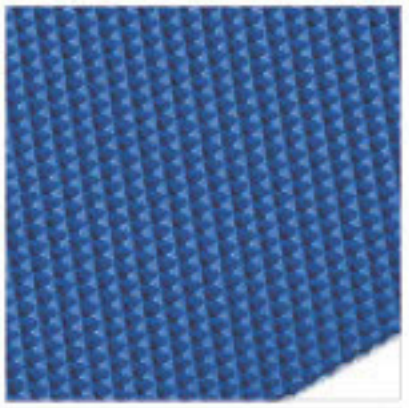
HabaFLOW® fabric-based conveyor belts



The right belt for every application
Habasit's conveyor belt selection includes hundreds of different belts to satisfy application requirements that range from straight-inclined or declined operations, to accumulation and diverters, to swan neck (Z) conveyors, and numerous others. We offer a wide variety of fabrics and cover materials, as well as structural conveying- and running-side patterns to optimize your system's performance.

Belt materials
The materials and designs are selected to cope with a broad range of application requirements, including resistance to wear or chemical agents, excellent release of sticky goods, and to high or low temperatures.

Belt design
Habasit HabaFLOW® conveyor and processing belts are generally made of different layers, with tensile strength provided by synthetic fabric plies. These fabrics are connected by layers of thermoplastic materials. The material, thickness and texture of the conveying side depend on the function of the belt.

Cover coatings are mainly made of thermoplastic materials like TPU, TPO, PVC, Silicone, and elastomers – or feature a fabric surface. The running side is usually a fabric, often impregnated with a thermoplastic material, or with special wear-resistant PUR that provides a low and constant coefficient of friction. There are also pulley-side fabrics characterized by special low-noise running capabilities.

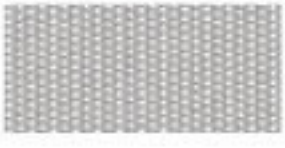
Many accessories
Guides, cleats and side walls, as well as egde sealing are common fabrication measures applied to conveyor and processing belts. While V-shaped profiles are mostly attached to the running side as guides, various cleat designs can be welded or bonded to the conveying side to ensure proper horizontal or inclined transport. Side walls positioned close to the edges of the belt stop loose goods falling off. Edge sealing is a measure to improve the hygienic design of a coated food conveyor belt.

Surface structure
A well-designed belt surface supports both the secure transport of the goods conveyed as well as the process where the belt is employed. Careful selection is essential in order to find the right belt for each conveying or processing application. The belt surface plays a key role in meeting each specific process step or function.

Selection of surface structures

Blank, smooth white

Blank, smooth blue



Fabric surface

Waffle structure

Quadrillé (quadrangular) pattern/structure

Saw tooth profile structure

HabaFLOW® fabric-based conveyor belts

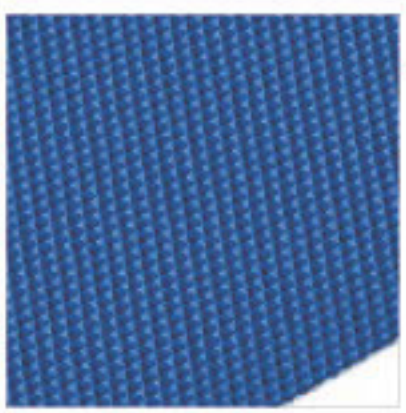
Fabric-based belts

Key features	Your benefits
• Wide range of surface types, structures, belt strengths and special features available	• Selection of the most suitable belt for specific applications like feeding, accumulation, releasing, metal detection, check weighing, etc.
• Full compliance with food regulations such as FDA and USDA (US), EU Directive (Europe), etc.	• Comply with food safety regulations, especially for processing and packaging of sensitive goods
• Excellent adoptability of special fabrications such as profiles, side walls, marking, tracking guide, edge sealing, etc.	• Meet the technical requirements for applications like pick and place • Proper belt tracking • No stringing prevents contamination

TPU coated belts

Key features	Your benefits
• Abrasion and temperature resistant coatings	• Reliable performance • Long belt service life • Able to handle elevated temperatures (100° C)
• Good chemical resistance	• Ability to clean with common food contact surface detergents
• Homogeneous surfaces due to calander-coating technology	• Improved hygiene conditions • Good release of goods

TPO coated belts



Key features	Your benefits
• Non-polar surface	• Excellent release of sticky products • Reduced waste in production • Yield increase
• Excellent chemical resistance	• Increased lifetime in applications that require frequent cleaning
• Unique belt carcass made of spun and knitted fabric	• Reduced mechanical shrinkage – long and reliable service life • Wear resistant edges – reduced fraying tendency

PVC coated belts

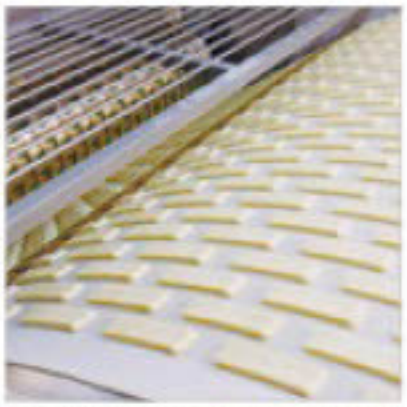
Key features	Your benefits
• Wide range of surface types, structures and belt strengths available	• Selection of the most suitable belt for specific applications like feeding, accumulation, general conveying, etc.
• Stable modulus of elasticity after running-in	• No re-tensioning required and reduced downtime possible, leading to easy maintenance
• Permanently antistatic belts available	• No interference with electronic devices • Less dust and dirt attraction • Process reliability

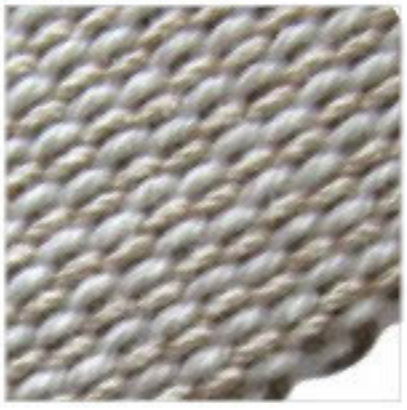
Silicone coated belts

Key features	Your benefits
• Easy release property of silicone-coated conveying side of the belt	• Easy release of delicate products and contaminated sticky residues from the belt, such as hot melt adhesive for flap sealing and labelling of cartons
• Excellent high- and low-temperature resistance	• Suitable for high-temperature film packing applications such as over-wrapping, shrink packaging, hot melt adhesive applications, etc.
• Full compliance with food regulations for the selected belts such as FDA and USDA (US), EU Directive (Europe), etc.	• Maintains the food safety required, especially for food packaging applications when necessary

Habasit rotary molder belts

The HRM (Habasit rotary molder) belts are in use at a wide array of biscuit manufacturers, featuring any kind of dough – from dry speculaas over Danish butter cookies and Scottish shortbread to Mediterranean Frollini.





Rotary molding is a key process in shaping biscuits
Engraved rollers are used to shape biscuits from dough. The rotary molder belt (also called the extraction web or brayband) extracts the raw biscuits from this roller supported by the forces of the extraction roller driving the belt.

Tight transfer to the next processing belt ensures biscuit shape integrity. A seamless belt is preferred over products with a join in order to achieve uniform extraction and continuous biscuit molding quality.

Common weave patterns
Seamless belts used in rotary molding are offered in three common weave patterns:

- Plain Weave – the versatile solution for most biscuits
- Herringbone Weave – the ultimate solution for most short and heavy doughs with demanding extraction needs
- Cross Twill Weave – an enlarged surface to handle larger biscuits or dough with a higher fat or moisture content

Natural fibers such as cotton are standard materials due to their excellent extraction behavior, based on the absorption of fat and moisture from the biscuit dough.

To improve service life Habasit rotary molder belts are made not only using cotton, but also with polyamide and linen fibers to add wear resistance and lateral stability to the extraction and release properties of cotton.

Key advantages of Habasit rotary molder belts

- Precise dense weaving provides uniform extraction over the entire surface
- The endless woven design with selvage belt edges delivers excellent tracking and strong protection against belt edge wear without compromising the extraction behavior of the belt edge

Rotary molder belts

Key features	Your benefits
• Truly endless (mechanical) woven • Various weaving combinations	• Tight fabric surfaces • Right belt design for specific dough • Long lifetime and reliable extraction
• Selvage edges	• Durable belt design • Reduced risk of product contamination

HabasitLINK® plastic modular belts

Advantageous in numerous applications
The modular belt is an aggregation of individual plastic modules made by high-precision injection molding and connected by lateral rods. Its robust design is optimized for efficient conveying and easy cleaning procedures.

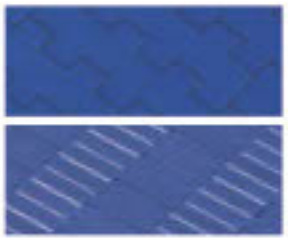
Plastic modular belts eliminate the need for high-tension systems by positively engaging the sprocket with the running belt and maintaining proper belt tracking. They are widely used in many industries, where their specific product features provide numerous benefits to our customers.

Materials
Habasit modular belts are available with a variety of state-of-the-art features, including special materials for: low friction, self-lubrication, chemical resistance, food-approved materials, as well as with antistatic, flame retardant, magnetic, detectable, electrically conductive, submersible, anti-microbial, special-impact, cut-resistant, high-temperature, and super high-temperature properties.

Sprockets and rods
Injection-molded sprockets have a specific open design that allows easy access for cleaning across the width of the conveyor shafts. Wear-resistant materials secure a long lifetime in all applications. The full-width rods ensure belt connection and lateral stiffness. HabasitLINK® modular belts come with two rod solutions, depending on the belt type: Smart Fit and Snap Fit.

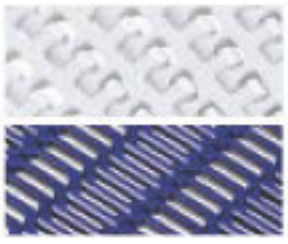
Accessories
Habasit offers a wide range of modular belt accessories including cleats, flights, scoops, side guards, finger transfer plates, and hold-down tabs for elevators with back bending (Z-conveyors), as well as HabiPLAST™ guide rails.

Selection of surface structures



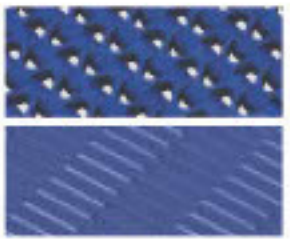
Flat Top

Micropitch Flat Top



Radius Flush Grid

Micropitch Flush Grid



Flush Grid

Micropitch Diamont Top

Key features	Your benefits
• Assembled in a brick-layered pattern connected with solid plastic rods	• High flexibility in terms of width and length, with lateral strength • Accessories such as flights, scoops and side walls can be placed as required
• Positive drive and tracking system by engaging the belt with sprockets	• No need for high tensioning systems; maintains proper belt tracking alignment
• Various types of materials available	• Belts for elevated temperature, proofing, cooling, freezing and for spiral systems • Good release and yield increase
• Quick installation and easy maintenance	• Easy belt installation and maintenance with minimum downtime

HabaCHAIN® slat and conveyor chains

Designed, produced, and serviced by the worldwide leader in belting, the HabaCHAIN® range offers top-class innovation and quality combined with excellent reliability and cost-efficiency. HabaCHAIN® products are available in both straight-running and radius/side-flexing versions, and run on most systems and sprockets on the market today. They are fully compatible with industry standards, making them ideal for retrofitting.
The chain elements are high-precision injection-molded single plastic parts linked to each other with pins. These run engaged over sprockets and idlers on profile guides. Selected chain elements are available in stainless steel.

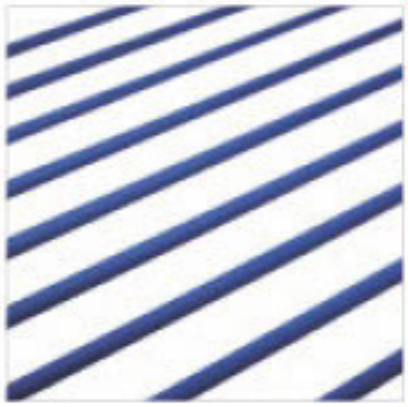
Accessories
The accessories range includes: inserts to increase friction between product and chain, "bakery bends" for smooth lateral product transfer, stainless steel attachments, extended pins or half-round pushers, and much more.

Key features	Your benefits
• High tensile strength	• Reduces downtime while maximizing conveyor layout
• Low-friction material available	• Excellent for high-speed applications on various packaging machines
• Bevel edges and high-friction inserts	• Product stability over multiple strand conveying, enabling unique product conveying solutions
• Wide range of specialty materials available	• Coverage for all food and packaging application requirements

Habiblue round belts

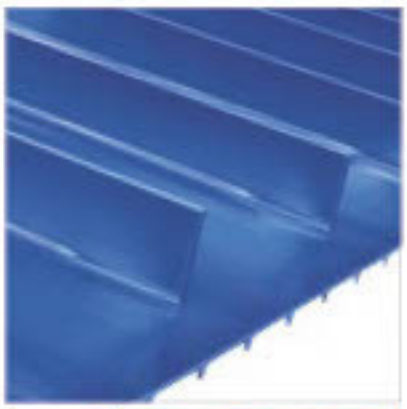
Habasit round belts are highly flexible, directionally adjustable, and multi-directional for angular gears. They can be used for both conveying and driving applications. As a result of their elasticity, round belts can be installed without a tensioning device. This allows compact machine designs. In addition, the elasticity acts as a security element by reducing shocks in case of brief overloads.

Round belts are highly resilient and their physical and chemical characteristics are exceptional in many areas: their resistance to hydrolysis is significantly superior to that of most existing polyurethane elastomers. As a result, Habasit round belts are resistant to water, oils, grease and benzine.



Key features	Your benefits
• Excellent abrasion resistance and constant coefficient of friction	• Good for gentle handling of the conveyed products required by many packaging machines
• Smooth surface of the belt	• Easy release of wrapping materials such as plastic film and foil, avoiding wrapping material sticking to the belt
• Excellent oil resistance	• Good for continuous use of the belt even when oily foodstuffs such as meat and poultry are conveyed for packaging
• Simple, fast and adhesive-free joining method (quick melt)	• Easy handling of belt replacement without disassembling the packaging machine, enabling machine downtime to be dramatically reduced

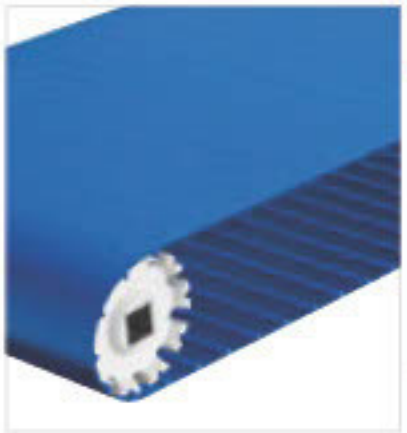
Habasit® Cleandrive positive drive belts



While belts play a key role in many production processes, in the food industry, the hygiene properties of the belts used are absolutely crucial. For specific applications in hygiene-sensitive areas, Habasit has developed a brand new belt concept: the Habasit® Cleandrive conveyor and processing belt.

Habasit® Cleandrive features a totally smooth conveying surface combined with a reverse side structure of lateral drive bars, which provide a positive fit to the sprockets.

High-quality thermoplastic material permits use in aggressive cleaning areas, while the closed surface minimizes the accumulation of waste and debris on the reverse side. Longitudinal reinforcement using high-tech cords ensures a long-term belt stability in the application. The positive engagement of Habasit® Cleandrive allows an energy-saving conveyor design, similar to plastic modular belt conveyors.

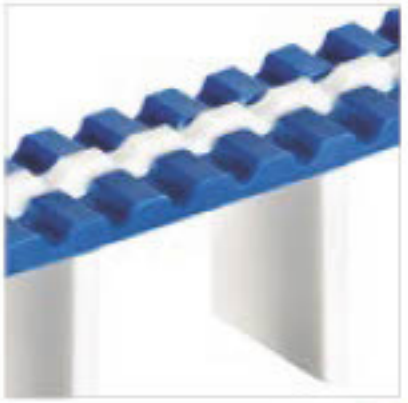


Key features	Your benefits
• High-tech fiber as tensile member	• No belt creep at load • Constant belt dimensions • Good tracking behavior
• Homogeneous, closed and smooth surface	• No traps or hinges to clamp product • Very easy and fast cleaning • Good product release • Increased yield and efficiency
• Good chemical resistance of thermoplastic material	• Cleaning agents cannot affect belt material • Reduced hygiene risks • Increased lifetime

HabaSYNC® timing belts

The demand for synchronized conveying has grown significantly over the past two decades. As machines moved faster and precision output became a greater engineering challenge, it was obvious that no conveying solutions existed to reliably and cost-effectively meet customers' needs.

Profiles and tracking guides
Profiles, added with thermal-bonding processes or mechanical attachment, allow unique positioning and adjustment. Thermoplastic profiles are made in several ways: extrusion, injection molding or machining. The choice of profile sourcing depends on the shapes, dimensions and quantities required.



Covers
Habasit offers a broad selection of covers for our HabaSYNC® timing belts. Covers provide the friction needed to handle products so that they are correctly indexed and securely and effectively managed. Our covers are designed to cope with a wide variety of requirements and can thus guarantee reliable conveyance in every type of transport function and manufacturing application.

Selection of food approved covers

FAC-W / FAC-C

FAF

FAS / FAS-C

FSB-C

FAW / FAW-C

N5 Cone Top

Key features	Your benefits
• All pitches designed for precise synchronous conveying and linear movement	• Suitable for applications where exact positioning is required in the packaging machine
• Selection of special fabrications such as covers, profiles, tracking guides, machining modifications, etc.	• Enables highly custom-engineered timing belts according to specific requirements
• Ease of on-site joining by specially designed joining press machine and hinge joint system	• Enables belt installation and replacement without disassembling the packaging machines, leading to reduced downtimes and costs