

Ultrasonic Testing Terms

Airborne – Pressure and Vacuum leaks

Thickness Testing

Weld Integrity & Cracks

Mechanical & Bearing faults

Ultrasonic - A term referring to acoustic vibration frequencies greater than about 20,000 hertz.

Ultrasonic Absorption - The damping of ultrasonic waves as they pass through a medium. See attenuation coefficient.

Ultrasonic Simulation (UTSIM) - A user interface integrating a CAD model representing a part under inspection and an ultrasound beam model.

Ultrasonic Spectrum - Usually, the frequency range from 20,000 to 107 hertz. But may extend much higher in special applications.

Ultrasonic Spectroscopy - Analysis of the frequency content of an acoustic wave. Generally performed mathematically using a fast Fourier transform.

Ultrasonic Testing - The transmission of high-frequency sound waves into a material to detect imperfections or to locate changes in material properties.

Ultrasonic Vibrations - Vibrational waves of a frequency above the hearing range of the normal human ear are referred to as ultrasonic, and the term therefore includes all those waves of a frequency of more than approximately 20,000 cycles per second. Also known as ultrasonic waves.

Ultrasonic Waves - Sound waves too high in frequency for humans to hear.

Ultrasonically Sound Material - A material having no discontinuities which cause discernible ultrasonic indications at the required test sensitivity level.

Ultrasound - A test using ultrasonic waves to create an image of the inside of an object.