

Company Name: _____

Maintenance Forms & Logs

Date: _____

Log ID: _____

Version: 1.0

Steam Trap Acoustic Inspection Failure Log Sheet

1.0 Form Objective & Asset Scope

This log sheet is used to document acoustic inspections of steam traps in process and facility steam distribution systems. The objective is to identify failed or failing traps (blow-through, cold, or plugged) that waste energy, reduce system efficiency, and risk water hammer damage. Regular acoustic inspection is critical for steam trap reliability and energy conservation programs.

2.0 Administrative & Asset Details

Date: _____

Technician Name: _____

Steam Trap ID / Asset Tag: _____

Trap Type (e.g., Float & Thermostatic, Thermodynamic, Inverted Bucket): _____

Location / Line Number: _____

System Pressure (psig): _____

3.0 Inspection / Parameter Checklist

- ☐ Pass ☐ Fail - Visually inspect trap body and connections for leaks, corrosion, or physical damage.
- ☐ Pass ☐ Fail - Record acoustic reading (ultrasonic decibel level) at trap outlet using calibrated sensor.
- ☐ Pass ☐ Fail - Compare acoustic reading to baseline or manufacturer reference for normal operation.
- ☐ Pass ☐ Fail - Assess trap cycling frequency (if applicable) via acoustic pattern analysis.
- ☐ Pass ☐ Fail - Check upstream strainer for blockage (if accessible and safe to do so).
- ☐ Pass ☐ Fail - Verify trap discharge temperature using contact thermometer or IR gun.
- ☐ Pass ☐ Fail - Inspect downstream piping for signs of condensate backup or steam leakage.
- ☐ Pass ☐ Fail - Document ambient conditions (temperature, humidity) that may affect readings.
- ☐ Pass ☐ Fail - Record trap operating status: Normal, Blow-Through, Cold/Plugged, or Leaking.
- ☐ Pass ☐ Fail - Tag trap with inspection date and status indicator (e.g., green/yellow/red tag).

4.0 Deficiencies & Work Order Generation

Issue Description (e.g., blow-through, cold trap, leaking, damaged body):

Acoustic Reading (dB) and Status Code: _____

Recommended Corrective Action (e.g., replace trap, clean strainer, repair piping):

Parts Required (e.g., trap assembly, gaskets, strainer screen): _____

Work Order Number (if generated immediately): _____

Priority Level (Emergency / High / Medium / Low): _____

5.0 Sign-off & Return to Operations

Maintenance Technician Signature: _____ Date: _____

Reliability Manager Review: _____ Date: _____

Operations Supervisor Acknowledgment: _____ Date: _____

Regulatory Disclaimer: This maintenance log is a generic template. The end-user assumes all liability for validating all inspection parameters, PM frequencies, and tolerances against specific OEM machinery manuals before active shop floor deployment.