

ULTRASOUND INSPECTION

A Proven Technology in Predictive Maintenance





ESCO Group is a versatile company that provides electrical construction, electrical engineering, plant automation, arc flash incident energy analysis, and electrical safety training services to a wide variety of commercial and industrial clients, primarily within the food & beverage, manufacturing, agriculture, and municipal markets. By empowering people, providing exceptional services, and delivering on promises, ESCO is known for responsible and reliable support and excellent, custom-made solutions.

When you work with ESCO, you are working with a company that forms strong relationships with our clients which gives us in-depth knowledge of your systems, what your needs are, and how your process operates. It's a partnership approach, meaning we partner with our clients and become an integral part of their team.

AIRBORNE ULTRASOUND can identify leaks in compressed air systems.

In electrical systems it can detect faults such as corona, tracking, and arcing. Ultrasound is a proven technology in a predictive maintenance program saving thousands of dollars and hours of productivity.

COMPRESSED AIR SYSTEMS

According to the Department of Energy, compressed air leaks are a significant source of wasted energy often wasting as much as 20 to 30% of the compressors output. Compressed air leaks can contribute to:

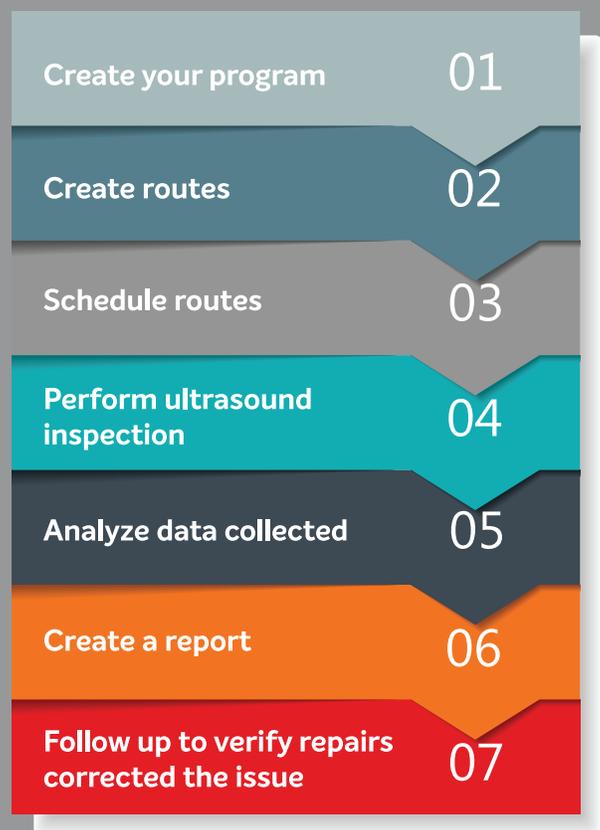
- Fluctuating system pressure
- Excess compressor capacity, resulting in higher than necessary cost
- Decreased service life and increased maintenance due to unnecessary cycling and increased run time

Some of the most common areas for leaks to occur are couplings, hoses, tubes, fittings, pipe joints, quick disconnects, filters, valves, flanges, packings, thread sealants, and point-of-use devices.



ESCO'S ULTRASOUND PROGRAM STEPS

There are many important steps in a complete ultrasound program.



Let ESCO Power & Safety assist you in deciding which steps are a good fit for your facility. Once we identify the appropriate steps, we can create your custom SPO's.

ULTRASOUND FOR ELECTRICAL SYSTEMS

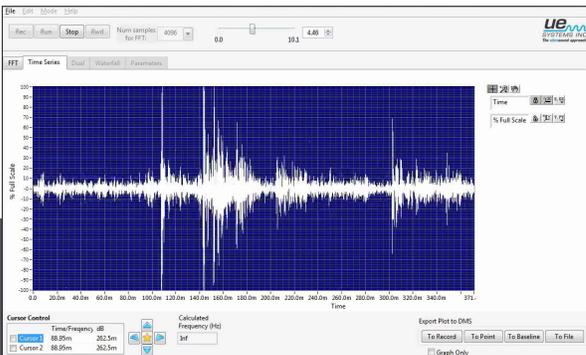
A common problem in electrical systems is corona, or partial discharge leading to tracking or arcing. These are dangerous situations leading to “flashover”. Ultrasound is used to detect these problems before they become major issues. Typical failure points of corona are:

- Lightning arrestors
- Faulty bushings
- Contaminated or damaged insulation
- Cable terminations
- Improper installations
- Points where components are secured

Typical electrical components that are inspected with ultrasound are switchgear, load interrupter switches, breakers, and transformers. Motor control centers (MCC’s) and terminal connection sources.



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SYSTEMS INC
The ultrasound approach



ULTRASOUND INSPECTION CAN SAVE YOU MONEY

SAVING YOU MONEY

An Ultrasound Inspection can result in significant financial savings by:

- Reducing the risk of electrical fires
- Reducing the risk of unplanned downtime
- Identifying priorities for planned maintenance resulting in your spending going where needed most
- Reduces downtime
- Reduces risk of equipment failure
- Increases safety
- Improves insurability
- Saves money



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