

Package testing for measuring product characteristics.



Measure



Improve



Service



ABOUT RYCOBEL: 3 DIVISIONS

Rycobel is a dynamic and growing company located in Deerlijk, Belgium. Rycobel is made up in 3 divisions:



Measure



Improve



Service

OUR MISSION: BRINGING COMPETITIVE ADVANTAGE

Rycobel brings competitive advantage by supplying and maintaining equipment to measure and improve product characteristics. To engage a loyalty mission, the company strives to close partnerships that offers customers an absolute added value. The goal of Rycobel is to think together with the customer about the business or technical need and propose the adequate solution to bring competitive advantage.

ISO CERTIFICATION

Over the past 40 years Rycobel has built up experience and knowledge in many industrial sectors.

To help reassure clients and deliver the highest levels of service, Rycobel gained the ISO 9001 certification. ISO certification guarantees that the company has fully submitted its quality control procedures.

OUR VALUES: THE HEART OF OUR COMPANY CULTURE

- Integrity
- Experience
- Engagement
- Teamwork
- Helpful

SERVICE TEAM

Our talented team of testing specialists and engineers provide you with the best possible on-going support.

Whether you need a:

- Turnkey installation with start-up
- Warranty maintenance & calibration contracts
- Maintenance for the departments 'Measure' and 'Improve'
- Full-service contract
- Calibration for your testing equipment
- Hands-on training on equipment
- Application training
- Telephone support by a product specialist

Do not hesitate to contact our service team via service@rycobel.com or +32(0)56 78 21 70.



Management of Rycobel, from left to right:
Frederik Castelain, Kurt Rommens and Vincent Rius



Rycobel's headquarter in Deerlijk, situated in Belgium, Europe.

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Packaging tests

Packaging greatly influences the quality of food and the safety of the product. This creates major challenges for product design. The variety of materials and shapes for packaging requires flexible testing equipment. Rycobel has a wide range of testing equipment for measuring product characteristics of different types of packaging materials:

1. Flexible packaging tests

LEAK & BURST

It is important to guarantee the leak tightness of the packaging to assure that undesirable microorganisms and air (oxygen) can't affect the product and that the packaged product may not leak.

PERMEABILITY

Creating an ideal atmosphere and providing the right packaging can extend the shelf life of your product. The purpose of a package is, after all, to form a barrier between the content and external factors in the environment that might affect the content.

SEAL STRENGTH

It is possible to determine the strength of a seal in order to determine which weight the seal can tolerate.

TENSILE STRENGTH

A tensile test, or tension test, is done by pulling on a specimen, to determine how the material reacts to forces being applied in tension. As the material is being pulled, you determine the material's tensile strength and how much it will elongate.

THICKNESS

Measuring the thickness of all sorts of materials is very important. Not only does it determine the cost of a product but it also has an influence on different characteristics such as strength, permeability, etc.

2. Cardboard testing

TRANSPORT SIMULATION

Simulating - in a controlled manner - influences products and packaging endure during transport and storage.

COMPRESSION

Testing how certain compressive forces have an impact on the packaging.

BENDING - OPENING FORCE

Simulating the resistance of materials against frequent folding and opening.

3. Testing bottles and cans

DROP TESTS

Simulating the fall/drop of a bottle or can.

OPENING FORCE

This determines the force required to open a bottle.

PRESSURE TESTS

The creation of leaks and cracks in a bottle or can due to a pressure increase.

RYCOLAB

RYCOLAB is our own range of innovative testing equipment for measuring product characteristics for paper, tissue, board and sample preparation. The easy and intuitive interface enhances the operation of our testing equipment. All our devices are conform to international standards.



leak and burst detection

PACKAGE INTEGRITY TESTER

This non-destructive and off-line leak detection system using the vacuum decay method to measure very small amounts of headspace gas leaking from a wide range of flexible pack types and sizes. An adapted version of the instrument is available to measure containers. The Package Integrity Tester (P.I.T.) is easy to operate and gives a pass or fail result, making it ideal for Quality Control on the production floor or in the laboratory.



RYCOLAB

SOLUTION

The Solution is a high resolution leak and flow tester featuring one to four channel concurrent or multiple channel sequential leak and flow testing. This instrument can perform ten separate test types on product, including:

- burst
- occlusion
- vacuum and pressure decay
- crack
- differential pressure or vacuum



WORKER INTEGRA

The Worker Integra is a bench-top and high-resolution leak test instrument with a small footprint and user-friendly. The system can be configured to perform pressure or vacuum decay leak testing, flow and occlusion testing on non-porous, flexible or rigid products. Models are available for pressure ranges from 1 to 10 bar and flow rates from as little as 10 ccm to as much as 10 lpm.



www.rycobel.com/en/measure/solutions/leak-detection



leak and burst detection

BT INTEGRA PACK

The BT Integra Pack does not only test leakages but also burst, creep, creep-to-failure tests of packages. The BT Integra Pack is a bench-top and high-resolution test instrument an user-friendly ease of operation. Electronic pressure and flow controls provide precise and repeatable test conditions, while automatic and high flow output allow testing of large porous packages.



AIRPROOF TESTER

The Airproof Tester is used in gasleak tests of food, pharmaceuticals, daily chemistry and other industries. The leak detection vacuum water chamber is simple to operate and shows the location of the leak(s) in the package as well as the total integrity of the pack.



www.rycobel.com/en/measure/solutions/leak-detection

pressure

Package testing often requires defined pressure sequences. The IPPS can be programmed with up to 99 different pressure sequences. Once programmed, the pressure sequences can be selected and activated. The duration of a sequence can vary from seconds to months and repetitions are also possible. The IPPS M+S additionally offers the possibility of pressure monitoring and switching of the outlet valves with the possibility to set warnings in case of pressure monitoring outside of specification.

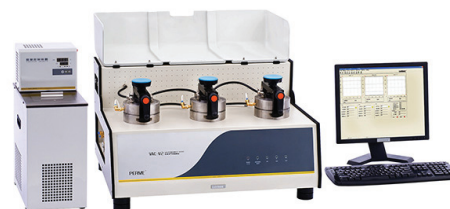


www.rycobel.com/en/measure/solutions/pressure

permeability

GAS PERMEABILITY TESTER

Gas permeability is the ability of a barrier material to allow gases (O_2 , N_2 , CO_2 etc.) to permeate through it in a specific time. Gas permeability may vary with temperature, humidity, pressure and specimen thickness.



OXYGEN PERMEABILITY

The oxygen permeability tester is based on the equal pressure method and is used for the determination of oxygen transmission rate of film and package products including plastic films, composite films, plastic bottles, plastic bags and other packages.



WATER VAPOR PERMEABILITY

Water vapor permeability is the measure of the passage of water vapor through the material. It is also known as water vapor transmission rate (WVTR) or moisture vapor transmission rate (MVTR). It is the mass of water vapor transmitted through a unit area in a unit time under specified conditions of temperature and humidity. 4 different measuring principles are available: electrolytic-, gravimetric-, humidity- and infrared detection.



VAPOMETER

The Vapometer is a simple test instrument for determining the water vapour transmission rate through using the first principle gravimetric method. This instrument is used for determining the water vapor permeability of sheet materials such as specialty paper grades, polyethylene, building material, leather, weatherproof clothing, vinyl, foil, laminates and other thin sheet-materials.



www.rycobel.com/en/measure/solutions/permeability

seal strength & tensile

HEAT SEALER

The Heat Sealer simulates, in the lab, the sealing in a production environment. Laminated films and other packaging materials are sealed with this unit in a simple way. Production parameters such as temperature, pressure and time can be set.



HOT TACK TESTER

The Hot Tack Tester is used to test sealing properties of packaging material. The instrument permits evaluation of sealability and hot tack under a broad range of testing conditions to optimize packaging machine settings and to ensure consistent quality of the product. In addition it can also test peel, shear and tension of adhesives, tape, laminated film, plastic film, paper and other flexible materials.



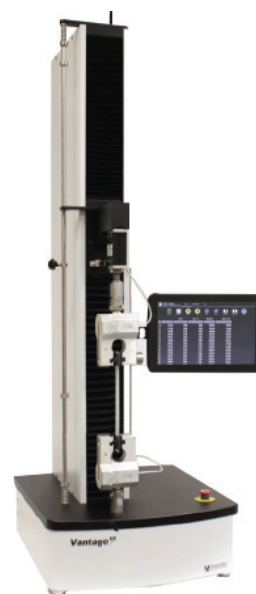
www.rycobel.com/en/measure/solutions/seal-strength

TENSILE

An universal testing machine or tensile tester is used to test the tensile stress and compressive strength of materials. This instrument can perform many standard tests including tensile and compression test for packaging materials.



www.rycobel.com/en/measure/solutions/tensile





folding resistance

The Scorebend /Opening Force Tester is a microprocessor controlled testing machine for determining both the force required to open a carton from flat and the stiffness of individual box carton creases/flaps. Both parameters are critical for ensuring the smooth running of carton erection on folding carton packaging lines. A choice of interchangeable loadcells enable small corrugated boxes to also be tested.



www.rycobel.com/en/measure/solutions/folding-resistance



torsion

MANUAL

The torque tester determines the precise torque force required to open and close any kind of threaded lid. This instrument has an excellent reliability thanks to its combined high accuracy and rugged mechanical construction. It is the standard for the quality control of any bottling line where threaded lids are used.

AUTOMATIC

In order to exclude all operator influences, the torque tester can determine the angular momentum automatically. Thanks to the robust construction, this unit can be used in both laboratory and production environments. It was developed in close operation with the industry in order to meet all standard procedures. Several programs can be run such as opening and reclosing of the bottle, only closing, only opening, seal break, overtorque, ...



www.rycobel.com/en/measure/solutions/torque



Compression and thickness

BOX COMPRESSION TESTER

The compression tester determines the crushing resistance of boxes and is used for quality control and R&D.



RYCOLAB



www.rycobel.com/en/measure/solutions/compression

THICKNESS

The ProGage thickness tester utilizes advanced technology to quickly and accurately measure the thickness of sheeted materials such as paper, plastic film, tissue, nonwovens and textiles.



www.rycobel.com/en/measure/solutions/thickness

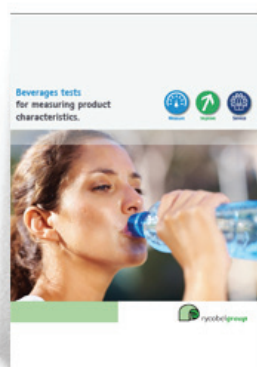
Other product characteristics

Didn't find what you were looking for in this brochure? Read also:



Traditional tests

- Sample preparation
- Tensile
- Tear
- Friction
- Burst
- Seal strength
- Ink
- Impact
- Abrasion
- Thickness



Beverages

- CO₂ measurement
- Torque measurement
- Pressure loggers
- Pasteurization measurement
- Foam stability
- Carbonation
- Calibration

Our other divisions

Equipment to **improve** your product characteristics.



- Static electricity
- Energy efficient drying and blow off
- Surface treatment
- Contactfree cleaning

www.rycobel.com/en/improve

We help you with the best possible **service**.



- Installation
- Calibration
- Equipment qualification: IQ, OQ & PQ
- Analysis of your production process: static electricity and compressed air consumption
- Repair and service
- Application and training
- For all your technical or application-related questions, call our technical helpline: +32 (0) 56 78 21 79

www.rycobel.com/en/service

Rycobel academy

We believe that through **training and coaching** everyone can become an expert in his or her profession of field.

Our employees are dedicated professionals who want to pass on their passion and experience to help you grow professionally and to successfully achieve your goals.

We put together an experienced team of engineers and experts with their **own speciality**. With their strong product and market knowledge and years of experience in the industry, they are always ready with advice to provide you with the right solution.



