

IS YOUR PACKAGE REALLY LEAK-TIGHT?

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Benefit from WITT's certified quality systems for leak detection of all types of packaging
Keyword: HACCP

LEAK-MASTER® EASY

Bubble-test leak detection



- 1 Perspex high-quality housing**
 - Transparent from all sides
 - Robust and easy to clean
- 2 Venturi injector**
 - No electrical connections
 - Operation with compressed air
- 3 Pressure regulator**
 - Setting of vacuum
- 4 Water level**
- 5 Water drain**
- 6 Lid adjustment**
 - Avoids injuries
- 7 Ball valve**
- 8 Pressure gauge**
 - Control of vacuum
- 9 Handle**
 - Simple open and closing

OPTIONAL

As EASY PLUS with electronic control. For perfect documentation as well as fast and standardised test processes – user independent and repeatable.

LEAK-MASTER® EASY features detection of even the smallest leaks without the need for trace gases. The principle is based on one of the oldest and most intuitive methods of leak detection: the bubble test in a water bath. The test package is placed in the chamber filled with water and pressed under water by means of a downholder. With the aid of compressed air and a venturi nozzle, a vacuum is generated in the air space above the water level. The package immersed in water inflates. Testing time takes just a few seconds. At the location of a leak air or filling gas escapes as a visible stream of bubbles. This is particularly important in order to identify at which point in the packaging process an error may have occurred, e. g. if there is a material defect or a sealing problem. Furthermore, the LEAK-MASTER® EASY can also be used for other applications: So you can also check vacuum packaging using a special set. If the packed products will be shipped by air freight, the LEAK-MASTER® EASY is recommended for altitude simulation test. For ease of checking the stability of a package, it can also be tested in the dry chamber. Furthermore, optional feature is the electronic control unit (model EASY PLUS), which accelerates and economises test sequences: via pre-set measuring programs, convenient data management and easy documentation of your measurement results.

› BENEFITS

- Simple and cost-effective
- Visual inspection enables localization of the leak
- Short testing period (< 30 sec.)
- For all flexible and rigid kinds of packs (food-, pharmaceutical-, industrial and other packages)
- No trace gas required in package
- No calibration required
- Simple rigidity test realisable in dry chamber
- Altitude simulation test (air freight)
- Easy to-use intuitive system – no special skills required
- Various chamber sizes available
- Easy installation and start-up
- Low maintenance
- Easy to clean perspex housing
- No vacuum pump necessary
- No electrical connections, operation using compressed air

› OPTIONAL

- Adapter for testing vacuum packaging
- Electronic control unit (PLUS), can also be retrofitted
- Calibrated gauge
- Vacuum stop valve

Localization of the leak – also suitable for vacuum packages



LEAK-MASTER® EASY by WITT – Bubble-test leak detection – ideal for locating the leak. Cost effective and easy.



› LEAK-MASTER® EASY SERIES

You have the choice: the LEAK-MASTER® EASY is available in 7 different chamber sizes. You are not sure which size you require? Just send us your packages and we identify the suitable version for your application.



LEAK-MASTER® PRO 2

Leak testing of packaging based on CO₂



1 User interface

- Touchscreen for intuitive operation
- No additionally trained personnel required

2 Wide range of connections on the rear of the device

- Ethernet interface for integration into the company network
- Convenient data management
- USB and RS232 connection e.g. for barcode readers for rapid user and product selection

3 Compact acrylic/stainless steel housing

- Small space requirement
- Dual safety through simultaneous visual inspection
- Optimal hygiene due to easy cleaning
- Robust and durable

4 Lid with gas-filled hinge spring

- Easy and safe product change

5 LED illumination

- Red or green illuminated chamber signals test result
- Intuitive operation

Leak testing with the LEAK-MASTER® PRO 2 is carried out with CO₂ as the tracer gas. A vacuum is generated in the measuring chamber. Up to 200 mbar absolute is possible. The pressure difference between the test item and the chamber lets protective gas containing CO₂ emerge from even the smallest leaks in the packaging. Highly sensitive sensors detect this gas. Even the smallest leaks from 10 microns upwards can be detected in a matter of seconds. The user obtains a high level of product safety and saves valuable time with every test. The complete test is fully automatic and therefore independent of the operator and particularly safe. In addition, the test is non-destructive and thus avoids unnecessary rejects.

The PRO 2 is operated via touchscreen and optionally via barcode reader. The integrated LED illumination is a visual and functional highlight. After completion of the inspection, the device lights up either red or green. Absolutely intuitive for the user.

The PRO 2 manages up to 1,200 products as well as names, passwords and barcodes of 60 users. The measurement data documentation is done with the help of special WITT software. All measurement results including date, time, product details and name of the tester can thus be digitally archived and additionally analysed, for example, via MS-Excel®. The PRO 2 can be integrated into your company network via the Ethernet interface.

ADVANTAGES

- Finds even the smallest leaks from 10 microns upwards
- Short testing time due to highly sensitive, ultra-fast CO₂ sensor
- Non-destructive testing avoids unnecessary rejects
- Intuitive operation with LED signal, no additionally trained personnel required
- User-independent and standardised
- Digital documentation for easy certification
- Small space requirement due to compact design
- No calibration required
- Durable and low maintenance
- Different chamber sizes

OPTIONAL

- Barcode reader

The LEAK-MASTER® PRO 2 from WITT – Leak testing of food packaging based on CO₂. Non-destructive, fast and accurate.

Non-destructive leak testing – highly accurate and fast



Measurement in progress



OK



LEAK

LEAK-MASTER® PRO

CO₂-based leak testing for large packages or cartons



LEAK-MASTER® MAPMAX

Inline micro leak detection system for packages containing CO₂



- 1 Stainless steel frame**
 - Smooth surface, splash-proof
 - Optimal hygiene
- 2 User interface**
 - Touch-screen
 - Intuitive data and parameter entry
 - No skilled personnel needed
- 3 Emergency stop**
- 4 Two synchronised belt conveyors**
 - For placing the package in the measuring chamber and for forwarding to following systems
- 5 Alarm signal**
- 6 Measuring chamber**
- 7 Ethernet interface (optional WLAN/WiFi)**
 - Integration into company network
 - Comfortable data administration and analysis
 - Customer oriented quality documentation
- 8 Manifold connection options**
 - Potential-free contact to connect a signal-horn, alarm indicator or to stop the system
 - Digital contact to control the number of cycles and to control an external reject device

LEAK-MASTER® MAPMAX features non-destructive detection of even the smallest leaks using CO₂ as trace gas – a 100 % testing method connected directly to the packaging process. Thus not a single leaking package gets to the customer. LEAK-MASTER® MAPMAX places the packages or shipping case in the test chamber. A settable vacuum is produced, resulting in pressure differences between the tested package and the testing chamber. CO₂ escapes through smallest leaks and the CO₂ concentration within the chamber rises. The highly sensitive sensor reacts and detects even smallest leaks. The sensor allows a resolution of 1 ppm. After each test cycle the chamber is flushed with air and the tested package is forwarded to following systems. If a leak has been detected, several potential free contacts are available for communication with other equipment which for example could trigger an alarm or a pusher to sort out a faulty package. Important facts for the achievable cycle time are the CO₂ concentration within the package, the leak size, the chamber size and the environmental conditions.

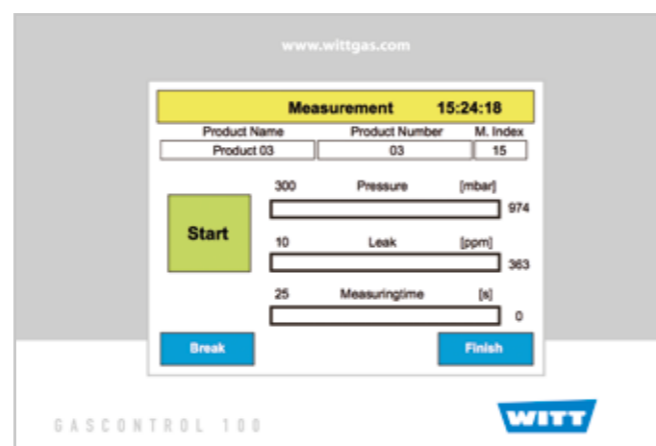
- > BENEFITS**
 - Non-destructive leak detection and sealed seam testing for flexible and rigid single packages or shipping cases
 - No costly returns – 100 % protection against order or reputation loss
 - Functionality like LEAK-MASTER® PRO – but fully automatic
 - Installation directly into the packaging line
 - Unique worldwide high frequency – up to 15 cycles per minute
 - Suitable for all packages containing CO₂
 - Highly sensitive, very fast CO₂-Sensor
 - No need for costly helium
 - Two standard machines for all customers' requirements as well as customised versions available
- > OPTIONS**
 - Reject system
 - Barcode Reader
 - WLAN/WiFi

For 100% safety – up to 15 cycles per minute

LEAK-MASTER® MAPMAX by WITT – Inline leak detection system based on CO₂ for up to 15 cycles per minute. Unique worldwide.

> USER INTERFACE

- Menu**
 - Multi-lingual
 - Intuitive use
- User administration**
 - Up to 60 users
 - Password protection
- Data memory**
 - Product details (name, item number, barcode)
 - Measure time
 - Result
 - Date and time
 - Name of user



> GAS CONTROL CENTER

- Software for data administration**
- Product and user administration**
 - Parameters (product and user)
 - File administration (MS Excel compatible)
- Measuring data administration**
 - Automatic (periodic) or manual
 - Data transmission to MS Excel
- Multi-device**
 - Data exchange with multiple LEAK-MASTER®



OUR PRODUCT RANGE

GAS CONTROL EQUIPMENT

- Gas mixing systems
- Gas metering systems
- Gas analysers
- Leak detection systems
- Gas pressure vessels
- Engineering of customised systems

GAS SAFETY EQUIPMENT

- Flashback arrestors
- Non-return valves / check valves
- Quick couplers
- Safety relief valves
- Stainless steel devices
- Gas filters
- Pressure regulators
- Outlet points
- Lance holders
- Ball valves
- Automatic hose reels
- Test equipment
- Accessories
- Customised safety equipment

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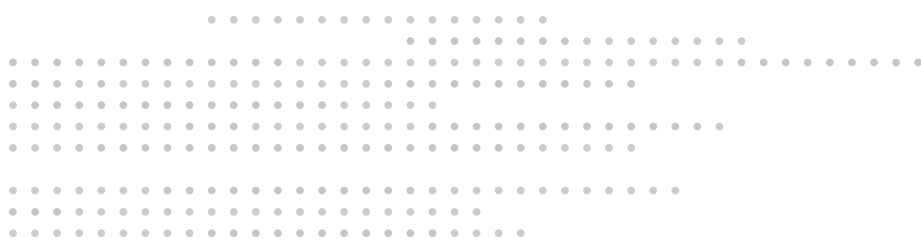
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