

Technical Inspection and Surveillance

Whether for onshore or offshore wind projects, technical inspection and surveillance play a key role in ensuring quality, condition and performance of wind turbines, thus providing confidence to all project stakeholders. Some countries, such as Germany, even impose regulations on periodic inspections to ensure safety for installed wind turbines.

TÜV NORD offers an extensive range of technical inspections and surveillance activities for onshore and offshore wind projects. Securing quality and safety while reducing project risks due to unknown field conditions, such as infrastructures is our matter.

Examples of our main services are:

- Commissioning inspections
- Periodic or condition based inspections of turbines and components (e.g. rotor blades, gearboxes, towers, transformer stations, etc.)
- End-of-warranty inspections
- Lifetime extension evaluation
- Inspections of service lifts, cranes, ladders/fall arresters and pressure equipment
- Manufacturing inspections for turbine components
- Transport, construction and installation surveillance

Furthermore, we offer auxiliary services such as:

- Blade inspections by rope access including lightning protection system
- Endoscopy inspections of gearboxes and witnessing of tests
- Vibration measurements and condition evaluation of drive train components
- Inspections of auxiliary systems such as ice detection system, range visibility sensor of obstruction light system, etc.
- Witnessing of electrotechnical tests
- Inspection of the turbine safety system
- Non-destructive weld seam testing
- Damage investigation
- Other services

TÜV NORD is an accredited inspection body or “Zugelassene Überwachungsstelle (ZÜS)” for service lifts and pressure equipment by the German Industrial Safety Ordinance (BetrSichV). In addition we are accredited by the DAkkS for all relevant schemes and standards of wind certification as well as by BSH for offshore project certification. We are acknowledged by the German Wind Energy Association (BWE) to perform periodic inspections on wind turbines subjected to mandatory inspections.

We are keen on supporting you with our proven competence, extensive interdisciplinary knowledge and world-renowned objectivity to identify project risks and minimize uncertainties through our accredited and certified technical inspections.

