NON-DESTRUCTIVE TESTING

NON-DESTRUCTIVE TESTING - INDEPENDENT AND IMPARTIAL EXAMINATION AND TESTING

We experienced that many failures found on running wind turbines are related to either poor material quality, wrong choice of material or manufacturing and welding faults. Hence, quality supervision during production is strongly recommended.

NDT is an appropriate method to check material quality before assembling wind turbine components.

- How do you identify and quantify material defects of your products also below the surface?
- How do you assure that your welds have no unacceptable imperfections?
- How do you control the surface of your castings?
- How do you detect possible corrosion?

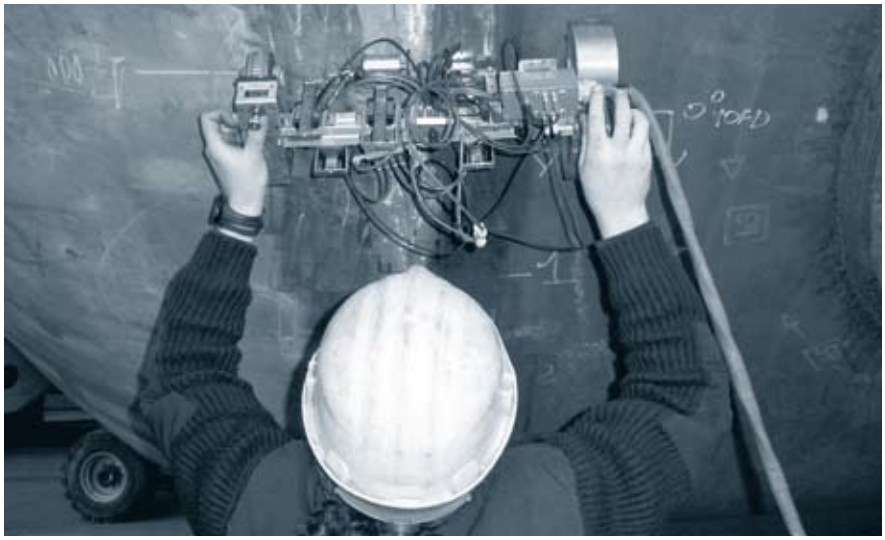
Lots of components for wind turbines require special attention in regard to material composition, surface integrity and internal conditions.

NDT is an indispensable technique to assess the quality of new constructions and products and the status of assets in service or for preventive maintenance. Our non-destructive and mechanical examinations provide quality assurance and process safety.

SGS R&D, special examination and consulting teams are at your disposal for your complex test requirements.

Our variety of equipment and personnel offers technically and financially suitable methods, be it traditional or more specialised examination techniques.

PROFESSIONAL SERVICES TO ASSURE INSTALLATION INTEGRITY



CERTAINTY WITH SGS

Our certified NDT experts provide the necessary certainty and guide you in choosing the most appropriate and efficient NDT method or combination of methods, either for single components or large projects.

The combination of experienced operators with all necessary qualifications and state-of-the-art technology makes SGS a reliable and valuable NDT partner.

CONVENTIONAL TESTING METHODS

- Visual Inspection (VT)
- Thermography
- Radiographic Examination (RT), X-Ray or Gamma Graphic Testing
- Manual Ultrasonic Testing (UT) (Pulse-Echo Method)
- Surface Examination using Magnetic (MT) or Dye Penetrant Testing (PT)
- Positive Material Identification (PMI), Alloy Analysis
- On-site Hardness Measurements
- On-site Material Structure Analyses

SPECIAL EXAMINATIONS

- Digital Radiographic Examination
- Time of Flight Diffraction Examination (ToFD)
- Phased Array

ACCREDITATIONS

All our NDT operators possess certificates according to the relevant international or local standard. Our mechanical testing laboratories are accredited by ISO 17025 and by NADCAP.

SHARING KNOWLEDGE

In order to provide maximum added value and competitive advantage for our clients, we follow a philosophy where education and training of our NDT operators is our top priority.

SGS offers relevant NDT courses and provides workshops (if requested, also at your company location).

Experienced instructors share knowledge that complies with guidelines and local and international NDT/NDE standards, such as SNT TC1A and EN 473.

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WHEN YOU NEED TO BE SURE

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