

ULTRASONIC FLAW TESTING (UT)



FOR ALL YOUR INSPECTION NEEDS



UT uses high frequency ultrasonic waves to detect surface breaking and internal imperfections, measure material thickness and determine acceptance or rejection of a test object based on a reference code or standard. Flaw detection is a fast and accurate inspection method to evaluate internal product integrity.

Ultrasound penetrates deeply into materials searching for defects, cracks, delamination, lack of bonding and other discontinuities.

Shear Wave UT (A-Scan) – shear wave UT or A-scan testing transmits an ultrasonic wave at a predetermined angle into the test material. Surfaces normal to the beam path and corner traps reflect the wave energy back to the transducer. The display shows the distance the wave traveled to the imperfection and the relative strength of the energy.

UT is mostly used to guarantee the integrity of critical welds in process equipment or structures but can also be used to detect and/or quantify defects occurring in other locations. UT is often applied directly after the welding process. If welds turn out to be out of specifications, the weld will be grinded down and re-welded.

UT has big advantages over RT as there are no radiation risks and it does not interfere with work in surrounding areas.

