

# Leak Inspection Process

## FIND AND FIX LEAKS WITH AIRBORNE ULTRASOUND



### 1 Pre-Survey Checks



#### Safety

Review safety policies & PPE requirements.



#### Plan Survey Route

Review system layout & plan inspection route.



#### Equipment Checks

Ensure equipment is functioning properly & adheres to safety policies & PPE requirements.



#### Preliminary Inspection

Perform a quick scan of the area to locate pipes, valves, fitting, & other components.

### 2 Start Survey



#### Begin the Inspection

Move through the inspection area scanning your compressed air system & adjust instrument sensitivity as needed.



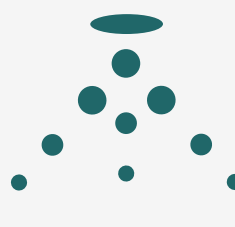
#### Inspection Technique

The compressed air system should be scanned both up & down & side to side.



#### Focus on Common Leak Spots

1. Connections on lines
2. Quick couplers
3. Filters
4. Pneumatic cylinders
5. Pressure regulators
6. Air dryers
7. Isolation valves
8. Control valves
9. Automatic drain traps
10. Air separators



#### Locate Leaks

By now, you've probably located some leaks. They must now be documented.

### 3 Pinpoint and Tag



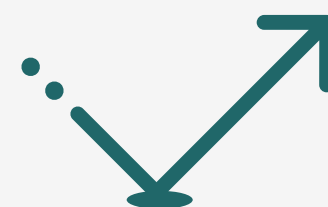
#### Pinpoint the Exact Location

Reduce the sensitivity of your instrument as you approach the leak source to find its origin.



#### Shielding Techniques

Control background noise (parasitic ultrasound) using shielding techniques to get a clean and accurate signal.



#### Manage Reflections

Verify that the source of the signal is not a reflection from another ultrasound source.



#### Tag and Document

After verifying a leak, it must be tagged with a smartphone camera/ app, acoustic imager, leak tag, or pipe cleaner.

### 4 Repair and Document



#### Safety

Isolate the system and lock it out. Then bleed off any excess pressure to begin repairs.



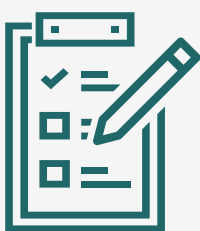
#### Perform Repairs

Repair the leak.



#### Resurvey

Ensure the leak was properly repaired and no other has formed by following the above-mentioned steps.



#### Report and Document

Create a report to document findings, repairs, and cost savings estimation. Celebrate your wins.