



Operation &
Maintenance

Non-Destructive Testing (NDT)

www.turnericensi.com



Non-Destructive Testing (NDT)

With its experienced technicians, Turner Icenic can support you with a wide range of non-destructive testing solutions

NDT is used in a variety of settings and covers a wide range of industries, with new NDT methods and applications being continuously developed. Non-destructive testing methods are routinely applied where a failure of a component could cause significant hazard, economic loss, or when compliance with set standards is essential.

Severe rotational forces, variable loads, impacts, lightning strikes, and other hazards can create cracks, corrosion, and irregularities that are too small to see with the naked eye but nonetheless can compromise the integrity of gears, bearings, blades, and structural pieces. Non-destructive testing (NDT) is a broad category of inspection methods that technicians use to highlight these flaws and defects.

Turner Icenic can provide you with a range of tailored services that will ensure you are getting the best out of your assets. With its experienced technicians, Turner Icenic can support you with a wide range of non-destructive testing solutions including:

- Weld Inspection
- Magnetic Particle Inspection
- Penetrant Inspection
- Ultrasonic Testing
- Phased Array Ultrasonic Testing
- Remote and continuous scanning of vulnerable areas utilizing our condition monitoring solution
- Visual Inspection
- Hardness Testing
- Level 3 Consultancy Services
- Eddy Current
- QA / QC Services
- Third Party Cross Checking Services

NDT is used in a variety of settings and covers a wide range of industries, with new NDT methods and applications being continuously developed. Non-destructive testing methods are routinely applied where a failure of a component could cause significant hazard, economic loss, or when compliance with set standards is essential.

Non-Destructive Testing (NDT) is commonly used for the inspection of wind turbines to identify areas of degradation, corrosion weakness and cracking before damage or failure to the asset occurs. Turner Icenic will work with you to determine the requirements of your assets and develop an inspection plan that suit.

Non-destructive testing is carried out to ascertain that the components or materials being used are not damaged or faulty and are fit to be used by personnel. The result of testing can show whether the components need to be repaired or if they are safe for operation.

ON AVERAGE
18%
OF TURBINE INSPECTIONS SHOW CRITICAL DEFECTS

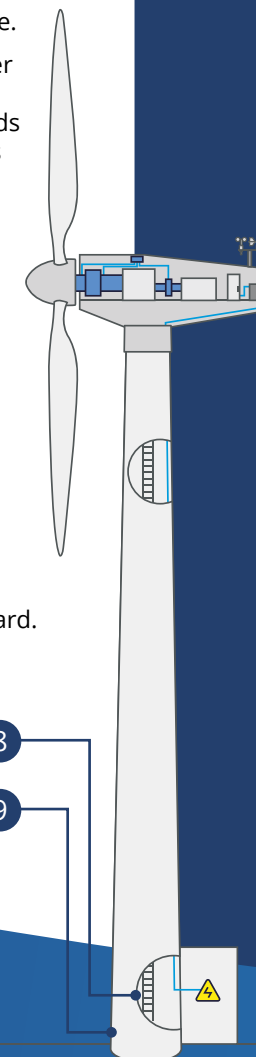
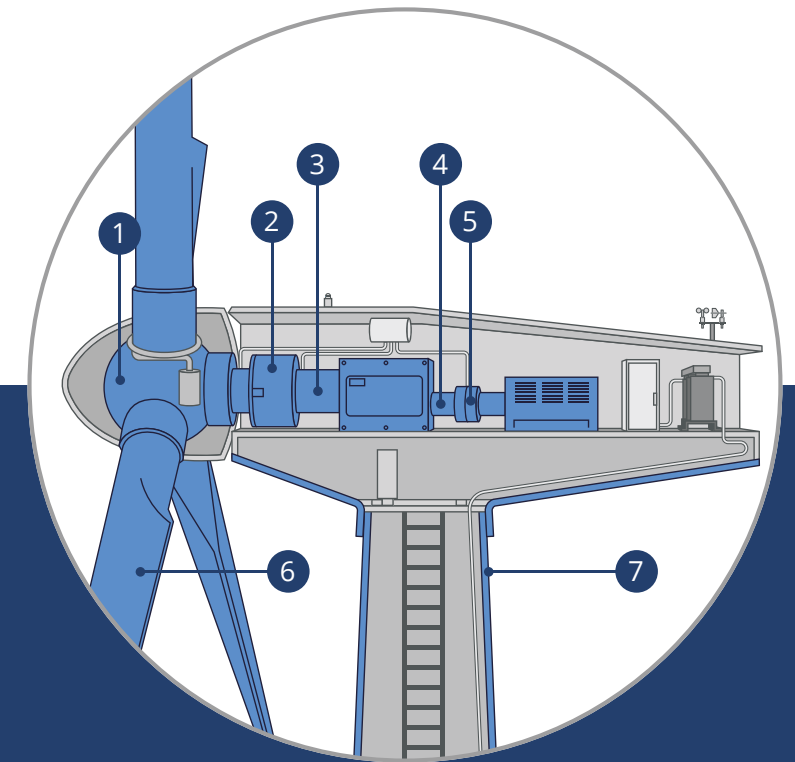
Ultrasonic and eddy current testing

Ultrasonic testing and eddy current testing are two leading inspection methods when dealing with wind turbines due to their advanced features and added convenience.

Both are adept at finding smaller flaws that are normally harder to read using other NDT methods and instruments. Both methods offer array functionality that conforms to unconventional geometries and scrutinizes flaws on a deeper level.

Quality Assurance & Cross Checking

Turner Icenic currently provide a range of cross checking and quality assurance services to our customers on & offshore. Utilizing our inspectors skills we are able to ensure working is being carried out to a set standard. This checks will be carried out in line with your requirements.



Standard Monitored Parts

No.	Description
1	Hub
2	Slow-speed main bearings
3	Slow-speed shaft
4	Fast-speed shaft
5	Fast-speed coupling
6	Blades
7	Tower
8	Door Frame
9	Anchor Rods





Operation &
Maintenance

Any Turbine, Anytime, Anywhere

Contact Us

Glasgow

65 Craigton Road
Glasgow
G51 3EQ
T 0333 012 9258

Lowestoft

8b Newcombe Road
Lowestoft
NR32 1XA
T 0333 012 9258

 turnericeni

 Turner-Iceni-Ltd

 turnericeni

www.turnericeni.com

