Leak Test Devices







Over 20 years of experience and a strong industrial asset A winning mix for your production process.

The 3 pillars of ID-Leak

Stable foundation

ID-Leak is the result of the union between the consolidated experience of the key figures and the well-rooted industrial asset of BERMA Macchine: the specialized knowledge and the experience accumulated in the most varied applications, together with the skills of the technical staff, the use of advanced software and dedicated equipment for product industrialization, represent the founding know-how of ID-Leak.

In addition, thanks to the connection with specialized partner companies, ID-Leak can access high-level skills in the development and customization of the software part for industrial process requiring leak test instruments.

Shared skills

To give you the best solutions for your production process, ID-leak puts the sharing of skills first: The Technical Knowledge to ensure the best implementation and continuous development of leak test equipment, as well as the Application Experience to find the most suitable configuration and maximize the accuracy of the service, are shared every day by all our staff, thus featuring top transversal skills.

Full integration

This leads to the highest integration between ID-Leak and BERMA: industrial marking machines and leak test tools can in fact be configured natively in integrated solutions for the production process, to ensure complete reliability and traceability of your industrial product.

"We want to provide innovative solutions for industrial testing, which meet the production needs of our customers, helping them to place safe and reliable products on the market over time."

Automotive / E-Mobility



Process productivity and user safety

The complexity of the automotive production process requires the maximum reliability of each component. The accuracy of the testing systems creates the best conditions for vehicle reliability and safety for users.

Engine, brake system, electrical system, cooling, transmission, lighting, etc.

Aerospace





Maximum safety and reliability of components

The use in extreme conditions, combined with the very high-risk profile in case of anomalies, makes the reliability of each component of the aircraft a very critical aspect. Tests play an essential role in risk prevention.

Power supply and lubrication systems, electrical and pneumatic circuitry, drives, generators, alternators, injectors, valves, etc.

Medical / Pharmaceutical



Component safety for patient health.

The seal test on disposable components for outpatient, hospital and surgical uses guarantees the correct integrity of the finished product and safety towards the end customer.

Plastic bags for liquids, syringes, inhalers, catheters, filters, by-pass valves, etc

Hydraulics / Pneumatics



Structural resistance in severe conditions of use

The intense and prolonged effort to which the hydraulic and pneumatic components of machinery and vehicles are subjected requires maximum structural strength.

Systematic testing of parts and components avoids the introduction of defective elements into the process.

process.
Fittings, hydraulic and pneumatic cylinders, solenoid valves and valves, guns, filters, etc.

Household Appliances Professional Equipment



Operation and Reliability

The quality of each component contributes to the proper functioning and longevity of the equipment for home and professional use, and the testing phase is a decisive element in maintaining the required standards.

Hobs, home cleaning systems, fabrics and dishes, air conditioners, refrigeration systems, pumps for liquids, boilers, etc.

Mechanical components





Constant and lasting performance

The lubrication system plays a decisive role in ensuring the reliability and durability of the gears and mechanical parts: verifying the absence of leaks ensures the hermetic seal against fluids even in conditions of high stress.

Gearmotors, axles, gearboxes, covers, casings, heat exchangers, etc.

SMARTLEAK – Leak Test Devices

Reliability, accuracy, ease of use and extensive connectivity

"SMARTLEAK" is a measuring instrument designed to perform leak tests with pressure decay measurement (D1, EN1779).

The 5 "resistive touchscreen display allows real-time viewing of the test progress and makes programming and use of the device simple and immediate.

The high measurement resolution allows you to test different types of parts, in various sectors, quickly, objectively and always traceable.

The possibility of interfacing external automations through digital I/O, ASCII protocols, fieldbus and barcode readers through the serial port as well as the Wi-Fi TCP/IP connectivity, make "SMARTLEAK" a complete, reliable and integrable tool in any production system 4.0.

FILLING STABILIZATION TEST PART OK LEAK LIMIT PART FAIL

TIME

LEAK TEST (Pressure Decay Measurement)

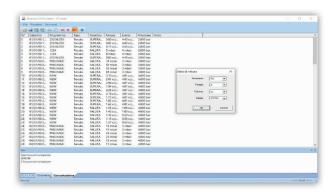


CALIBRATED LEAK



Indispensable accessory for the continuous verification of the instrument operation in compliance with what is required for the specific application by the company directives

RESULTS TRACEABILITY SOFTWARE



Tool that allows you to download and manage the results from the ID-Leak devices and export them in different formats (ex. Excel) to ensure a tests complete traceability.

SMARTLEAK - M

Mechanical pressure regulator device

For continuous tests at fixed pressure:

Extremely versatile and easy to use, it guarantees maximum precision in setting the testing pressure.

For passing tests:

To check for the absence of unwanted total or partial obstructions, it is possible to set the pressure to a certain threshold value, which in normal conditions must never be reached.

Typical application:

Testing on low volume pieces.



SMARTLEAK - E

Electronic pressure regulator device

For sequential tests at different pressure levels:

It allows to carry out a rapid pre-filling of the pieces to be tested, improving the test execution speed even on more voluminous objects.

Typical application:

Hydraulic pumps, gearmotors and bulky objects.



- 5 "resistive touchscreen graphic display (480 x 272 Pixels)
- Measurement process and obtained results graphic visualization
- 128 testing programs storage
- Internal memory for approximately 10,000 results
- Connection for calibrated leak
- USB, RS-232 and Wi-Fi (TCP / IP) connectivity
- Integrated ASCII and MODBUS-RTU protocols, Profinet with optional external gateway

Measuring range:

	SMARTLEAK -V	SMARTLEAK -2	SMARTLEAK -10
Full scale of measurement	up to -1000 mbar (*)	2000 mbar	10000 mbar
Accuracy	1,5% of the full scale – Accuracy = linearity + repeatability + hysteresis		
Resolution	1 Pa	1 Pa	10 Pa

(*) according to the characteristics of the connected vacuum generator



