

Wind turbine inspection services



Advanced drone technology and analysis tools: Non-contact and non-destructive material testing of rotor blades

There are many reasons for testing wind turbines: testing new turbines after commissioning to determine that they are free of defects, regular periodic inspections are required, or operational safety must be determined during recertification or repowering. However, the most important reason for testing is to avoid a failure on the return on investment of the wind turbine.

The combined competences of VDE Renewables, as a globally recognized service provider for high-quality quality assurance of renewable energy power plants, together with Rolawind GmbH, as a recognized expert with extensive experience in drone operations, offer you maximum safety and reliability.

We do not only detect external damages like cracks, but also internal damages like detachments at the crossbeam, erosion, penetration of moisture and water into the gel-coat layer, and oil inclusions in the laminate of the rotor blades.

The patented process is the only one that reliably secures operational safety, enables early fault detection, and reduces repair costs and downtimes. For operators, banks, investors and insurance companies, this is the only way to qualitatively determine and reduce the potential for risk.

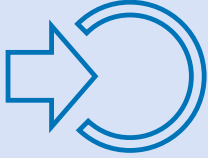



Your advantages

- **Faster than state of the art** – Our criteria is constantly updated based on the latest research and real-world experience
- **Transparency** – Highly accurate wind turbine evaluation report and independent verification of test results
- **Increased safety** – Due to the high quality of testing
- **Guaranteed operational safety and reliability** – Reduced turbine downtime
- **Cost savings through reduction of repair costs** – Earlier detection of technical faults
- **Standardized report recognized by banks and insurance companies** – In order to support the financial needs of your project

In cooperation with



4 stages to your VDE Verified Report

	<p>Compiling the technical details of the wind turbine to be analyzed</p> <p>Flight preparation and obtaining the necessary permits</p>
	<p>Thermographic measurement data recording for checking the inner blade structures according to a patented process of the technology partner RolaWind</p> <p>Optical images of the blade surfaces using high-resolution optical imaging</p>
	<p>Extensive evaluation of the measurement and image data by an accredited expert for wind energy plants</p>
	<p>Digital twin, quality assurance and verification of results with independent, objective assessment</p> <p>Issuance of the internationally recognized VDE Verified Report</p>

Additional services can be requested as required: Metrological inspection of the lightning protection system, inspection of the rotor blades from the inside, or 3D scan using Lidar technology.

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