

# ROTOR BLADE INSPECTION AND LIGHTNING PROTECTION MEASUREMENT

## WITH DRONE

## HOW IT WORKS

- An intermittent alternating voltage of up to 6000 V is provided by means of a voltage generator and fed into the lightning protection system (LPS).
- The intermittent AC voltage generates an intermittent electric field in the rotor blade.
- A drone flies along the rotor blades autonomously and 1) takes pictures of the blades for the rotor blade inspection and 2) checks the LPS with a field strength meter.
- If the electric field does not reach the tip of the blade, this is an indicator of damage to the LPS. The end of the electric field in the direction of the blade tip marks the defect in the LPS.

## YOUR BENEFITS

- More efficient inspection and route planning ensure shorter downtimes (and more money in your pocket)
- High-resolution imaging and wide detection field ensure higher fault detection rate
- Realistic lightning protection inspection: New is that ENERTRAG measures at 6000 V during operation, which is much closer to a real lightning strike than the previous 24 V during a resistance measurement by rotor blade inspectors
- Robust measurement method that meets the legal requirements for operators and insurers
- Intelligent symbiosis of inspectors and drone thanks to many years of experience in fault assessment and classification of inspection data
- More weather resistant and therefore more predictable: drones can fly at up to 10 m/s and even in very cold temperatures

## HOW TO GET YOUR DRONE INSPECTION

### OPTION 1

- Book a drone inspection by ENERTRAG Operation and enjoy the advantage of our experience in drone inspections and evaluation of data

### OPTION 2

- Get a license for ENERTRAGs innovative procedure and do drone inspections autonomously - your personnell will be introduced to the technique and get all relevant information to get the best possible results!

**Do you have any questions or want to get additional information on our drone inspections?**

Our colleagues are happy to help you! Contact us:  
**+49 39854 6459-200** or **betrieb@enertrag**

IN COOPERATION WITH

**SULZER**  **SCHMID**

APPROVED BY

**TUV NORD**

