ITLS Information Sheet

Ultrasonic Examination of plate material.

ITLS Volumetric Examination Services include:

- ***Ultrasonic Examination***
  - *Contact and Immersion*
    - *Straight Beam*
    - *Angle Beam*
- ***Radiographic Examination***
  - *X-Ray*
  - *Isotope (available)*

"ITLS is fortunate to have the personnel, equipment and resources available to perform volumetric examinations."

Nondestructive Examination Services – Volumetric Inspections

Nondestructive Examination (NDE) – Volumetric examinations allow us to "look through" material and components in search of flaws and discontinuities.

The two (2) major methods to perform volumetric examinations are to use either **Radiographic (RT), or Ultrasonic (UT) examination** techniques.

Ultrasonic (UT) Examination

When performing Ultrasonic (UT) examinations, we send sound (above human hearing) through a part or component, and see the image sound path created on an oscilloscope.

This approach is very similar to that used in hospitals when performing a sonogram.

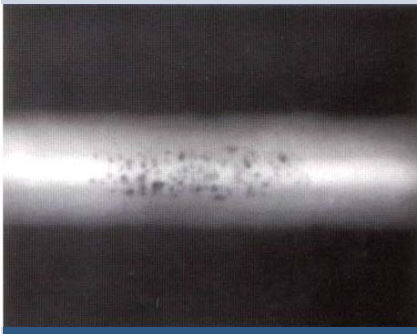
We can send sound directly through a part (contact); or use water as a medium (immersion) to examine parts.

Radiographic (RT) Examination

If you think you may have broken a bone, you go to the hospital and have an x-ray performed.

We use the same techniques (X-Ray) to look for "cracks" (and flaws) in materials and parts. However, (as you may guess) our capabilities can go through thicker and denser materials.

When needed, we can provide radiography services, using radioisotopes (Cobalt 60; Iridium 192), as well as conventional x-ray machines.



(above) – X-Ray of a weld with porosity;
(below) an X Ray radiograph of a .45 cal handgun.