ROTOR BLADE INSPECTION

Why is rotor blades inspection important?
Because preventing a damage or operation failure is always less expensive than fixing it.

As the wind industry tendency is to have larger wind turbines, blades maintenance cost is continuously increased due to higher towers thus higher hub heights, expensive manufacturing materials, sophisticated aerodynamical profiles, etc. As a consequence, the producers recommend performing rotor blades inspection on a yearly basis, at least.

Why ask for an inspection?
Because rotor blades are susceptible to various failures caused by human error, accidents, environmental events, poor manufacturing quality control and operational wear.

Whether detecting early new defects or inquiring on suspected or well known ones, the inspection plays an extremely important role in an operator’s balance sheet. Future repair costs, machine downtime or insurance claims, all these are avoided or at least pushed to a minimum.

And for the early period of the wind turbines lifespan, a detailed “End of Warranty” inspection really makes the difference. This is the moment when you get informed upon manufacturing and operational faults and make your future inspection plans considering the ageing process.

What are the key components of an inspection?
Visual evidence of cracks, gel coat damage, erosion, delamination, defective flow elements, drainage system, lightning protection system, protective film, voids, pin holes, profile accuracy. There are different types of problems occurring at different stages of the blades
life but the most common are cracks, chips and minor delaminations, which can all be easily fixed if picked up quickly.

**How is an inspection performed?**
By rope access, one of the most accurate type of rotor blades inspection.

Our technicians are always aligned to the latest instructions in terms of technical and safety procedures. Having followed training courses at the BZEE Academy Training Centers in Husum (Germany) guarantees a professional approach towards the inspection activity and using high end equipment and accessories adds to the safety climate in which inspections are performed.

**What is delivered after the inspection?**
Professional Blade Inspection Reports containing detailed information and parameters of the wind turbine, high resolution pictures of every recorded defect and deficiency along with recommendations for a better functionality.

A highly intuitive color code is used to describe each particular defect so you can easily picture the current situation in which your equipment is and make decisions towards that.

**Why choose us?**
The continuously growing experience of our skilled technicians in both performance issues and structural defects of multiple rotor blades types, along with more three years in this business sector performing works for clients from several countries. A zero complaint record counts as much if we consider the 150+ rotor blades inspected so far since market entry.

**Main References**
- Enel Green Power Romania / 110 blades
- Bridge Construct Romania / 15 blades
- Eolian Project Romania / 12 blades
- Eco Power Wind Romania / 12 blades
- OX2 Sweden / 12 blades