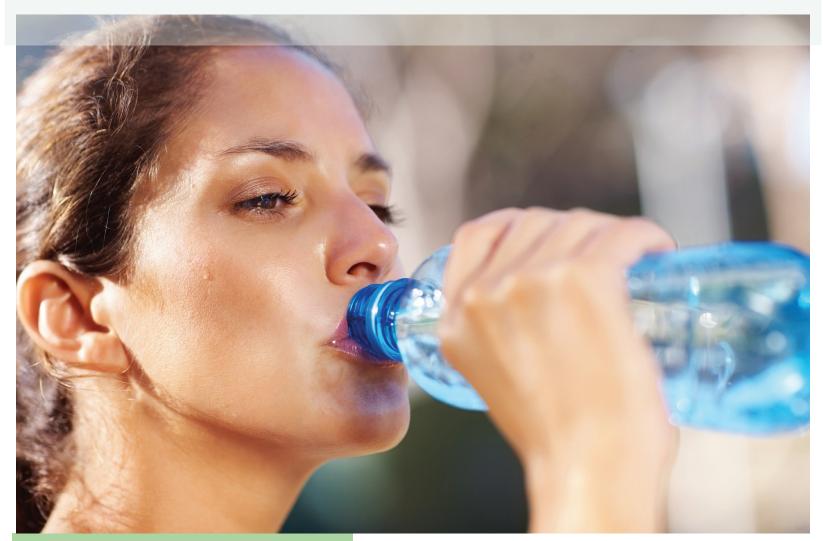
# Testing product characteristics for beverage & packages.











#### **ABOUT RYCOBEL: 3 DIVISIONS**

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







Measure Improve

e Sen

## OUR MISSION: BRINGING COMPETITIVE ADVANTAGE

Rycobel brings competitive advantage by supplying and maintaining equipment to measure and improve product characteristics. To engage a loyality 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.



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

# 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.



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



# Beverage&package 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 product for impeccable quality.

The beverage and packaging quality can't be seen or monitored these days anymore separately – both areas of those are the inseparable parts of the QA influencing each other.

- CO<sub>2</sub> measurement
- Carbonation
- Torque
- Bottle pressure
- Foam stability
- Packaging tests

## **RYCOLAB**

RYCOLAB is our own range of innovative testing equipment for measuring productcharacteristics 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.



# CO<sub>2</sub>-Measurement

#### CO<sub>2</sub> Tester

Both, taste and shelf life of the product are affected by the amount of  $\mathrm{CO}_2$  dissolved in the product. A reliable measuring method is the basis for maintaining a uniform carbon dioxide content in beer, carbonated water and soft drinks. The demand for an accurate and user independent  $\mathrm{CO}_2$ -measurement device led to the development of the automatic  $\mathrm{CO}_2$  tester  $\mathrm{CO}_2\mathrm{MS}$ . The  $\mathrm{CO}_2\mathrm{MS}$  is the perfect tool for high efficient QC in modern bottling facilities.



#### Measuring the CO<sub>2</sub> concentration

The  $\mathrm{CO_2}$  Tester CDA MK-6 measures pressure and temperature simultaneously, calculates the  $\mathrm{CO_2}$  content and transfers the measurement results via data-interface to the base-unit.



#### **Optical Shelf Life Tester**

The Optical Shelf Life Tester combines the non destructive functionality of the optical measurement with precise measuring method delivering on this way a new interesting application for his technology. The optical method is used for resource saving process monitoring and the high precise measurement for system calibration and accurate measurement of the true carbon-dioxide content.



#### CO<sub>2</sub> Tank & Keg Tester on a tank or the line

The  $\mathrm{CO}_2$  Tank & Keg Tester automatically calculates the  $\mathrm{CO}_2$  content in a tank or keg. Checking of the  $\mathrm{CO}_2$  content at different process steps is essential to verify the quality of the final product. The Tank & Keg Tester can be connected to a tank of the product line for easy product sampling.

The system combines easy operation with the new, highly accurate and compact  ${\rm CO_2}$  manometer for simultaneous pressure and temperature measurement and automatic  ${\rm CO_2}$  calculation.





#### Cup Tank carbonation tester in fountain beverages

The Cup Carbonation Tester measures temperature and pressure and the  $\mathrm{CO}_2$  on beverage dispensing sytems, tanks and Kegs. Servicing and adjustment of draught systems for fountain beverages requires robust instruments for quick and accurate carbonation measurement. The Cup Carbonation Tester (CCT) combines very easy operation with the new, highly accurate and compact  $\mathrm{CO}_2$  manometer for simultaneous pressure and temperature measurement as well as  $\mathrm{CO}_2$  calculation.



#### Silver Bottle

The Silver Bottle is used for standardized checking of pressure and temperature calibration on CO<sub>2</sub> testers based on Henry-Dalton physical law.



# Carbonation

#### Precise carbonation

The Laboratory Carbonation System is used for single sample carbonation studies and preparation of tasting samples in bottles and cans. Each beverage has its own specific content of carbon dioxide for which taste and flavour are optimally developed. The laboratory carbonation system carbonates individual beverage samples with an exactly pre-defined  $\mathrm{CO}_2$  content.





#### **Automatic Torque Measurement TMS 5010**

The TMS 5010 is the perfect instrument for development, design, dimensioning and approval of screw caps. It's a powerful tool for closure manufacturers and at the same time optimal test equipment for package analysis and approval in beverage, pharmaceutical and food companies. The torque measuring sytem is a fully automatic tool for closure manufactures enhances by its extensive testing possibilities. Measuring the overtorque and application angle is also possible.



#### Manual Closure Torque Measurement TMS 2000

The manual torque measuring device TMS 2000 is perfect for routine quality check on closures, where no special testing programs are needed. An easy calibration, very compact dimensions, integrated overload protection and robust construction create optimal benefits for this torque instrument.



#### TorqTraQ® Quick mobile torque measurement

The TorqTraQ $^{@}$  is a mobile device for detecting the torque of bottle closures quickly. The TorqTraQ $^{@}$  device uses specifically designed chucks which positively engage the closure. This unique design eliminates the variability of manually gripping closures and improves measurement reliability.





#### Orange bottle

The Orange Bottle is used to verify the operational repeatability of torque measuring instruments. This bottle is constructed with high energy permanent magnets and is pre-set at the factory to a customer specified torque.





#### Bottle pressure tester for PET & Glass bottles with crown

The Bottle Pressure Tester is easily attached to glass bottles with crown closures or PET bottles. It pierces the closure, and the internal pressure can be read from the digital or analogue pressure gauge.

#### Can pressure tester

The Can Pressure Tester is easily ergonomic attached to beverage cans. It pierces eccentric the top lid of the can (for proper piercing outside of the pull ring area).



#### **Pastcontrol**

# Logger system for monitoring of the pasteurization process in tunnel and chamber pasteurizers

Pasteurization monitoring is essential for producers of pasteurized beverages. Insufficient pasteurization results in microbiologically objectable product charges; if pasteurization is carried too far, taste is affected. Therefore, an accurate measuring of pasteurizing units on a regular base can't be neglected. The Past Control system simplifies the pasteurization task. The safe and simple operation requires only a short instruction to the operation personnel. The PU value can be read from the PU monitor's display directly at the pasteurizer line.





#### Foam stability tester & sampler

Foam stability is an important beer quality parameter. Measuring foam stability, however, has been so far either laborious or inaccurate – or both.

The demand for an accurate and user-location independent stability measurement device led to the development of the automatic Foam Stability Tester.



#### Rotech Inspection Keg - Monitoring tool

ROTECH MK5 is a brewery standard keg fitted with sensors and a data logger unit. It is an essential tool for every brewery with keg filling line, large or small. Send it through the line as normal; transfer data to PC or laptop; look at the results on screen and see exactly what is happening inside the keg during every cycle of washing, disinfection and filling.





#### **Opening Performance Tester (OPT)**

The Opening Performance Tester opens a bottle closure with adjusted repeatable speed on the original thread finish. Meanwhile, it records torque, rotation angle, vertical movement, pressure and temperature. The Opening Performance Tester doesn't exert any vertical force on the closure, making a possible blow-off-effect clearly visible. The recorded data is transferred to the PC and evaluated for standardised opening performance conditions.



# Interactively Programmable Pressure Sequencer (IPPS)

Package testing often requires defined pressure sequences. The IPPS can be programmed with up to 99 different pressure sequences. The programming can be done by the operator; special knowledge isn't necessary. Once programmed, the pressure sequences can be selected and activated. The duration of a sequence can vary from seconds to months. Repetitions are also possible.



#### Closure tester

Resistance against interior pressure should be tested frequently, but at least when a new closure design is to be introduced. The Closure Tester gives you the opportunity to safely perform and observe this test under water in a stable plastic tank. The second function of the Closure Tester is the so-called Top Load Vent Test. This means testing the resistance against leaking while a strong vertical force is applied to the closure, thus simulating the stacking of the containers (bottles or cans) in trays. This test is performed under water in a tank. You'll need the IPPS for both of these tests.





#### Drop cart tester

The Drop / Cart Tester is a testing device designed to support two different beverage can stability tests: Drop Test and Can Abuse Resistance Test (CART). The Drop test includes repeated dropping of a specimen can onto a plain anvil plate from ever increasing heights. Cart includes repeated dropping of a specimen can onto an anvil plate different from that used for the drop test, but from a fixed height.



#### Universal tensile tester

An universal testing machine or tensile tester is used to test the tensile stress and compressive strength of materials. It is named after the fact that it can perform many standard tests including tensile and compression tests for a wide range of materials.



#### **Box Compression Tester**

## RYCOLAB

A box compression tester is used for carrying out compression tests on packing corrugated boxes. The corrugated box or packaging to be tested must be placed centered in the lower plate of the compression tester. When the test begins, the upper plate will displace downward and a load will begin to be applied to the specimen. This force is captured by means of the three load cells located under the lower plate. When the system detects the sample breaking, the upper plate returns to the initial position at maximum speed.



#### 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.



