



# INSPECTION OF ROTOR BLADES





# Condition-based Maintenance – Inspections of Rotor Blades



Regular inspections of rotor blades are an important part of condition-based maintenance which is required by most insurance companies today. Through regular inspections, it is easy to recognize existing damage. This is an important requirement in order to repair damage early and with minimal expense.

Inspections within the framework of the condition-based maintenance will be executed by special trained and knowledgeable employees. For working outside on the rotor blades, we developed a special technique based on the use of ropes. So we don't need a crane or lift, and there are no extra costs for accessing the rotor blades. This technique also has the advantage that all areas of the blade body are optimally accessible and it can also be applied at very high hub heights and unfavourable weather conditions. Our inspections include the examination of the interior of the blade.

## We perform different inspections according to your requirements:

- Check of the outside blade body for damage
- Check of the condition and position of installed flow elements
- Inspection of the interior of the blade in all accessible areas
- Check of the lightning protection system of rotor blades
- Check of the water drain vent
- Inspection of the tip mechanism of stall controlled wind turbines
- Execution of special inspections by means of various measurements and test equipment:

- » Internal check of the blade tip by means of a special camera system
- » Endoscopy of damaged areas in the interior of the blade
- » Analysis especially of low frequency vibrations by means of a special vibration measurement system
- » Layer thickness measuring, material check-up, ultrasonic check

## Typical cases of damage at rotor blades

