

SmartCharge 5

MULTIPURPOSE SYSTEM

TO PERFORM A STRUCTURAL LEAK AND PRESSURE DECAY TEST

Smart Charge 5 A multipurpose system designed to first perform a structural leak and pressure decay test using (Air or Nitrogen). The part is then evacuated followed by helium backfill. The unit includes the capability to dynamically mix Helium & N2 using a user defined and recipe selectable helium % as well as N2 backfill at the completion of the test. Ideal for use in multi-site leak tests, such as Clam Shell applications.

BENEFITS

- User-friendly display
- Portable
- Digital part pressure and leak rate displayed at-a-glance
- Password Protection prevents unauthorized access for your prod
- Flexibility for up to 10 recipes
- Easy charging for your parts
- Helium recovery enabled



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Performance

- 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.

Options

- Analog
- MD490S
- User I/O
- Printer
- Side mount configuration
- Low pressure feature, 0-20 psig
- Nitrogen charge up to 300 psig or 750 psig
- Barcode scanner feature

Standard Capabilities

- Structural Proof test using Air or Nitrogen. (New)
- Maximum fill, pressures are up to 300psig.
- Helium/N₂ Mixing capable
- N₂ Backfill capable
- Ability to store up to 10-part recipes, Dynamic individual leak test with Accumulative leak test
- Touch screen 6" color (HMI) for full system configuration/diagnostics display
- 16-bit analog input resolution on the pressure transducer
- System includes all necessary controls, gauging, valving and
- 3CFM oilless product evacuation pump
- Allen Bradley MicroLogix 1400 PLC for all control, set- points, and lockout password functions EthernetPort
- Data storage and retrieval from front mounted USB port
- Scanner (barcode) Support (Scanner Sold Separately)
- Zebra Label Printer Support (Label Printer Sold Separately)

Main Features

- Recipes to include up to 10 leak locations, with user configurable dwell at each site
- Banner scanner input
- Serial printer output
- Data logging over Ethernet
- Graphical user interface with color touch screen
- 2 inputs; 2 outputs available for external use, such as for future clamping, etc.
- Multi-level password protection
- Built-in gross leak test eliminates tracer
- Cumulative leak rate rejection capability that will distinguish if each individual leak site is an accept or reject
- Gas recovery, gas mixing and gas boosting systems available

Technical Specifications

Power	120 for Process 1 & 2, Part Vent, Helium Recovery, Shop Air, Nitrogen and Helium Volts AC, 50/60 Hz, 6.5 Amps
Dimensions	Dimensions (in mm) W344*H395*D618
Utility Fittings	1/4" NPT female 1/2" NPT female for Part Evacuation
Pressure Transducer	Resolution of 0.01 psi in vacuum mode, or in pressure mode. Accuracy of ± 0.25%.
Valving	Fast acting pull type solenoid featuring epoxy encapsulated design
Manifolding	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
Gauging	Digital part pressure and leak rate displayed on operator interface

Main Monitoring Display

