

Solution flow and leak tester

The TME Solution is a high resolution leak and flow tester featuring one to four channel concurrent or multiple channel sequential leak and flow testing.

Sensitive, repeatable and reliable, the Solution can perform ten separate test types on product, including burst, occlusion, vacuum and pressure decay, crack, and differential pressure or vacuum.

Touch screen menu-driven operation allows the operator to control the test parameters, examine statistical analysis of results or download data files easily.

The Solution, in conjunction with custom fixtures, accessories and engineering support, provides a complete turnkey solution to your leak and flow testing problems.

Leak testing with the Solution is simply pressure sensing, with its high performance resulting from our proprietary sensing technology and low internal volume design. The system operates by connecting the tested product to the front panel test port. Internal valves allow air (or another gas) to pressurize the part and connect the part to the sensing transducer. Pressure changes as low as .0001 psi are detected from leaks in the tested part. The preset program compares the actual pressure change, then signals the operator to "Accept" or "Reject" the part.

Vacuum decay testing functions similarly to pressure decay tests; however, vacuum tests are limited to less than one atmosphere test pressure and are usually performed where specifications of the test part demand this pressure differential.

Flow testing uses a precision mass flow sensor to make a direct measurement of air flow through the tested part. A direct flow reading means no separate pressure measurements or special calculations are made in the instrument.

Applications

Industrial applications

pumps, valves, heating/AC coils, tubing, toner cartridges, film canisters, hoses, home appliances, food/beverage containers

Medical devices

catheters, blood devices, drainage bags, bottles, solution vials, implantable devices, infusion sets, package integrity testing

Automotive components

rakes, cooling systems, fuel systems, transmissions, power steering



Features

- Non destructive, clean, dry tests with repeatable, quantitative results - you can store up to 100 different tests or test parameters (stores 5000 test results)
- Up to four channel concurrent leak and flow testing multiple channel sequential leak and flow testing
- Real time statistical analysis and quality control charts
- NIST traceable calibration services
- CRF part 11 data protection
- Adjust set-up times (fill, settle, test)
- Set reject limits to detect fine or gross leaks
- Dual switching capability for operator productivity
- Pressure rise measurement
- Tube or hole sizing
- RS-232 computer connection for data collection and remote parameter control
- Audible and visual reject alarm
- Easy to use touch screen

Technical specifications

Tests

Test channels	1,2,3 or 4 concurrent or sequential
Test mode	pressure or vacuum, single or differential
Single tests	leak, flow
Dual test	leak/flow, flow/leak

Test units

Psi, inches of H₂O, kPa, mbar, more

Memory

Datalog memory saves up to 5000 test results
Program memory saves up to 100 test programs

Statistics display

Mean and range control charts with UCL & LCL, histogram, standard deviation, averages, min/max

Port

Two way up & downloadable programs

Calibration

NIST traceable

Timer ranges

0.1 to 1000 sec

Pressure range

0.5-5, 0.5-15, 1-50, 2-100, 5-250 psig, vacuum 0.2-28 inHg

Resolution

Decay max .0001 psi (.01 mbar/sec)

Flow range

250-5000 sccm standard-10 sccm to 75 lpm available

Flow resolution

1 sccm standard-0.01 sccm to 1.5 lpm available

Power supply

220 V, 50 Hz, 150 W

Display

Backlit blue LCD, 40 character x 16 line
Alphanumeric/graphic display

Physical specifications

Dimensions

21.5 x 40.5 x 25.5 cm (W x D x H)

Net weight

14 kg

Options

Restraining plate fixtures

for leak testing flexible pouches have semi-porous surfaces to stabilize expansion during pressurization without blocking any holes in the surface material.

LA-05 filter drying assembly

dries and removes water, oil and particulate matter from pressurizing air. The TME Solution requires clean, instrument quality air in order to maintain the warranty on the instrument.

Radial sealing fixture

is a pneumatically operated clamp that provides either a sealed leak tight access to a tubular product or a sealed leak tight dead end to the produce during pressure decay leak testing. The radial sealing fixture can be configured to diameters from approximately 0.5 mm to 150 mm.