# Ultrasound testing and leakage detection

Eliminate your machines faults in the earliest stadium. Find all the leakages in your system and save a great amount of energy and money. With our ultrasonic testing services it is quite simple and no need to invest in an expensive equipment.

* Eliminate bearing faults even in slow or periodical working assets
* Find the problem in the earliest stadium
* Perfect for detect gearbox problems
* Increase your pneumatic systems efficiency
* Find electrical problems - arcing, corona discharge

The ultrasonic technology counts many benefits against other maintenance technologies. In most cases it gives the earliest signs of faults and it helps to identify the problems. The ultrasonic testing can be used anytime because it is a non-destruction technology. More and more industrial companies apply and use this technology in predictive maintenance. The early detect of problems can avoid from large defectives, and high expenses. With our services you can easily obviate breakdown of the system.

**Compressors**

Statistics show that the average air system wastes between 25% and 35% of its air due to leaks. A 28 320 l/min (1000 CFM) compressed air system with a 30% leak rate costs an additional $40 000 – $50 000 per year to operate. The best way to maximize the cost of operation of running a compressor is to use ultrasound to minimize the number of air leaks in the system.

**Electrical systems**

Ultrasonic sensors are perfect for scanning arcing or corona discharge at power substations or within manufacturing facilities. With our acoustical extension attachments, we are highly effective in locating internal arcing in transformers.

**Steam traps**

A steam trap can fail open or fail closed. Traps that have failed open result in the loss of steam and energy. Water is also lost when condensate is not returned. Heating costs will rise and boiler plant costs rise significantly. When a trap fails closed, heating capacity is lost and damage can be done to the steam heating equipment.

**Compressed Air & Gas**

Regardless of the type of gas or low-pressure variables we are able to detect leaks in compressed air/gas systems. In some cases, leaks have been detected in systems pressurized to less than 3 psi (0,2 bar).

**Non-pressurized systems**

In the scan mode with the transmitter, we can detect and pinpoint leaks in non-pressurized vessels, cavities, pipes, housings, hoses, rooms, heat exchangers, vehicle and equipment cabs, ship hulls and galleys, airplane cabins, train cars, etc.

**Bearings**

Some of the most critical components in any industrial setting are bearings. Bearings are mechanical components used to reduce friction and provide load support for rotary or linear equipment. A single bearing failure can cause hours of downtime, including the identification and replacement of the failed component.

**Vacuum systems**

Like any air or gas system, we are able to detect leaks in vacuum systems regardless of the type of gas. Our equipment’s high sensitivity, selectivity, and signal-to-noise ratio helps to distinguish leaks in the harshest environments. In many cases, leaks can be detected as low as 20 Torr (12 mbar).

**Gearboxes**

Teeth deformation and wear depend upon the type of sliding contact associated with the various types of gear sets. The operation of different types of gears emits a wide spectrum of airborne and structure-borne ultrasonic vibrations. Ultrasonic vibrations are the evidences of the operational conditions of the gears, as well as the rest of the transmission. The spectrum of ultrasound vibrations depends upon many design and operational features of the gear drive.