

Aerosol Leak and Pressure Tester

100 % In-Line Machine for Non-Invasive, Non-Destructive Integrity Inspection for empty aerosol cans.



HIGHLIGHTS



- Alternative test to water bath
- Zero downtime
- Total body integrity
- Zero alteration of container features
- High machine adaptability & stability

TECHNICAL FEATURES



Container Application: Empty Aerosol Can

Container Dimensions: From diameter 45 to 65 mm

Speed: From 150 to 800 cpm

Technology: Pressure and Vacuum leak testing

Inspection Features: Test is performed by applying pressure inside the can and vacuum on the outside into an airtight testing group surrounding the can. The test objective is to detect container leakages by measuring the target pressure level as well as the pressure change over test time.

Inspection Capabilities: Microleaks detection

ADDITIONAL BENEFITS



- **ESA (Enhanced Sensitivity Algorithm)** improves machine sensitivity to meet regulatory standards maintaining the required line output and stability
- **Easy Bypass** and reduced downtime in case of interference thanks to safety clutches present in each testing chamber shaft and star wheels
- **MES** (Manufacturing Execution System connection) allows remote machine data exchange & download
- **Statistical Process Control** reduces deviations for a better yield control
- **Quick format change:** automatic height adjustment
- **Special clamp design** avoids marking risk

TECHNOLOGY



Rotary machine (according to **Patent ID 1225063** (13-9-1988)) features testing chambers with a Bottom magnetic Plate that, by means of mechanical cam, loads the can to the top part, where a gripper group allows for the sealing of the can cupole and pressure application.

Meanwhile the surrounding testing chamber is closed and vacuum is applied.

The monitoring of the vacuum level allows to identify microleaks and rejecting the faulty cans.

Principle of operation according to FDA Consensus standard: American Standard Testing Method "**ASTM F2338**" – "Nondestructive Detection of Leaks in Packages".

QUALITY ASSURANCE



- **Higher sensitivity** achieved measuring a Vacuum decay (Delta) instead of the Aerosol Can internal pressure
- Test method is based on **FEA guidelines** for alternative Hot Water Bath Testing
- It permits compliance with DOT requirements (**49 CFR 173.306**): Empty Aerosol Cans detection higher than 3.3×10^{-2} mbar L/s
- **Calibrated leakers** are in place for validation and verification to check for the minimum leakage rate