

*Be ahead.*

**FILLING AND SEALING MACHINES**





# *Go for the world's leading sealing solution.*

Seal integrity is one of the most crucial aspects in food packaging. A seal needs to be tight: immediately after sealing, during the sterilisation process and especially later on, when the product is on the shelf for months, or even years. The last thing that you want is to have your product shipped back to you. We know this. At Rychiger we design and build the world's best sealers to give you the best seal integrity in the world.

Rychiger was the first company to commercially build filling & sealing machines for hot-fill and retortable products. This was in the early 60's, when the sealing window defined by the available materials and sealants was very narrow, and achieving highest seal integrity, combined with easy peelability, was a demanding challenge. Consequently, a filling & sealing machine had to be ultimately precise in the sealing process to achieve constant and sustainable results. An engineering paradigm that is still inherent to the genes of any Rychiger machine.

A Rychiger filling & sealing machine is a piece of mechanic as precise as a Swiss watch. All movements are constantly and positively guided, and all parameters of the processes are under continuous control. Our process approach of short dwell times, high pressure and low temperature, gives proven results in seal integrity and easy peelability, which no other process approach can achieve.

It is the experience achieved over many years, and in the hundreds of filling & sealing machines built, combined with ongoing developments and extensive knowledge about modern packaging materials, that gives us the leading edge in filling & sealing technology.

*Go for the world's leading sealing technology.  
Don't accept anything less.*

**I D1** Destacking



**I D2** WALKING BEAM Transport



**I D3** Fill technology



*From bright ideas  
to tight solutions.*

Rychiger provides filling & sealing solutions for plastic and aluminium packaging in the food, pet food, chemical, cosmetics and pharmaceutical sectors. Vast experience, innovative ideas, and a close relationship with our customers has led to the design of our machines. Our unique filling & sealing technology is the basis for a secure production, quality and high efficiency. Precise filling, combined with our special lid cutting technology and a very reliable, strong design, results in low operating costs. Last but not least, user friendly operator interfaces, easy clean features and built-in flexibility make the machine popular with your employees.



**I D4** Direct lid cutting



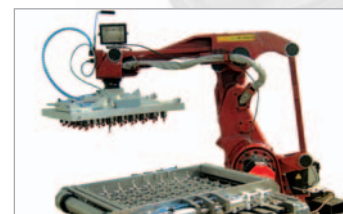
**I D5** Seal technology



**I D6** Drives & Controls



**I D7** Options



**I D1 Destacking** Our destackers work with separating knives, sliding plates or screws, depending on the container, and have a continuous, active hold on the container. That's why a Rychiger destacker works with many different shapes at high cycle rates with superior efficiency. Long operating-time magazines and automated cup loaders are available.

**I D2 WALKING BEAM Transport** It combines the advantage of a continuous motion system with the benefits of an intermittent transport. The mechanism itself is in constant motion (no stop/start), whereas the containers are moved intermittently and stopped and positioned precisely where a filling or sealing operation takes place. No chains or other parts are travelling through the machine – if we have fill spoilage it remains local and cannot be spread into other process steps – the machine simply stays cleaner. The WALKING BEAM is quickly changed over to a new format, is wear resistant, easy to clean and doesn't know any effect of play or lengthening.

**I D3 Fill technology** We build piston fillers, auger fillers, volumetric pocket fillers and fillers for special applications. Swiss precision guarantees exact fill volumes and clean, drip-free filling. Volume adjustment from touch screen or check weighing and CIP (clean in place) increase flexibility for quick product changes.

**I D4 Direct lid cutting/pre-cut lids** Our machines work with lidding from roll-stock or with pre-cut lids. The lids are cut from the roll-stock and sealed to the flange in the same stroke. The determined angular infeed of the roll-stock allows the Rychiger machines to make more lids from one single reel than other machines can. Let us calculate your savings in material costs with this unique process. You will be amazed what a difference this can make!

**I D5 Seal technology** An extremely strong and ultra-precise sealing station is the heart of any Rychiger machine. The combination of a mechanical seal stroke and preloaded individual air-springs on every lane guarantees very precise and short dwell times at high seal forces. The result is highest seal integrity and constant easy peel characteristics. The temperature of each seal head is constantly monitored.

**I D6 Drives & Controls** Our machines usually combine servo drives with cams for greatest flexibility and reliability. We have the most advanced programming skills in-house and are able to realise all your requirements, e.g. to integrate several servos on one single machine. You have full control over the process on the machine via the touch screen; and we put a lot of attention into an easy to understand operator interface.

**I D7 Options** Whatever your imagination is – share your ideas, we create the solutions. Think of ideas like online check weighing with feedback to fillers or auto-reject, tray inverting, single/multi-lane switch off, automated tray and roll stock loading, downstream pick & place etc.

**I D8 Long shelf life** Good packaging barrier-material and highest seal integrity are the basis for a long conservation of a product. To extend the shelf live further, we offer vacuum packing and MAP (Modified Atmosphere Packaging). Depending on the application, we guarantee residual oxygen levels of below 0,5%. Ask us about our experience and the achievable residual oxygen levels.

**I D8 Long shelf life**



# Machines built on trust.

## How it all began

It was in 1918 when Rudolf Rychiger had no other choice but found his own company. He had led a workers' uprising against unfair labour conditions and, successful in this task, was made redundant as a result. He soon became a renowned tool & machine builder. In the 60's, the company was motivated by the food industry, which wanted to be able to distribute its products further, despite the lack of a refrigeration chain: the first filling & sealing machines for retorted products were built. What originated in Switzerland soon became a global business, and Rychiger machines nowadays operate in 47 countries.



## Long term relationships, lifetime service

The average Rychiger customer is a contented, repetitive, customer. The average age of all Rychiger machines still in operation is 21 years. We build on trust-based relationships and support our customers during the entire lifetime of a machine. We are aware that only a comprehensive approach, including the availability of spares, upgrades and rebuilds, will bring you the full benefit of a Rychiger machine. Furthermore, we have the people and knowledge to do so, since we apply the same long-term thinking to our staff. The average Rychiger employee has 12 years of service.

## Sharing ideas, creating solutions

Our way to success is simple: every Rychiger machine is the result of intensive discussions with you and customised to your needs. Every fifth Rychiger filler is built from scratch, 100% customised to the application. We listen, and combine your knowledge about your product, with ours about machines and packaging materials. We make use of our extensive network of packaging material suppliers and up- and downstream partners. Only this way can we ensure the development of the best solution for your application. We don't only supply machines, we deliver solutions.



## Think ahead, be ahead

Pro-active and project-independent Research & Development is our belief and we invest a considerable amount of our turn-over in R & D. Sophisticated engineering CAD-systems (and sophisticated engineers), clearly defined and implemented processes and in-house manufacturing are the most important tools and ways that we use to stay ahead. We train our employees and encourage them to think differently and to leave the beaten track. At the end of the day it is our people that make the biggest difference. Because we care and our people know that they build machines for other people.

Rychiger filling and sealing machines  
are used in the food industry for  
the following packaging technologies,  
products and markets:

**Retortable plastic packaging**

Baby food, ready meals, sauces, soups,  
pet food, fruits...



**Retortable aluminium packaging**

Pet food, patés



**Modified atmosphere packaging**

Snacks, ready meals, fruits,...



**Plastic packaging**

Cheese, salads, compots,...



**Aluminium packaging**

Portionpacks for jam, honey,  
spreads, flans,...



**Powdered products**

Coffee, tea, instant drinks,...



**Chunky products**

Fruits, vegetables, meat,...



**Pharmaceutical products**



**Special products with highest  
seal complexity**



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