, end of warranty, recurring and condition-oriented inspections, monitoring of repair work, etc.)
- Consulting

Other services using rope access technology:

- Technical inspection of towers
- Specific inspections, e. g. inspection of tensioning systems of concrete towers

New services:

- Laser-based measurement of rotor blade angles
- Laser-based measurement of tower clearance

About us

The 8.2 Group brings together experts with decades of experience and young thinkers dedicated to the sustainable value of renewable energy projects. For onshore and offshore wind energy, photovoltaics, biogas, grid integration and QHSE. The 8.2 network offers a comprehensive range of technical consulting services and inspections with independent expertise.

From the first tender, through quality assurance, to lifetime extension assessments, our services cover the entire life

cycle of renewable energy projects. The expertise generated over the last 20 years is based on around 40,000 inspections of wind turbines, 20 GW due diligence projects on- and offshore as well as photovoltaic projects. Furthermore, the 8.2 Group has been involved in almost all German offshore wind projects right from the start.

As a client, you benefit from this unique wealth of experience through our broad knowledge base and the guaranteed quality level of our work.



32
offices



130
Experts
worldwide



40,000
Technical
inspections



15
GW TDD Wind
on-/offshore



4.2
GWP PV projects



5
GW Condition
Monitoring



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