Manual UT Thickness Measurements



One of the most widespread NDT methods in mechanical equipment of industrial installations for the characterization of erosion and deterioration is the thickness measurements with the Ultrasonic method. Envirocoustics offers high



level thickness measurement services on pipes, pressure vessels, boilers, tanks etc, by its experienced and certified inspectors.

Thickness measurement is achieved by placing the UT probe on the object surface. Local or general reductions of thickness can be located and measured with high precision. The instruments that are used for the measurement are portable and light with possibilities of saving the measurements data in a data logger.



The use of different probes offers the capability to perform thickness measurements in inaccessible surfaces, on very thin plates, on high temperature environments, above paint (thru-coat or echo to echo functions) as well as on surfaces with intense local corrosion without any surface smoothing required (use of pencil type probes).



Advantages of the method:

- Quick measurements with direct results.
- High precision measurements.
- The inspected object can be in-service.
- No particular surface preparation required.
- Measurements can be made without removal of the paint.
- Measurements can be made in inaccessible regions using suitable probes.
- In many cases there is the possibility of measuring corroded surfaces without the need of cleaning the surface (using special probes).
- Corrosion rate calculations can be made with thickness reduction observations with repeated measurements in the same points.
- Measurements on high temperature surfaces possible.



• Display of corrosion profile on B-Scan form.

All the measurements and measurements points can be stored in electronic form e.g. Excel, Access or AutoCAD and can be statistically processed and compared with newer measurements.





Envirocoustics also provides corrosion mapping services using automated ultrasonic systems. Please visit <u>www.envirocoustics.gr</u> for more information.

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