



Periodic Inspections for Wind Farms.

To ensure the success of your wind farm project, we provide a range of services to support you at each phase of the project life cycle – from site selection, design and manufacturing, right through to operation.

Product Certification	Project Certification	Manufacturing Surveillance
Health & Safety	Marine Warranty Survey	Periodic Inspections
Due Diligence	Laboratory Services	Expert Reports
Training / Education	Management System Certification	Grid Connection
Project Planning Services	Coating Inspection Services	CE Marking
Condition Monitoring	Risk & Safety Management	

Periodic inspections for owners, operators, investors and insurers of wind farms

Wind energy is one of the energy sources of the future and the technical reliability and functionality of a wind farm are critical for all parties involved. Wind farm owners want to ensure efficient and operational conditions of the wind farm in order to maximize productivity and profits and to minimize unscheduled downtimes. For insurers the reliability of a wind energy project is essential to reduce the risks of avoidable replacement of important components of the wind farm due to undetected defects.

Thanks to our extensive experience in periodic inspections of wind farms and various technical facilities, we can serve clients in securing the quality and security of their wind farm, onshore or offshore, by checking and verifying its technical condition with the independent knowledge of our experts.

Our experience - your benefit

With our extensive knowledge of independent periodic inspection services for wind farms and a reputation for conscientious and reliable work, we satisfy customers around the world and ensure successful project performance.

Our experience in periodic inspections for wind farms includes the offshore project alpha ventus. We provided the project developer with inspections of all lifting equipment, cranes, hoists and elevators for the alpha ventus offshore wind farm, in order to ensure safety and functionality.

With independent periodic inspections, defects of relevant components can be detected on time, allowing for prompt maintenance or replacement and so preventing unnecessary down time of the wind farm.

Periodic inspections for offshore wind farms are statutory and have to be performed every four years. For onshore wind farms the safety-related equipment has to be inspected periodically by an accredited inspection body. Inspections of other parts of onshore wind turbines are performed according to the individual contract and/or to the authorities' standards.



All inspections are carried out according to IEC 61400 standards. For offshore wind farms, we also perform our services in accordance with German Federal Maritime and Hydrographic Agency (BSH) standards and all other common wind standards (GL, DNV, etc.).

Moreover we develop own inspection standards based on our expert knowledge and experience.

German accredited inspection body (ZÜS).

ZÜS is an accreditation in accordance with the German industrial safety ordinance (BetrSichV) to carry out inspections of plants subject to mandatory inspection.

We offer inspections of all the safety-relevant equipment, such as lifting devices, cranes and pressure vessels of wind farms. This type of inspection is statutory for all types of wind turbines.

We perform periodic inspections of:

1. Safety, efficiency and control systems
2. Nacelle, blades, electrical and hydraulic systems
3. Main shaft, bearings, gearboxes and generator
4. Tower, substructure, foundation and secondary steel
5. Substations

For wind farms in operation we also provide corrosion monitoring. We conduct visual inspections and perform non-destructive testing as necessary. In our laboratories we also test material samples and use physical and electrochemical measuring methods to investigate the coating, the quality and the mechanical properties of various materials.

About TÜV Rheinland:

Founded more than 140 years ago, TÜV Rheinland is a global leader in independent inspection services, ensuring quality and safety for people, the environment, and technology in nearly all aspects of life.

TÜV Rheinland Industrie Service GmbH
Wind Energy
Julius-Vosseler-Str. 42
D-22527 Hamburg
Phone +49 40 3787904-900
wind@de.tuv.com
www.tuv.com/wind