

Testing equipment for **measuring** product characteristics.



Measure



Improve



Service



rycobelgroup

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.

“We work for several years with Rycobel. Every time we have a question, they are ready to help us with expertise and advice. We have a good follow up and can count on an excellent support.” Lano NV

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 9001:2008 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 work together to 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 specialist



Equipment to measure product characteristics



Package testing

The variety of material types and shapes for packaging asks for flexible package testing equipment.



Vibration, shock and drop testing

Transport simulation is a simulation of real transport under standardized conditions.



Textile testing

We provide testing equipment for textiles, nonwovens, carpet, fibres and yarn for both online and offline quality control.



Traditional tests

We have an extensive range of equipment to test mechanical, optical and physical properties of materials.



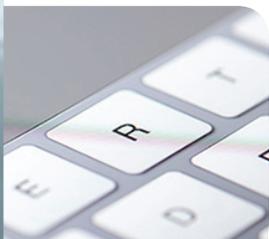
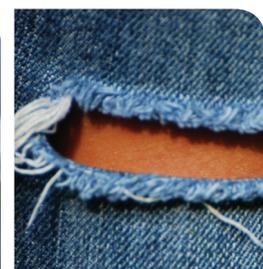
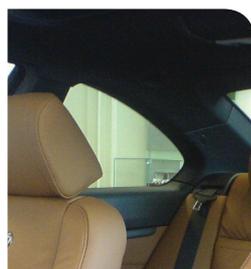
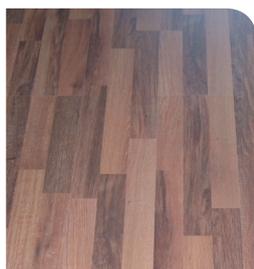
Beverage testing

We provide the necessary equipment to test the content of beverages for impeccable quality.



Ageing and weathering tests

Materials are affected when they are exposed to the sun, heat and moisture. With aging tests these situations are simulated.





Package testing

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.

Flexible packaging tests



- **Tensile strength**
A tensile test, or tension test, is done by pulling on a tensile (normalized) 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.
- **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.
- **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.
- **Leaks**
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.
- **Seal strength**
It is possible to determine the strength of a seal in order to determine which weight the seal can tolerate.



Equipment for packaging testing

- Vapometer
- Burst strength
- Airproof tester
- Seal strength
- Permeability tester
- Tensile tester
- Thickness gauge
- Elmendorf tear tester
- Leak detection
-



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.



Testing bottles and cans

- **Drop tests**
Simulating the fall/drop of a bottle or can during transportation.
- **Ball Impact Tester**
Testing the impact of a steel ball on a defined location of the bottle.
- **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.
- **Pressure measurement**
Measuring the right pressure.



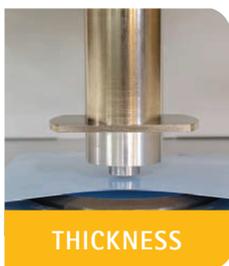


Traditional tests

Rycobel has a full range of testing equipment to test the mechanical, optical and physical properties of materials. Our equipment meets international standards including ASTM and ISO.



BURST



THICKNESS



COMPRESSION



TENSILE



FOLDING RESISTANCE



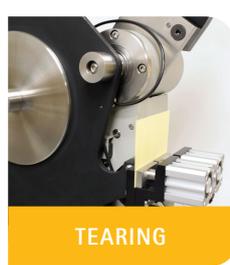
HANDLE



FRICTION



SAMPLE CUTTER



TEARING

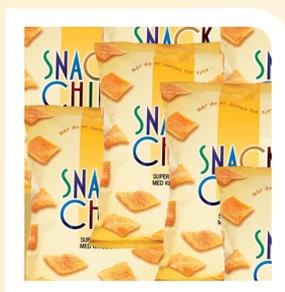


ABRASION

Testing equipment for traditional tests



- Sample cutters
- Tensile testers
- Friction Peel
- Handle-O-Meter
- Heat-sealer
- Dart drop tester
- Abrasion tester
- Balances
- Absorption
- Surface tension metre
- Thickness gauges
- Contact angle metre
- Gloss measuring
- Permeability
- Ink
- Adhesion
- ...





Beverage testing

The content and packaging of beverages are inextricably linked to each other. The packaging performs numerous functions and must meet different conditions. We provide the necessary testing equipment to test the content of beverages for impeccable quality.



- **Pasteurization**
Following the pasteurization process of pasteurized beverages is essential.
- **Foam stability**
The optical determination of foam height over a given period of time.
- **Pressure measurement**
Measuring the right pressure.
- **CO₂ determination**
Calculating the carbon dioxide content in beverages.
- **Clarity**
Measuring the turbidity or clarity of beverages and liquids.
- **Carbonization**
Carbonization is the process by which carbon dioxide is dissolved in a liquid. Hereby an exact number of g/l of CO₂ is added.

Testing equipment for beverage testing



- CO₂ tank and keg tester
- Pressure and temperature loggers
- Pressure calibrator
- Foam stability tester
- Carbonation tester
- Pasteurization test
- Monitoring kegs
- Hazemeter
- Alcohol content
- Sampler
- ...





Vibration, shocks -and droptest



- **Vibration**
Shock and vibration can harm a product and its packaging during transport. Especially low frequencies (<50Hz) can cause vibrating parts of the product to resonate and break. Often the damage is not immediately visible from the outside of the product. With a vibration table, one can simulate vibration and test the product and the packaging.
- **Shocks**
Shock tests accurately measure the fragility of products and evaluate how they respond to specific shock inputs. Shock test data is key information when determining whether your product is capable of withstanding its intended distribution and use environment.
- **Drop tests**
Drop testing determines the ability of a package to withstand the impacts prevalent in the distribution environment.
- **Compression**
Stacking forces generated during warehouse storage and transit can generate severe compressive loads. Compression tests are an essential part of the package design process. We offer a full range of compression test systems to determine the performance of unit loads, individual packages, components, and materials under compressive loads. This information enables the engineer to minimize damage, costs, and liability due to stacking failure.
- **Field data recorders**
Saver field instruments can measure and record tens of thousands of targeted events of interest. The collected data allows for assessment and characterization of both the dynamic and atmospheric hazards present within measured transport and in-use environments.

Testing equipment for transport simulation

- Compression testers
- Drop testers
- Impact test systems
- Vibration test systems
- Transport recorders





Ageing and weathering tests



- **Sunlight simulation**

The principle of artificial accelerated weathering consists of exposing a product to the sun during a certain period or cycle, under certain conditions and to evaluate the critical properties of the product before and after the exposure. Although these tests can be carried out in a 'non-accelerated' way, in which the product or material ages in 'real-time', often accelerated tests are executed which simulate the real time ageing process with the help of testing equipment which accelerate a cycle or make the conditions heavier. The aging tests are carried out with different instruments in accordance with ASTM, ISO, and DIN standards.

- **Outdoor weathering tests**

Many products are tested on natural weathering testing sites. The climatic conditions of the different regions play an important role in these tests. These tests make it possible to test the product in their actual conditions of use.

- **Climate simulation**

In many cases materials can be affected when being exposed to the sun, heat and moisture. Therefore, it is important that products are designed to withstand these conditions. Climatic chambers simulate climatic conditions such as desert climate, tropical climate, etc.

Testing equipment for environmental testing



- Weather-OMeters
- Xenotests
- Suntests
- UV and metal halide light sources
- Climate chambers
- Ovens
- Flame chambers





Textile testing

Rycobel offers testing equipment for textiles, nonwovens, carpet, fibres and yarn for online as well as offline quality control. Some examples: wear, pilling, colour fastness to washing, rubbing, exposure to daylight, tear strength, seam strength, etc.



- **Colour fastness**
Determining the colour fastness of textiles.
- **Wear resistance**
The Martindale test measures the abrasion resistance or 'pilling' resistance of textile materials.
- **Colour fastness to washing**
Determination of color fastness to washing at different temperatures.
- **Pilling**
The effect of fabric pilling can be simulated with an universal testing machine.
- **Flammability tests**
In a controlled environment, the flammability of different kinds of textile materials can be determined.
- **Comfort testing**
Measuring the surface properties of a certain fabric in order to examine how this fabric is experienced.
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Testing equipment for textile testing

- Comfort testing
- Air permeability
- Burst tester
- Martindale abrasion
- Rotawash colour fastness tester
- Grey scales
- Crimp tester
- Spray test
- ...



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 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 equipment.





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