

Standard Leakage Inspection Procedures

On working and transitionally out-of-operation, stationary refrigeration equipment $\geq 3\text{kg HFC}$

STEP 1

Check System Logbook

Inspection of records to determine previous issues & reports. This will provide inspector with relevant information on any repeating issues or problem areas to pay special attention to.

STEP 2



Indirect Leakage Control Procedure, Visual & Manual Inspection

Inspect for the following leak risk issues:

- Abnormal noises or vibration
- Corrosion or oil leaks
- Component or material damage
- Check refrigerant charge visual aids such as sight glasses or level indicators
- Check electrical current under full load conditions where appropriate

Inspect the following components:

- Safety devices
- Pressure switches
- Gauge and sensor connections

Leakages may be identified by visual checking and/or using proprietary bubble solutions and/or soapsuds.

STEP 3

Direct Leakage Inspection Procedure

Leaks may be identified by using the following methods:

- Electronic or Ultrasonic test equipment
- UV detection fluid or suitable dye

The following areas should be systematically inspected:

- Joints
- Valves including stems
- Seals
- Parts of system subject to vibration
- Seals on replaceable driers and filters
- Connections to safety or operational devices

Where these measures have identified a leakage it may be necessary to perform a pump-down or recovery prior repairing and re-commissioning.

Are Leaks Present or Suspected?

YES



NO



STEP 4

Repair Leaks

Repair leaks, leak test with dry Nitrogen or other suitable pressure testing gas, vacuum-tightness and recharge, leakage-test, re-commissioning

Go to STEP 5

STEP 5

Update Logbook

On completion of these steps the logbook must be filled in with the following details:

- Inspector / Operatives Name / Certification ID Nr.
- Their Company Name / Certification ID Nr.
- Any Repairs carried out
- Details of type and weight of any refrigerants used or recovered for disposal / recycling in the last year/from the date of last inspections.

Return Inspection Visit

Where Step 4 was necessary an additional inspection visit will be required within one month to repeat from Step 1. Particular attention should be given to areas where leaks were found or adjacent to these areas in case stress was applied during the repair.

