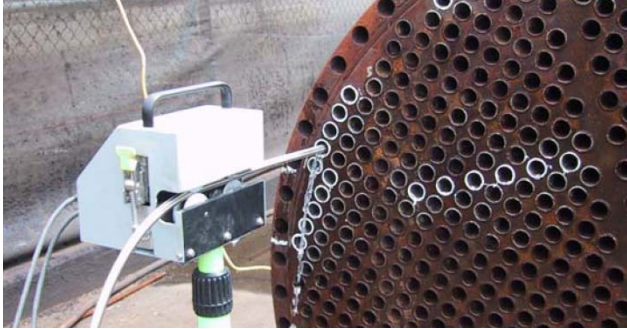


Automated UT Tubes Inspection

Envirocoustics provides complete services for tube inspection of heat exchangers, boilers and coolers. Apart from the EC and RFT methods Envirocoustics also provides automated ultrasonic inspections.

With the use of completely automated UT systems, designed for rapid measurements, C-Scan type displays are provided from small or medium diameter pipes.



All measurements acquired are recorded and filed inside the system, separately for each tube. The final report contains analyzed data in colored maps or in Excel worksheets. The report contains also the highest, the lowest and the average thickness values for each tube wall.



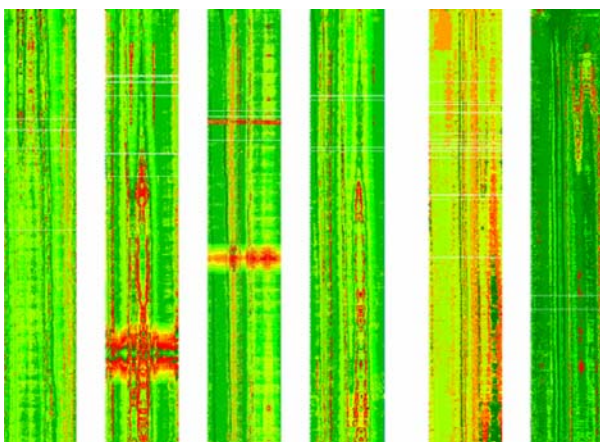
A specially retrofitted probe is inserted inside the tube, together with water supply (as coupling material). The ultrasound is emitted vertical (for corrosion inspection), or at an angle (from 45° to 70°, for the detection of imperfections as microcracks).



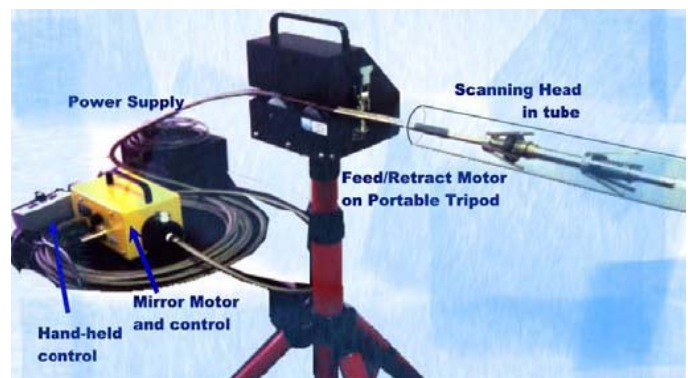
UT probe for tube inspection

Advantages of the method:

- Inspection speed up to 100mm per second, depending on the desirable resolution.
- Fully controlled and automated probe insertion and retraction for data acquisition. Insertion speeds up to 12 inches (300 mm) per second; inspection speeds up to 4 inches (100 mm) per second, depending on resolution required.
- Complete 2 or 3 axes recording (C-Scan and B-Scan) with capability to export the data on Excel worksheet for further analysis.
- Inspects tubes with diameters from 12mm up to 76mm.
- Thickness and corrosion mapping and/or inspection for other types of imperfections.



Tube mapping (in red are the areas with reduced thickness)



Member of

Envirocoustics also provides Eddy Currents tube inspection services.
Please visit www.envirocoustics.gr for more information.