



# ULTRASONIC INSPECTIONS

## Accurate Air or Gas Leak Locating and Mapping



### Benefits Quick Look

Optimizes Process Reliability

Locates Energy Losses

Reduces Air System Load

Effective in Diagnosing Repairs

Reduces Fire Hazard

Potential Reductions in Insurance Premiums

Ultrasound leak detection covers a wide range of leaks: pressure or vacuum and any gas. Our state of the art ultrasound equipment detects turbulent flow produced as the fluid (liquid or gas) moves from the high-pressure side to the low-pressure side of a leak. An Ultrasound Leak Inspection is especially beneficial in areas where there is a saturation of gases or where a wide variety of gases, pressurized vessels and vacuum processes. Ultrasound leak detection is used in many facilities for safety, environmental, energy or quality assurance programs.

Efficiency can be measured or defined in many ways. Regardless of your definition, non-efficient systems and processes can seriously affect the economics of any facility. Efficiency can be expressed as the ratio of input power to output power. It is an indicator of the "tightness" of the plant. Input power includes all the power consumed to reach a level of output. Therefore, the higher the input power for the same level of output, the lower the efficiency, and the operational profits.

The best way to minimize input power is to avoid wasting it. One of the main culprits of energy waste are compressed air leaks. Air leaks are very common, and can easily go undetected. In order to stop the waste, leaks must be found, mapped, reported and fixed.

Understanding the importance of locating and repairing air leaks and the incredible costs that can be associated with such waste is crucial to every industrial operation. 10's of thousands of dollars, are being wasted in energy every year in many industrial facilities. Estimates given by the US Department of Energy show that in plants with no routine leakage programs, roughly 30% of compressed air is being lost. Not only do leaks add to everyday operating costs, but will also ultimately affect the life of your compressor(s). An ultrasonic inspection is the most effective way to locate these costly leaks.

For many years ultrasonic leak detection techniques have been used in plant maintenance programs to reduce energy costs, and increase equipment reliability. Compressed air leak detection has proved to be one of the most popular and simple ways of saving energy and improving process reliability.

