Pressure decay leak testing of brake caliper assemblies

Problem/Goal:
Test brake housings for leaks
A manufacturer of brake caliper assemblies needed to perform a high pressure leak test on two configurations of the assemblies.

Resolution:
The leak test system provided consists of the TME Solution leak tester (high pressure model) and a test fixture adjustable to accommodate two configurations of brake caliper assemblies.

The test fixture is designed to restrain the caliper actuation cylinders when pressurized. The caliper is connected to the TME Solution test instrument via a manually actuated seal connector. The test fixture accommodates other configurations of brake caliper assembly by removing and replacing the central fixture body.

When the operator attaches the instrument’s air input line to the caliper and presses the "Start" button, the TME Solution tester will automatically perform a pressure decay leak test on the part. A decay of pressure beyond the customer’s acceptable test limit indicates a failed leak test actuating a red indicator and available alarm.

Fixtures:
TME is known for its ability to design, manufacture special instrument and fixture solutions to solve specific testing problems.

Automotive products present a variety of testing, sealing and handling requirements including marking, locking and multiple test procedures.
TM Electronics offers two instrument choices: There are subtle differences between the two instruments. Your TME account manager will recommend which will best fit your testing needs.

**TME Solution:**
The TME Solution has proven throughout the years to be a most reliable long lasting custom and standard leak test instrument.

Sensitive, repeatable, easily maintainable and reliable, the TME Solution can perform a variety of test types on product, including burst, occlusion, vacuum and pressure decay, crack, and differential pressure or vacuum.

Its touch screen menu driven operation allows the operator to control the test parameters, examine statistical analysis of results and download files easily.

**TME Worker Integra:**
A bench-top, high resolution leak test instrument with small footprint and user-friendly ease of operation.

The icon based touchscreen display provides easy, clear navigation through the wide variety of data handling and review screen.

Pressure changes as low as 0.0001 psi are detected from leaks in test parts.

For more information contact TME today.