

LPS Testing & Inspection

Clobotics Wind Services offers Lightning Protection System (LPS) for all blade types.

LPS testing has, for many years, been seen as an important part of yearly preventative maintenance routines. LPS inspection is critical for ensuring proper connectivity from the conductors all the way to the ground. Faulty conductors can have a significant impact on the structural integrity of the blade, and in worst cases result in complete blade failure.

Clobotics offers LPS testing performed by rope or from cherry pickers during the process of performing repairs. A Digital Low Resistance Ohmmeter (the Megger testing unit) is used to capture resistance readings throughout the lightning conductor system. These readings are presented in a .pdf report which is available the following day. The results will be compared to blade manufacturer specifications and for any reading that does not meet the requirements, a repair suggestion will be provided.

Clobotics performs tests according to OEM requirements, on both the full blade structure and for the remaining part of the Lightning Protective System. The equipment is compact and light enough to be carried in a technician lifting bag

LPS Testing Crew & Equipment

Required certifications

- Rope access IRATA certificate
- Blade B course

PPE/Equipment

- Maintained and certified in equipment log
- Personnel check before each use
- Megger Digital Resistance Ohmmeter
- DLRO-10 for LPS testing

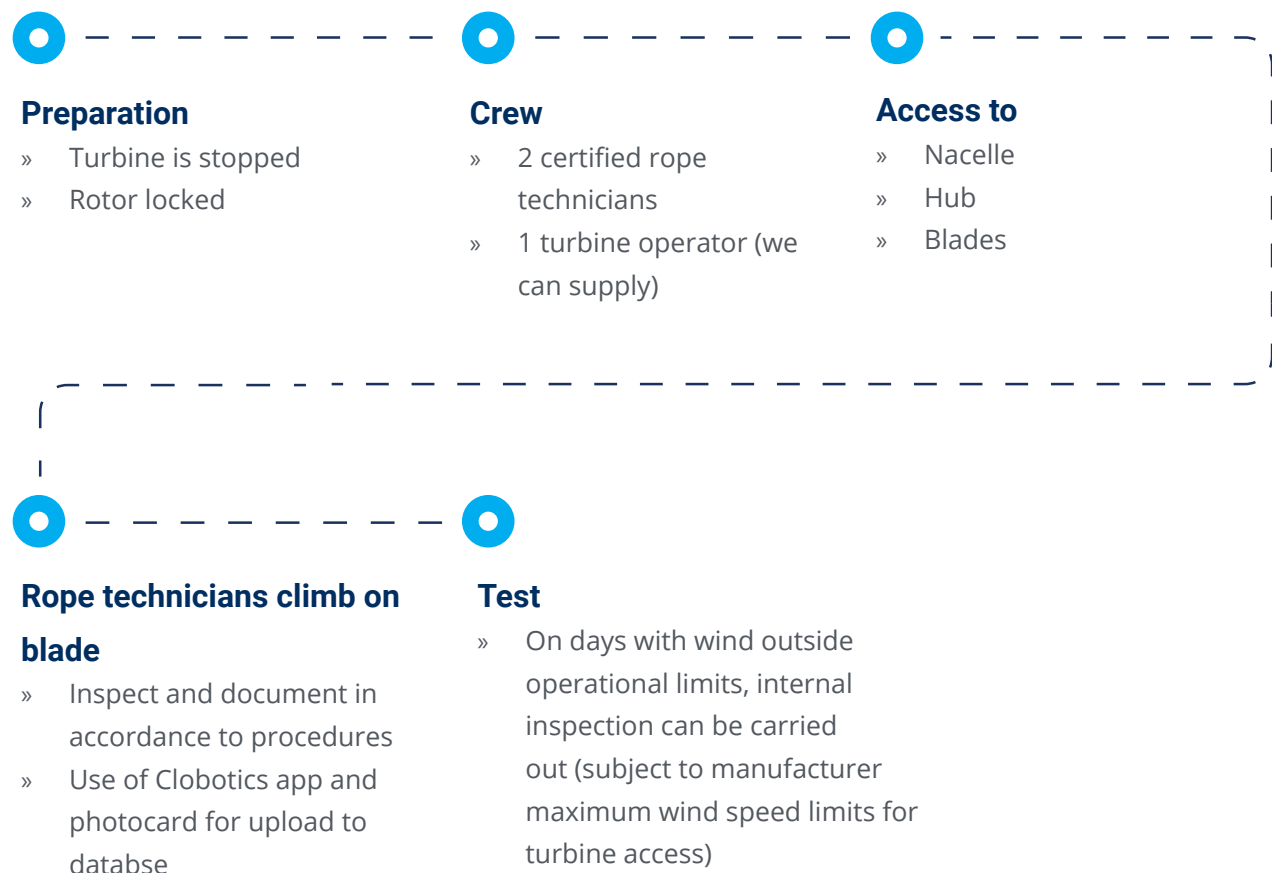
Weather Limits for inspection/repairs

- Depending on turbine/ blade type
- 10-12 m/s winds
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Documentation

- Comprehensive report for a full turbine
- All measurements and recordings made as one record per page

Process





WIND SERVICES

Clobotics

Developing
in-house technology,
Clobotics ensures a
seamless workflow
and state-of-the-art
documentation.



Clobotics A/S – Intelligent Wind Services

Clobotics is a global leader in solutions that combine artificial intelligence and the internet of things (AIoT) for the wind power and retail industries. Clobotics' end-to-end solutions combine computer vision, artificial intelligence/machine learning, and data analytics software with different hardware form factors, including autonomous drones and mobile applications to help companies automate time-intensive operational processes and boost the bottom line through the use of data-driven insights and analysis.



RECENTLY NAMED TO
**CNBC Upstart
100 List**

Clobotics was named to the CNBC Upstart 100 List in 2018 and was highlighted as an important computer vision solution provider for the industrial sector in the latest Bloomberg NEF report on computer vision. To learn more, visit www.clobotics.com/wind

Clobotics, with teams based in Seattle US, Esbjerg Denmark and Shanghai China, has a strong track record in drone-based inspection of wind turbines and AI-based analysis of the resulting images. Constantly developing technology allows faster, safer, and lower-cost inspections as well as high-quality reporting delivered faster than any other alternative on the market. Clobotics has inspected wind turbine blades since 2014 and has successfully inspected over 14,000 wind turbines, towers, jacket foundations and substations.

Our offerings include:

- External wind turbine blade inspection and analysis
- Repair of wind turbine blades by manual and robotic solutions
- Internal blade inspection by robots
- Structural inspection of foundation and offshore structures
- Blade upgrades, including Leading Edge Protection (LEP) and power upgrades
- Long term blade maintenance contracts including IBIS™ inspection, analysis, repairs and optimization
- Asset management software
- Offshore turnkey solution by combining drone/robot inspection services, vessel charter and subsea inspections by ROV



www.clobotics.com

Get Started

Denmark Office

+45 70 70 76 68

