

Strong Seals **Sharp Cuts** Proven Performance

Your customized sealing and cutting solutions
for horizontal flow wrappers.



Good sealing keeps fresh- ness in – and waste out

A strong pack-
age protects
what matters
most: your
product

As your lifecycle partner,
we develop the optimal
solution for your require-
ments.



We are your lifecycle partner for the best solutions based on your requirements

In case of a change in your film structure, processing time, or product, we will work with you to develop an optimized sealing jaw and a knife tailored exactly to your needs. This allows you to quickly react to changing market demands, without having to buy a new machine or disrupt your production schedule.



Request & specify

Thanks to our long-standing experience in the design of sealing jaws and knives, we are happy to assist you in finding new solutions. Let us know your requirements.



Let's engineer together

We will design and test the ideal solution for your product based on your demands and keep you in the loop at all times.



We will produce your solution

We deliver the finished solution in the best quality, at fair prices, and in accordance with your delivery requirements.

Optimized sealing & cutting for industrial efficiency

The product is wrapped in a continuous roll of film and is sealed on the longitudinal edge using fin wheels. The horizontal sealing jaws close on the film at set intervals. They apply (heat and) pressure to seal the film and cut it between the products. The jaws then open, and the next product moves into position.

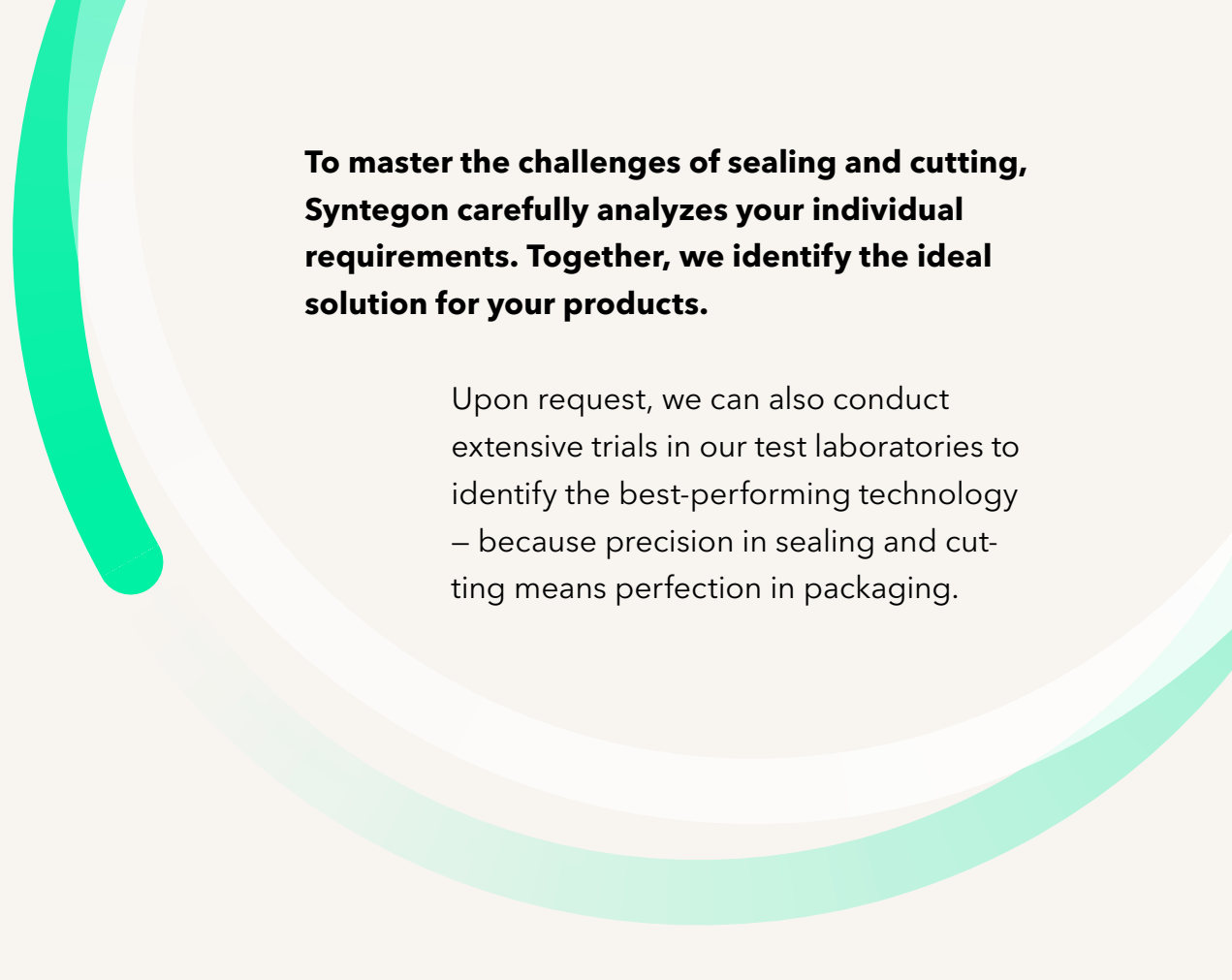


1

PRODUCT & FILM TEXTURE

A perfect match

Product characteristics and film properties must align to ensure smooth forming, secure seals, and consistent pack quality from the start.



To master the challenges of sealing and cutting, Syntegon carefully analyzes your individual requirements. Together, we identify the ideal solution for your products.

Upon request, we can also conduct extensive trials in our test laboratories to identify the best-performing technology – because precision in sealing and cutting means perfection in packaging.

Our solutions

Sealing and cutting are key processes in horizontal wrapping. Together, they make sure that each product is safely enclosed, protected from external influences, and presented with precision. The right technology not only enhances packaging quality but also ensures product safety and efficient machine performance.

2

SEALING

Sealing jaws and fin wheels

Reliable sealing depends on the right balance between temperature, pressure, sealing time, and film type. The sealing jaw creates a tight horizontal bond in the film. Syntegon offers optimized sealing technologies to ensure strong seals, long shelf life, and secure packaging solutions for your products.

3

CUTTING

Knives and anvils

After sealing, precise cutting of the film is essential for clean and consistent product separation. Syntegon offers a variety of cutting knives designed to meet diverse requirements – from standard cuts to specialized materials. Our goal is to ensure accuracy, durability, and smooth operation in every step of the packaging process.

Fin wheels

There is no way around fin wheels when it comes to forming a tube in horizontal flow wrappers

A fin wheel in a horizontal flow wrapper transports and seals the packaging film. While the film forms a tube around the product, the fin wheel presses and heats the overlapping film edges to create a continuous, longitudinal fin seal. It ensures even film tension, precise guidance, and an airtight, reliable seal as the product passes through the packaging process.

Fin wheel materials

Highly durable stainless steel for lasting reliability

Our advanced stainless steel delivers exceptional resistance to wear and damage on sealing surfaces, ensuring long-term performance. With its inherent protection against rust and corrosion, it eliminates the need for additional plating – providing durability you can trust.

Dura-Therm for even better thermal performance

Dura-Therm ensures smooth, consistent, and highly responsive heat transfer for optimal efficiency. Its built-in corrosion resistance eliminates the need for additional plating – delivering dependable performance and long-lasting protection of your fin wheels.

The fin wheels ensure

- Constant film transport with synchronized peripheral speed to avoid film slippage or wrinkles
- Stable longitudinal seal integrity by maintaining uniform temperature, pressure, and dwell time
- Accurate film guidance to keep the overlap aligned before it enters the crimp or rotary side-seal mechanism
- Continuous sealing during product flow without interrupting the packaging process
- Usage of specific material pairings for increased sealing quality

Sealing jaws / crimpers

Sealing jaws are essential for producing reliable transverse seals in horizontal flow wrappers

Sealing jaws in a horizontal flow wrapper create the transverse (end) seals of the package. While the product moves continuously through the machine, the jaws clamp the film, apply heat or pressure, and form a secure, hermetic end seal. They ensure consistent sealing temperature, uniform pressure distribution, and precise timing to maintain package integrity, prevent leakage, and support high-speed operation. Some sealing jaws use special coating to extend service lifetime.

Sealing jaw shapes and materials

Highly durable stainless steel for lasting reliability

Our advanced stainless steel delivers exceptional resistance to wear and damage on sealing surfaces, ensuring long-term performance. With its inherent protection against rust and corrosion, it eliminates the need for additional plating - providing durability you can trust.

Highly durable stainless steel with coating for even longer-lasting reliability

In addition to the coating, we are also able to harden the parts to make them even more resistant.



The sealing jaws ensure

- Reliable seal formation by applying consistent pressure and heat to create strong, leak-proof seals
- Precise alignment to maintain the correct positioning of film or packaging material for uniform sealing even across multiple film areas and film thicknesses
- Consistent dwell time to hold the material for the required duration and achieve optimal seal integrity
- Continuous operation for seamless processes within the packaging line without interrupting product flow

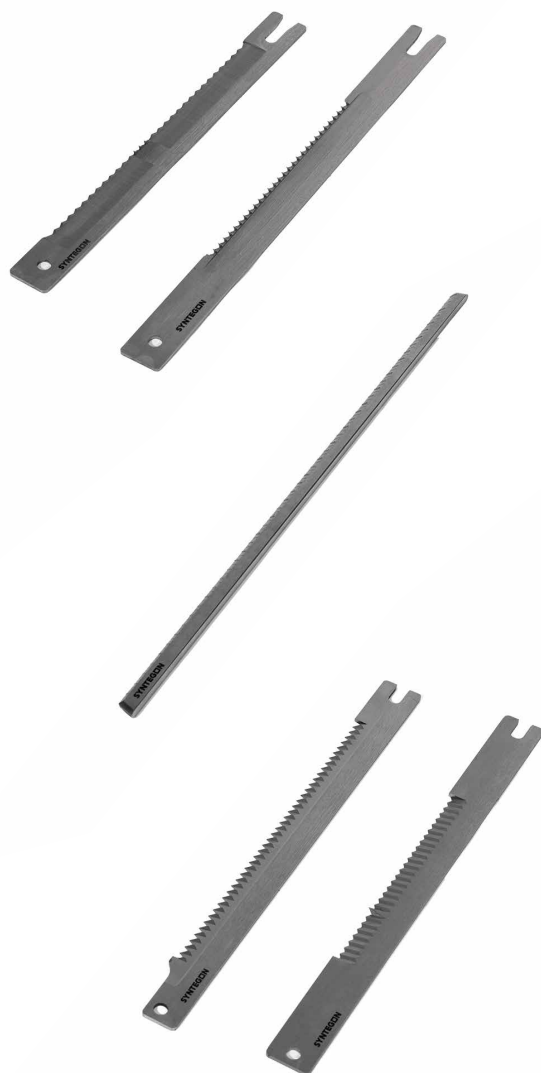
Knives

Knives make sure that finished packs are cut and discharged individually and precisely

Knives in a horizontal flow wrapper cut the sealed film between consecutive packages to separate individual products. While the film and product move continuously through the machine, the knives operate in precise synchronization with the sealing jaws to deliver clean and accurate cuts. They ensure reliable cutting performance, minimal film waste, and consistent package length at high production speeds. Most knives are made from hardened steel to optimize their lifetime.

The knives ensure

- Clean and precise cuts for a sharp, accurate separation between packages without tearing or film fraying
- Accurate synchronization for perfectly aligned operations with film feed and sealing jaws to maintain uniform package spacing
- Continuous operation to enable smooth cutting during product flow, ensuring uninterrupted packaging performance

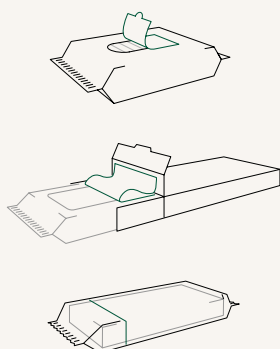




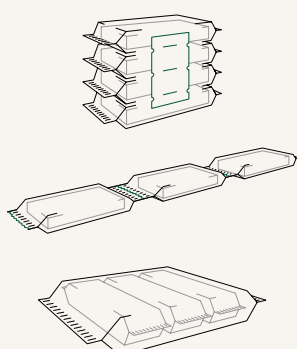
One packaging style - many versions

Whether crackers, cookies, or granola bars, products require an attractive and user-friendly presentation. The packaging materials and package design must be ideally matched. A large number of designs are possible, depending on requirements - from simple flow wraps, to hermetically sealed packs for special products or climate zones, to flow wraps with Euro holes that can be hung on racks, and many other options.

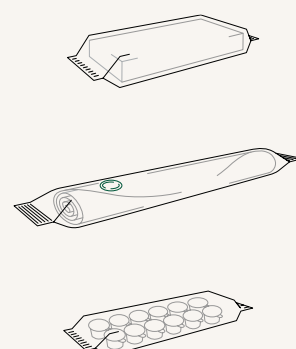
Packs with opening aids



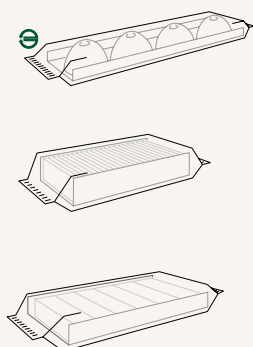
Multi packs



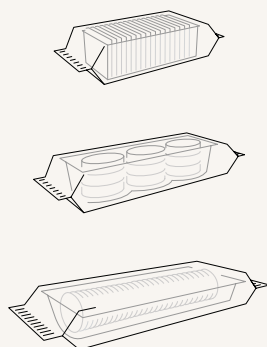
Hermetically sealed packs



Flow wraps with carton tray



Trays in flow wraps - on edge or stacked



Fin end options

Gusseted with
longitudinal grooving



Gusseted with cross
grooving



Not gusseted with
longitudinal grooving



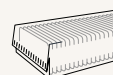
Not gusseted with
cross grooving



Not gusseted with
Euro hole



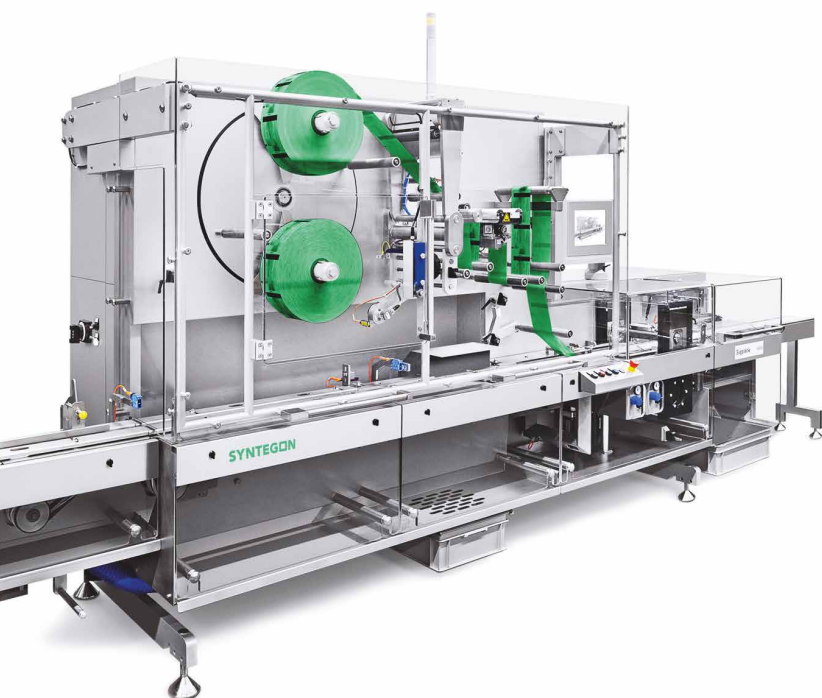
Folded and sealed
fin ends



Professional support

We assist you in staying ahead of new requirements

Our comprehensive support goes beyond technical assistance – it's a partnership built on performance, reliability, and innovation. We help you stay ahead of changing requirements with expert guidance, cutting-edge sealing solutions, and hands-on technical support. From concept to production and throughout the entire machine lifecycle, we ensure your processes run smoothly, efficiently, and at the highest quality level.



Technical production support

We are your partner for the development of a sealing system that perfectly matches your requirements.

Lifecycle machine support

We keep your machines up and running throughout their lifecycle with the best technical support to optimize running time, pressure, and tolerances.

Technical change support

When your packaging material or product changes, we're ready to adapt. As your trusted partner, we develop new and optimized sealing solutions that ensure consistent performance and packaging quality – perfectly tailored to your updated requirements.

COCREATE. COSUCCEED.



Seamless Processes

We help build better businesses.

With a deep understanding of our customers' businesses and a holistic approach to solutions, we help them unlock their full potential by enhancing productivity and reliability - through greater efficiency, fewer interfaces, and seamless integration of mission-critical processes into their operations.



Innovative Technologies

We enable customers to lead in their markets.

We leverage our deep engineering expertise to make a real difference to our customers' most critical operations, providing them with the most innovative and high-performance technology solutions on the market - solutions that create measurable value and drive competitive advantage.



Sustainable Solutions

We empower future-proof operations.

As a strategic partner, we stand alongside our customers to help them master tomorrow's challenges - supporting their sustainability goals, minimizing safety risk, safeguarding product integrity, and delivering services and added value throughout every stage of their system's lifecycle.

CO CREATE.
CO SUCCEED.