

# Rotor blade inspection & LPS

ENERTRAG OPERATION

Your license partner for drone inspections.

# High quality, onshore and offshore!

Offer your customers the very latest in wind turbine inspections! With our innovative license model for drone inspections of rotor blades including lightning protection measurement, you have the opportunity to revolutionize your services and set yourself apart from your competitors. Our highly developed drone technology enables a fully automated inspection of the rotor blades of wind turbines. During the flight, a high-resolution camera mounted on the drone captures images from various angles.

These images can then be analyzed in detail to precisely identify possible damage or wear. In addition, our drone is equipped with a field strength measuring device that detects a voltage applied to the blade root by a high-voltage generator along the lightning protection line of the rotor blade. Interruptions or damage in the lightning protection line can thus be precisely localized and documented.

	Module	Title	Description	SSL	ENERTRAG
Starter pack	1	Equipment	Support with the procurement of drone and hardware as well as assembly	X	X
	2a	Training	Training on the use of the 3DX™ Blade Platform software	X	
	2b	Training	Training for carrying out measurements on the lightning protection system		X
	3a	Licence	Licence Software for drone flight incl. standard report and error annotation	X	
	3b	Licence	Licence to use the lightning protection measurement method		X
Additional services	4	Support	E-mail/telephone support (1st level SSL and 2nd level ENERTRAG Operation)	X	X
	5a	Reports	Creation of report templates according to customer requirements	X	
	5b	Reports	Support with technical assessment of defects by inspection body		X
	5c	Reports	Preparation of a report by the inspection body		X
	6a	Data	Provision of raw data from inspection	X	
	6b	Data	Use of 3DX™ Blade Platform for fleet evaluation	X	





# For maximum safety in your systems

The LPS Box revolutionizes wind field processes and offers service companies in the wind industry numerous advantages. The licensable model allows you to benefit from the latest technology worldwide and significantly simplifies your inspections. Our developers placed particular emphasis on a robust design, user-friendly operation and seamless integration into existing work processes. In order to optimize transport logistics, the hardware of the LPS box has been significantly reduced in size.

The special drones are equipped with a field strength meter for use in the field. Mounting the advanced field strength meter on the drone increases measurement accuracy and makes it easier for personnel to operate in the wind field. In addition, the new, smaller frequency converter is at the heart of the fully integrated LPS box, which combines all the necessary functions in one device.



Advantages	Market advantage	Offer your customers one of the most advanced inspection methods on the market.
	Efficiency	Reduce inspection times and increase the precision of your analyses.
	Innovation	Position yourself as a pioneer and benefit from state-of-the-art the latest technology.
	Customers	Increase the safety and reliability of the systems you manage through precise and comprehensive inspections.
	Licence	Use our proven system and position yourself as a leading provider of rotor blade provider of rotor blade inspections including lightning protection measurement by drone.
Dimensions	LPS box	HV generator, 6 kV, 10 mA, frequency converter, 60 Hz
	LPS adapter sets	Depending on requirements, consisting of ring adapter, flat adapter and test probe adapter.
	Connections	Input voltage 230 V/50 Hz converted to 60 Hz, transfer to voltage generator. Output voltage with 6 kV/60 Hz from the voltage generator, termination of the of the measuring line.
	Case material	Plastic (polypropylene)
	Weight LPS box	23 kg
	Dimensions (W/H/D)	approx. 52 cm / 46 cm / 31 cm



# Our locations

● Dauerthal  
Gut Dauerthal  
17291 Dauerthal

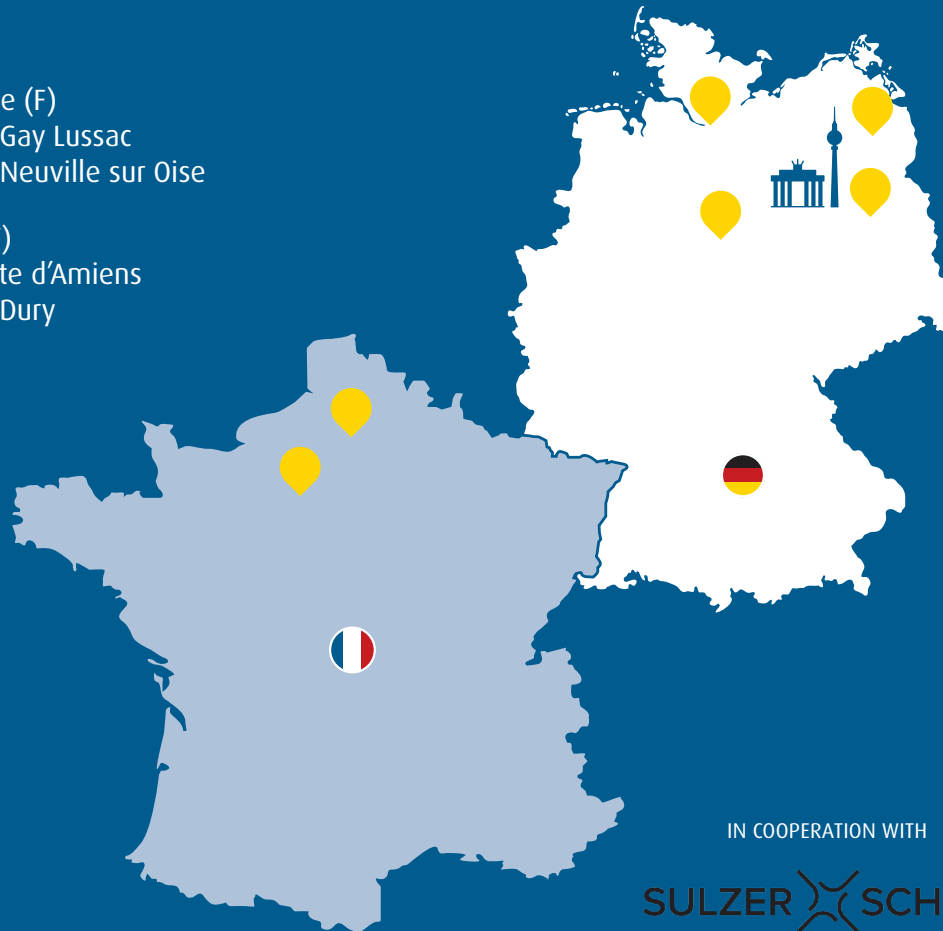
● Berlin  
Friedrichstraße 152  
10117 Berlin

● Edemissen  
Roth Acker 3  
31234 Edemissen

● Hamburg  
Trostbrücke 1  
20457 Hamburg

● Neuville (F)  
9 mail Gay Lussac  
95000 Neuville sur Oise

● Dury (F)  
26 Route d'Amiens  
80480 Dury



We reliably take care of your energy systems throughout Germany and beyond - including in France, Poland and, after consultation, in other countries too.

IN COOPERATION WITH  
**SULZER X SCHMID**

## Contact us:

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Certification of the quality management system  
according to DIN ISO 9001:2015.