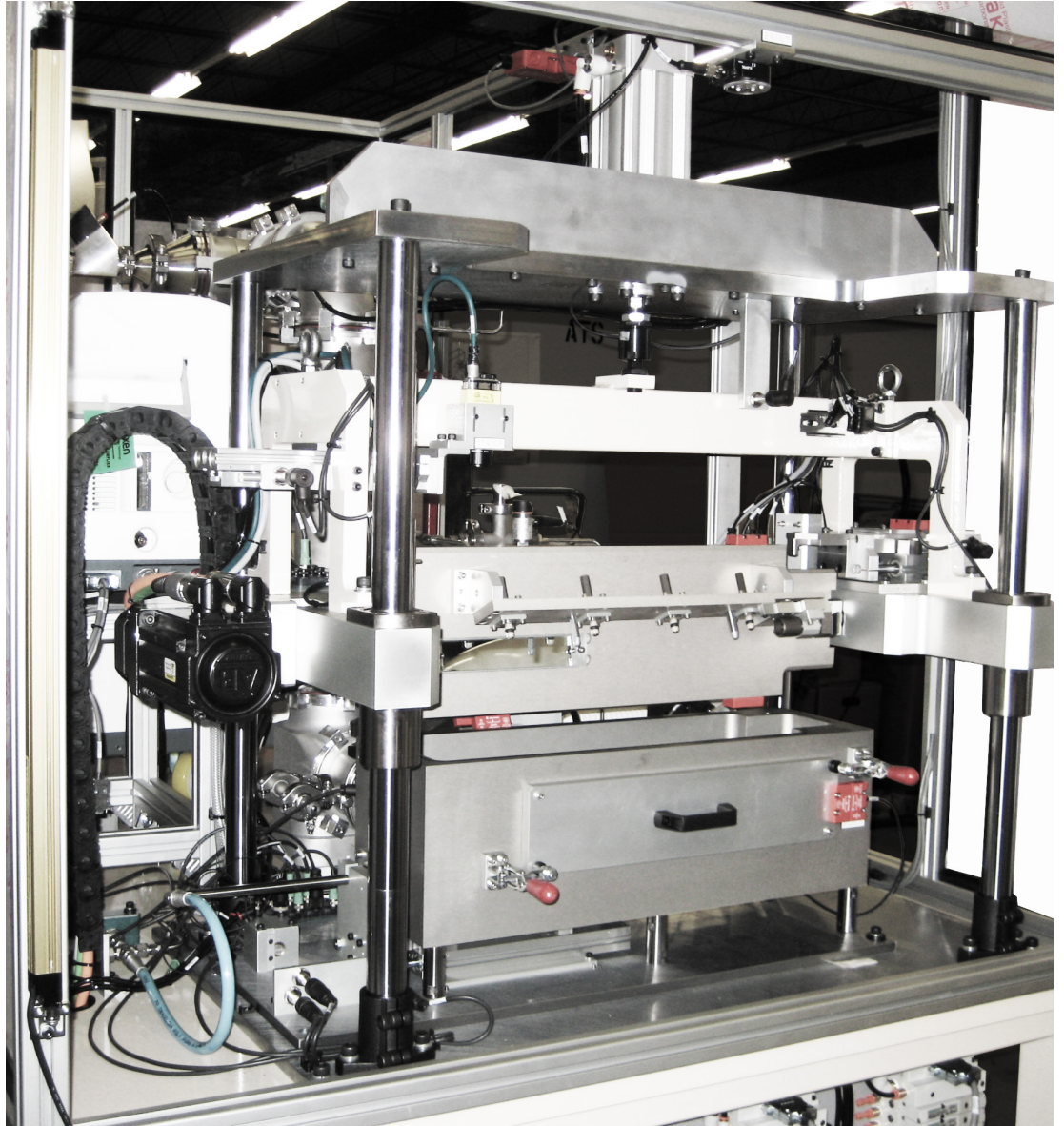


# Automation Product

## Helium Leak Testing



# Helium Leak Testing

## Description

Helium Leak Testers are used to measure fine leaks.

Helium is utilized as the test medium along with a detector to sense any presence of the gas. Presence of the gas in a known concentration equates to a leak value.

A concentration of helium is typically filled in the cavity of the Device Under Test (DUT). The amount of helium which escapes through the DUT is sensed by means of a helium detector.

The following techniques are deployed for cycle time improvement:

- Dual stage vacuum to evacuate the Device Under Test and the test chamber prior to filling with Helium resulting in improved cycle times.
- Measurement of pressure differential between the helium pressurized Device Under Test and the test chamber under vacuum.

## Capabilities

- High test pressure:
- 10 MPa (1450 psi)
- Leak Rate: 0.01 SCCM
- Cycle Time: part dependent:
- 3 - 10 seconds
- Leak detection
- Recover and reuse Helium

## Tests Performed

- **Gross Leak Test**
- **Fine Leak Test**

## Leak Detection Method

- **Use of Want**
- **Check detection on overall device under test for reduced cycle time**

Contact ATS directly for application review or for product specific applications beyond the scope of this document.



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