

Helium-in-Air Leakage Testing

Advanced technologies with testing down to 10^{-5} mbar l/s

TCO-optimized, precise leak test, in which temperature influences do not play a role

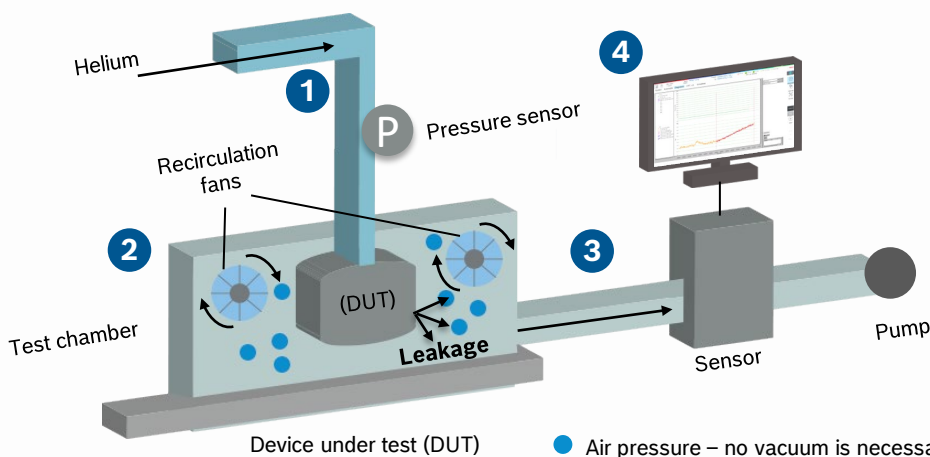
With our helium-in-air test method we offer you a reliable and precise leak test without a vacuum chamber.

Thanks to its ingenious layout, the test bench can be used for optimized and fast testing of a wide variety of products - including materials and test object features that are not compatible with vacuum technology, such as foams, oily and/or damp surfaces as well as battery cells. Once you have measured a leakage on the entire volume, the integrated sniffer probe helps you locate it precisely.

100% Leakage Testing of various products

For example:

- ▶ E-Machines and eAxles
- ▶ Combustion engine components
- ▶ Battery modules and packs
- ▶ Heat pumps, hydraulic pumps, gasoline pumps...
- ▶ Vehicle Control Units
- ▶ Fuel Cell components and systems



- 1 Evacuated DUT is filled with helium. Test pressure is monitored by a pressure sensor.
- 2 Fans distribute helium homogeneously in test chamber.
- 3 Continuous sampling from test chamber and forwarding to sensor.
- 4 Software calculates leakage rate and controls test process.

Helium in Air Leakage Testing Portfolio

Focus Technology

ATMO's Helium-in-Air Leakage Testing

- ▶ Testing down to 10^{-4} ... 10^{-5} mbar·l/s ($c_g/c_{gk} \geq 1.33$)
- ▶ No vacuum test chamber needed
- ▶ Test pressure up to 6 bar rel. (higher pressure on request)
- ▶ Gross leak detection at test item evacuation
- ▶ Temperature-independent test
- ▶ Independent of humidity and/or oil on test item surfaces

Products

- ▶ Ready to test & calibrated setup
- ▶ Safety/test chamber of approx. 100 l
- ▶ Extensive software for leakage testing
- ▶ Easily parametrizable & automated test processes
- ▶ Visual user guidance & sophisticated data evaluation routines

Options

- ▶ Enhanced training in Leakage Testing
- ▶ Custom-tailored test chamber & test item interface
- ▶ Reference leak
- ▶ MES data connection



Services

From process development to series test benches – we are your reliable partner in every phase of the product life cycle.

- ▶ Consulting
- ▶ Basic leakage training
- ▶ Feasibility studies
- ▶ Process development
- ▶ Calibration
- ▶ Rent a tester, rent a lab



Your Contact

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More about
“Automatic leakage testing in
series production”