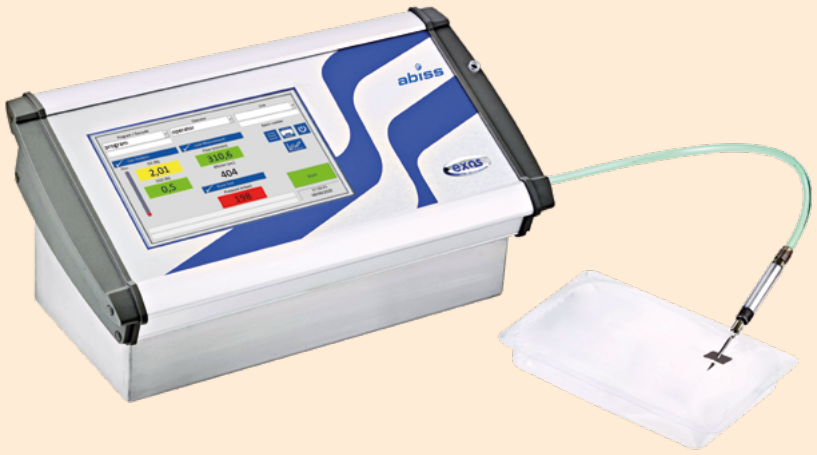
exos Leak O2 or O2&CO2

abiss

THE COMPLETE ANALYSER FOR MEASURING GASES AND THE QUALITY OF YOUR PACKAGING

VERSION 2020



BENEFITS

Measure, audit, and optimise your packaging process in controlled, reproducible test conditions (new recyclable packaging, line speed, machine settings, etc.).

Decision support : Integrated statistics

Check «easy open» packages with a dynamic burst or resistance measurement.

Assess the impact of a leak on the internal atmosphere over time

Help with diagnosis at the slightest technical changes.

How do you perform the inerting and sealing test on your packaging at the same time ?

EXOS is easy to use and measures the gas content, the tightness and strength of the seal on all types of packaging in a single test. These three tests are conducted on the same package.

EXOS gives you complete information about the initial condition of your packaging so you can identify the expiry date or best-before date.

EXOS measures :

- The O2 and CO2 content
- Leaks down to 5 µm (leak flow rate given in ml/min)
- The creep test of the packaging
- The strength of seals up to 1.4 bar

This adaptable device is suitable for laboratory and production use. **EXOS** measures and quantifies the essential parameters for your packaging inspections.

FEATURES

- 6 tests with 1 device:
  MAP (O2&CO2) + micro leaks + creep test (A&B) + seal strength
- Meets standards
  DIN 55508-1 : measures flow rate at constant pressure
  ASTM F1140 : seal strength
  ASTM F2054 : burst test
- Highest sensitivity in very low overpressure:
  micro-leaks down to 5 µm at over 10 mbar
- **Measures breathability:** micro-perforated films
- **Detects clogged circuits**
- **Wholly traceable:** use all data analysis possibilities via USB, Ethernet, or directly in your ERP system.
- **Remote connection and remote maintenance:** leverage the power of connected technology.
- **Accelerated test for big packaging**

SCOPE OF APPLICATION

EXOS is used in the food processing, cosmetics, and pharmaceutical industries for **all types of packaging including vacuum sealed**, flexible, rigid, semi-rigid, and metal membrane sealed.

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MADE IN FRANCE

HOW DOES IT WORK?

1. *Select the programme* › **2.** *Start the test* › **3.** *End of the test*

Select a program. Use the retaining arm to pierce the packaging with a needle through a septum. Once the needle is in position, the test can begin.

GAS ANALYSIS

The device takes and analyses a small amount of O2 and CO2 gases.

LEAK MEASUREMENT

The device measures the airflow needed to maintain a set overpressure in the packaging.

Leaks are shown metrologically in ml/min and equivalent µm.

CREEP TEST or **BURST TEST**

Application of a constant test pressure to the packaging and monitoring of flow and pressure as a function of time.

Pressure is applied to the package to measure the pressure needed to burst the package.

The compliance of the results is shown in colours compared to the preconfigured thresholds.

Remove the needle from the packaging.

SPECIFICATIONS

EXOS O2 OR O2&CO2 LEAK	
Device	IP54 table analyser in aluminium and stainless steel with 7" colour touchscreen
Weight and dimensions	5 kg - L 340 mm x H 170 mm x D 230 mm
Power supply	100-250 VAC -50/60 Hz - 63 W
Compressed air	4 to 8 bar (dry and oil-less) filtered to 20 µm
Ports	1 USB 2.0 and 1 RJ45 Ethernet
Features	Clogged circuit detector Pump suction control Compensates for variations in atmospheric pressure Complete traceability with integrated statistics Remote connection Analytical curves : Gas + Leak + Burst

	O2 GAS ANALYSIS	CO2 GAS ANALYSIS
Technology	Electrochemical	NDIR
Precision	+/- 1% relative	+/- 2% Full scale
T90 response time	750 ms	7 sec.
Resolution	+/-0,01%	0,1%
Average service life	18 months in air	10 years

	LEAK MEASUREMENT Standard DIN 55508-1	CREEP TEST Standard ASTM F1140	BURST TEST Standard ASTM F1140
Technology	Mass flowmeter	Piezoresistive barometer	Piezoresistive barometer
Precision	+/- 0.8% full scale (µm)	+/- 0.5% full scale	+/- 0.5% full scale
Resolution	0.1ml/min - 1µm	1mbar	1mbar
Measurement	0.1-500ml/min from 5µm to 500µm	200 - 500 mbar	0,2 – 1,4 bar
Pressure	from 10 to 500mbar	500 mbar	Up to 1.4 bar
Flow	Up to 6500 ml/min	6500 ml/min	Minimum 250 L/h

OPTIONS

- 3G router + HMI Advanced
- Waterproof RJ45 Ethernet port

ACCESSORIES AVAILABLE ACCORDING TO YOUR APPLICATION

- The calibrated leak to control the leakage measurement
- 2.5 L buffer tank with check valve
- The flexible probe holder : holds the needle during the test.
- The barcode reader select faster the test program.
- The metal detectable stylus for the touchscreen
- The secured needle holder

DELIVERED WITH THE DEVICE

- Calibration certificate
- 1 case IP67: 566 x 438 x 216 mm
- 1,000 septums for leakage measurement
- 1 external pressure regulator with integrated filter
- 2 stainless steel Anéolia needles :
  - 1 standard needle 2 x 30 mm
  - 1 needle with 3 side holes
- 2 sampling kits (including 1 for low head space packaging)
- 2.5-litre stabilisation tank with non-return valve to smooth the compressed air supply pressure
- Tank wall mounting accessory
- Needle holding arm
- Detectable stylus for touch screen

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