

Leak ID Station



Ideal for Leak Testing;

- Prototype Parts
- Secondary tests of production parts
- Production for lower volumes

Available Options

- Low Pressure <20psi
- High Pressure <750psi
- High Conductance
- Dual Gas

Leak ID Station

The integrated Leak Identification Station was designed to test your proto-type parts and/or secondary tests of failed parts on your production line and/or any lower volume leak tests. The Leak Identification Station is a fully perform a vacuum decay leak test, followed by a Helium backfill and fully integrated with the VIC MD-490S fully automatic helium leak detector specifically designed for sniffing applications. Leak Identification Station Includes the VIC Smart Charge – III along with an MD-490S.

The Smart Charge III offers fully automatic, custom configurable evacuation and gas backfill with built-in gross leak test that may be used to pre-charge products under test with gas for leak detection or for any gas charging application that requires evacuation and subsequent pressurization of a test product.

APPLICATIONS

Air Conditioning & Refrigeration Systems

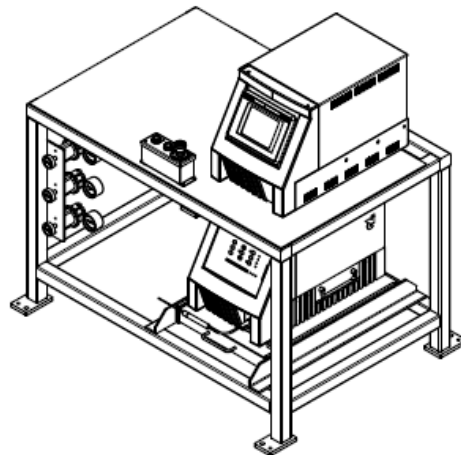
- Coils
- Hoses
- Evaporators & Condensers
- Compressors

Automotive Components

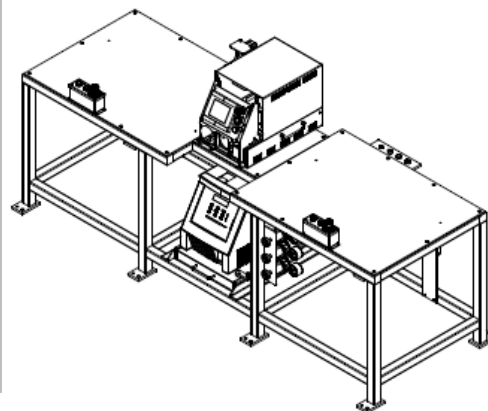
- Radiators
- Air conditioning components
- Fuel Tanks
- Fuel Rails injection systems
- Air bags
- Heat exchangers
- Heater cores
- Pressure transducers
- Headlights
- Wheels
- Hoses

Appliances

- Fire Extinguishers
- Gas Meters
- Heat Pumps



Single Station (Optional)



Dual Station (Optional)

BENEFITS

- High Availability Turnkey Solution
- Rapid response time (< 0.5 seconds)
- Fully interactive system diagnostics
- Menu-driven 6" LCD multi-lingual display
- Cumulative leak rate rejection capability
- Leak site identification
- Helium background suppression
- User programmable test parameters
- Recipes include up to 50 leak locations with user configurable dwell time at each site
- End of cycle and Test complete audio alarm
- Nitrogen Proof with backfill option
- Helium Recovery option
- Dual filament stainless spectrometer tube
- Maintenance free dry pump
- Five year warranty on major system components

Product Specifications

Performance

Sensitivity: Smallest detectable helium leak rate 5×10^{-8} Atm-cc/second helium (atmospheric sniffer mode).

Response Time: Approximately 0.5 seconds.

Leak Rate Range: 10^{-3} ~ 10^{-8} Atm-cc/second direct reading of helium leak rate (compensated for atmospheric sampling).

Startup Time: Less than 3 minutes; one-button automatic operation.

The Smart Charge III base unit performs evacuation (25" Hg), vacuum decay test and tracer gas backfill to 300 psig. Units can be configured to perform evacuation to lower vacuum levels, proof test with pressure decay, high pressure operation (to 750 psig), gas recovery, and communication interface.

Electrical

Console: Microprocessor-based electronics incorporating 40-character alphanumeric prompting display; fully automatic operation including startup, shutdown, leak rate ranging, automatic zero, and diagnostics.

Operating and runtime parameters, 40-segment leak rate indicator and operator function buttons

Mass Spectrometer

Miniaturized 90° deflection, fixed magnet design; all stainless steel construction; NW-40 flange for high vacuum connection; utilizes two non-burnout coated filaments.

Vacuum System

Pumps: Dry (oil-free) built-in diaphragm fore pump and 70-liter/second air-cooled molecular drag pump.

Inlet System: Inter-stage design incorporating integral mass separator high flow atmospheric inlet; standard sniffer probe hose length 10-feet; other lengths available.

Calibrated Leak: 150cc high pressure cylinder with low volume stainless steel leak element traceable to N.I.S.T. with calibration certificate supplied; easily removable for recalibration.

Pressure Measurement: Probe blocked sensor (10⁻³ Torr); turbopump speed characteristics for high vacuum (10⁻⁶ Torr). Seamless tubing with compression fitting interconnects. Helium leak tested to 1.0×10^{-6} atm-cc/sec@600 psig.

Product Evacuation Pump: Air Driven Venturi Pump Providing ultimate vacuum level 25.5" Hg.

Electronics: Microprocessor-based programmable logic controller.

Power: 120 Volts AC, 50/60 Hz, 6.5 Amps

Dimensions: 13-9/16"(344mm) W x 15-9/16"(395mm) H x 24-5/16"(618mm) D.

Utility Fittings: 1/4" NPT female for Process 1 & 2, Part Vent, Helium Recovery, Shop Air, Nitrogen and Helium.
1/2" NPT female for Part Evacuation.

Table: The Leak ID Station comes with an optional single or dual bench (quoted separately).

TECHNICAL SUPPORT

24 Hour Service Hotline 1.800.221.2440

service@vicleakdetection.com