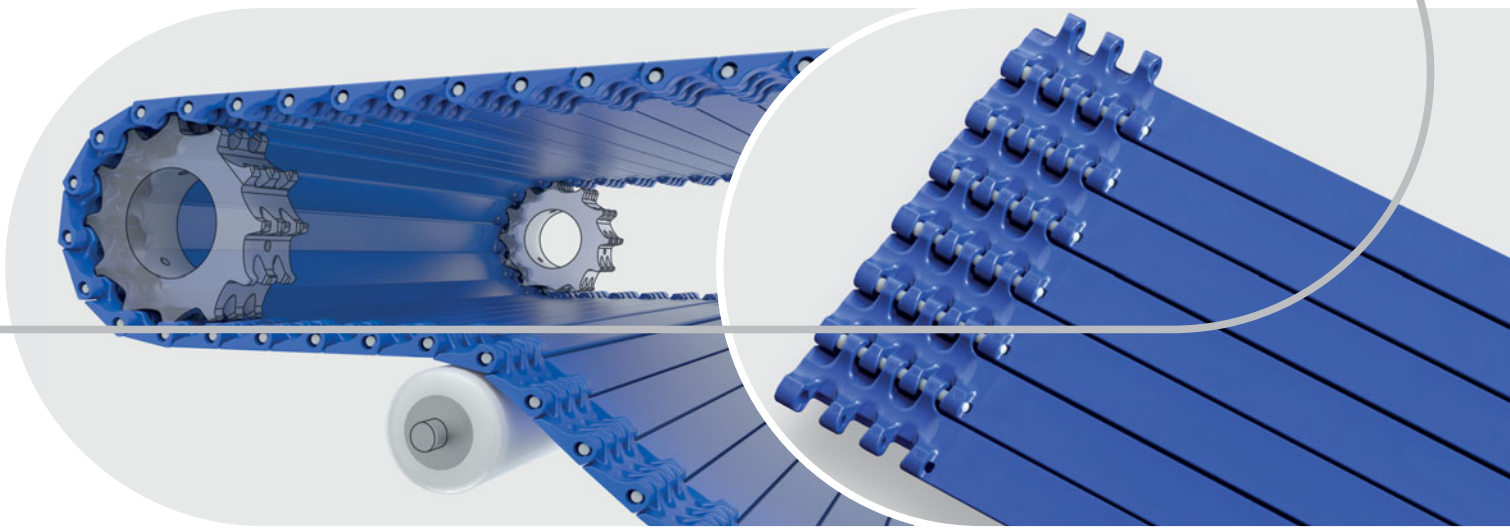


Super HyCLEAN® Modular Belting Range

The future of Hygiene is Now



Super HyCLEAN® is a brand new concept in the HabasitLINK® plastic modular belting range.

The Super HyCLEAN® products have been designed for applications where the highest hygienic standards are required, with special focus on poultry and fish processing.

The innovative hygienic design reduces the deposit of organic debris and, at the same time, it allows quick, easy and efficient cleaning operations, thus reducing the overall sanitation costs and the risk of product cross-contamination.



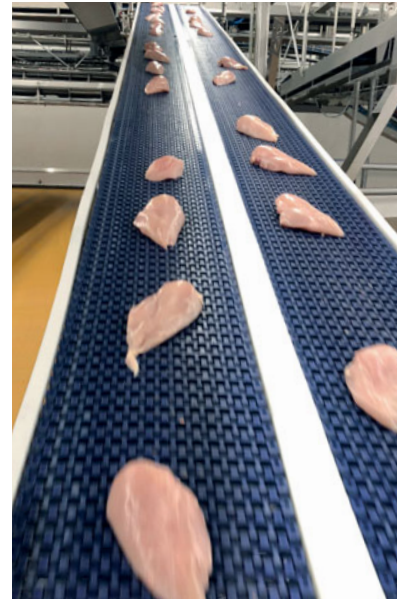
Winner of the International FoodTec Award 2021

Hygiene is the key point for most of the transformation processes in the food industry.

Processed food is continuously exposed to cross contamination originating from contact with the biofilm that grows and covers the surface of tools and production equipment. Biofilms contain colonies of fungi, molds, bacteria and other microorganisms harmful to health, which significantly reduce the fresh food shelf life. Intensive sanitation processes are frequently required to remove the contaminants from equipment and conveyor belts.

These sanitation practices:

- Result in high labor costs
- Consume high quantity of fresh water
- Use costly and non-environmental friendly cleaning agents
- Require expensive sewage treatment



The efficiency of cleaning practices is often compromised in the presence of complexly designed equipment and conveyor belts.

With specific reference to widely utilized plastic modular belts, corners, pockets and hinges are potential areas where bacteria can harbor.

Organic residues feed the bacteria colonies which increase the risk of product cross contamination.



The ultimate solution to significantly reduce the deposit of organic material and to efficiently sanitize plastic modular belts is to increase the flat surfaces improving the rinsing water flush away, and to minimize the quantity of hinges and rods.

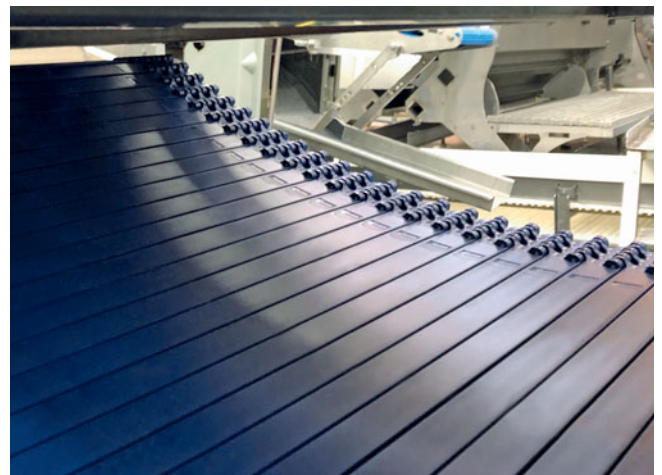
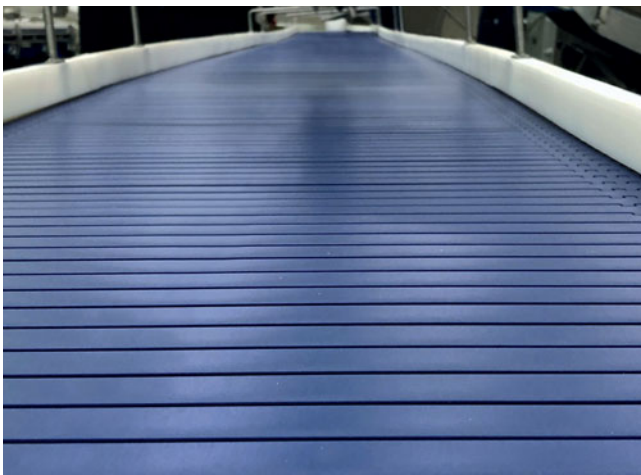
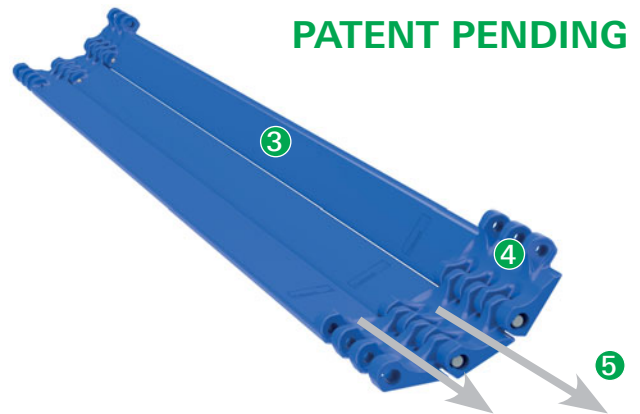
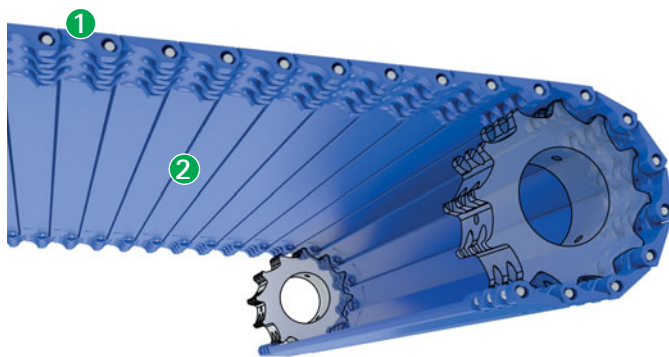
In this context, Habasit introduces the new **Super HyCLEAN[®]** belting range.

The new design removes most of the critical areas of potential debris accumulation.

| Features | Benefits |
|--|---|
| <ol style="list-style-type: none"> 1. Minimized usage of hinges and rods 2. Flat surfaces and minimal cavities in the rear part of the belt 3. Mold to Width modules - no gaps in-between modules 4. Dynamic open hinges 5. Easy lateral water flushing | <ul style="list-style-type: none"> • No pockets and corners that can trap contaminants • Less deposit of organic debris • Reduced risk of bacteria colony proliferation • Less risk of product cross contamination • Easier, quicker and cost effective sanitation |



Improved food safety
Lower sanitation costs
Longer product shelf life

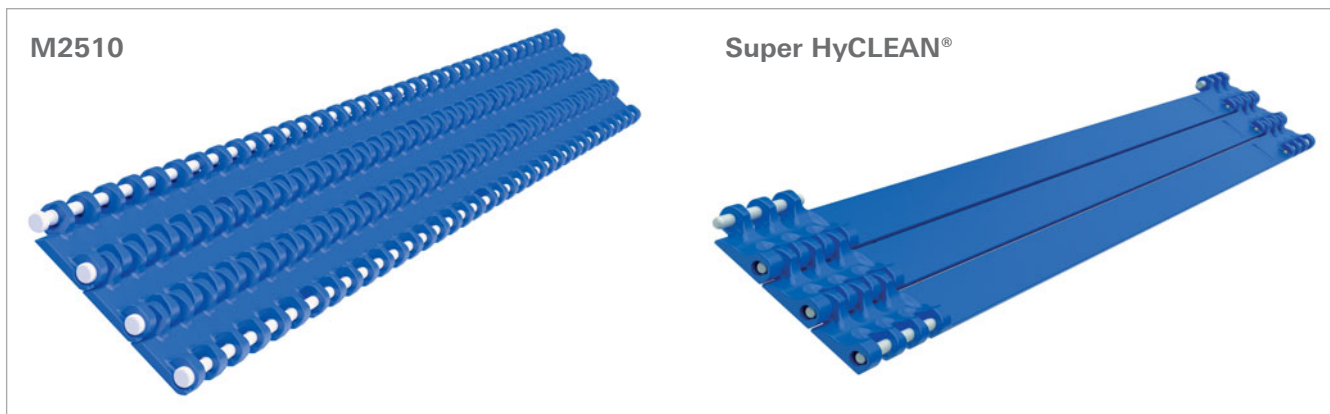


1 - Minimized usage of hinges and rods

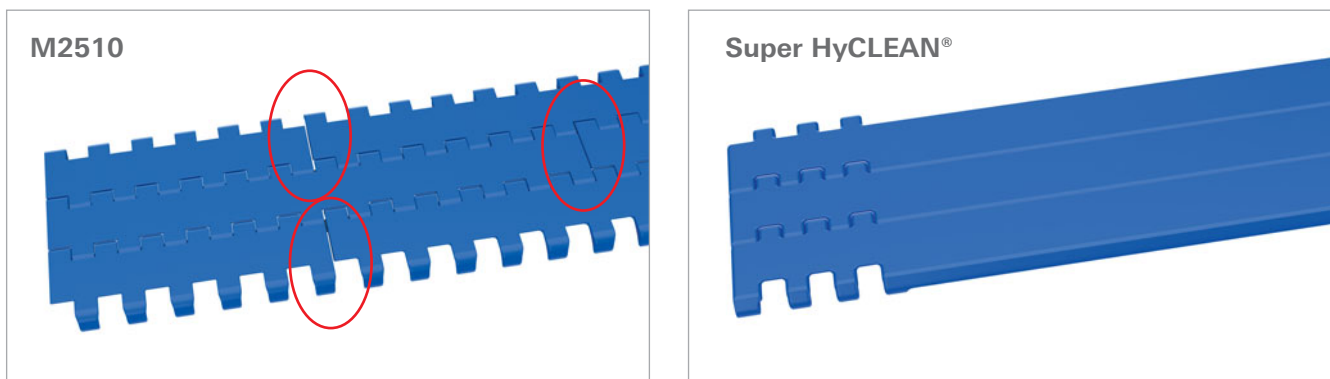
Hinges and rods have been reduced by 80% compared to a traditional modular belt (610mm/24" width). The total surface area of the Super HyCLEAN® belt has been consequently reduced by 33%.

2 - Flat surfaces and minimal cavities in the rear part of the belt

The complete absence of pockets and corners in the central section of the belt reduces the deposit of organic debris which is the main cause of bacteria colony proliferation.



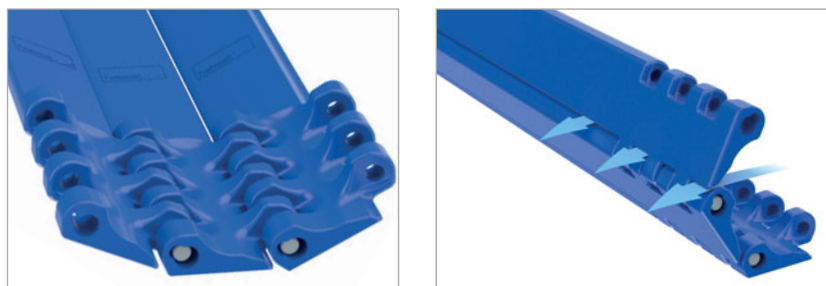
3 - Mold to width modules: no gaps in-between modules



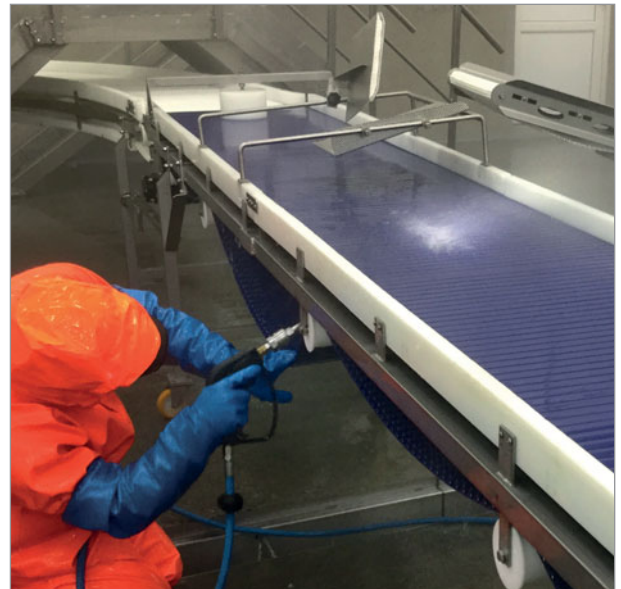
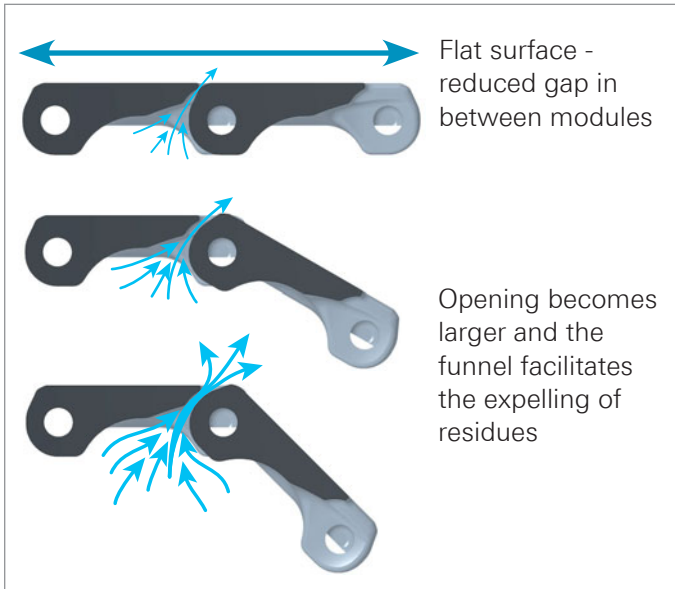
Super HyClean is always manufactured in a single solid mold-to-width module.

4 - Dynamic open hinges

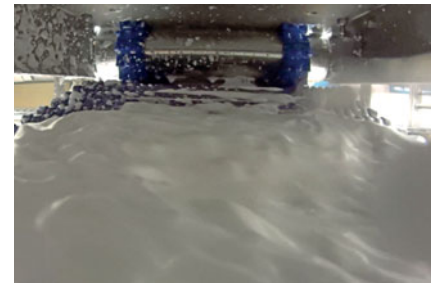
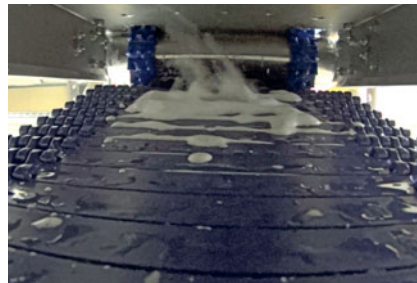
The brand new dynamic open hinge creates a robust structure to drive the belt with only two sprockets. At the same time, it allows the water flow to reach the hinges and the rods, facilitating product debris removal.



Even if the modules are nearly closed in a flat position, the belt design creates a funnel that helps the rinsing water to eject entrapped solid residues. Moreover, the belt rotation opens a wider gap in the belt surface that supports the cleaning water in pushing out any sort of debris.

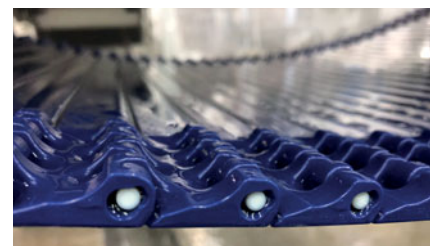


The openings between the consecutive modules allow the water and the sanitation foaming agents to pass through them and easily reach the underside of the belt.



5 – Easy lateral water flushing

The lateral opening of the hinges allows an easy water flush away.



Habasit is committed to supplying proven solutions that deliver real benefits to its customers.

To prove the benefit of its innovative design, the Super HyCLEAN® belt has been tested by a 3rd party independent research organization.

Tests were made to measure and compare the cleaning behavior of Super HyCLEAN® versus the main hygienic modular belts in the market.

A comparison was made in relation to resource utilization, through a reproduction of the real cleaning actions undertaken in the protein food industry, using an industrial robot with a spraying system.

The results returned outstanding performance of the new Super HyCLEAN® belt in comparison to the most common 1" plastic modular belts in the market, with time and rinsing water volume savings over 50%.

Cleaning Test

The tests have been designed to compare the cleanability performance of the bottom side of the five examined belts, which is the most critical area for sanitation.

All belting samples were contaminated with a meat-based soiling. Each of the samples then underwent an identical cleaning procedure.

The soiling included an UV-tracer which allows the detection of soil on the belt surface through a special camera.

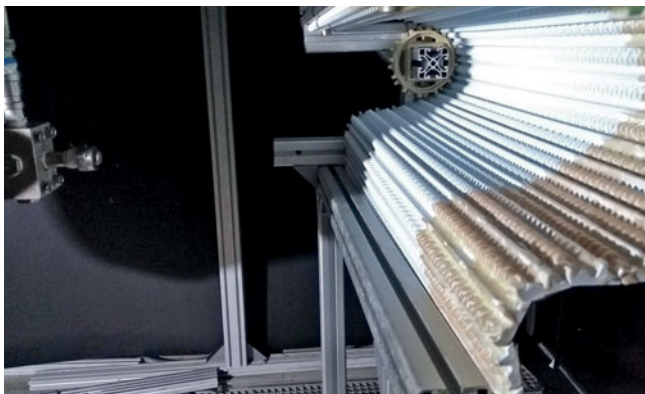


Habasit M2510



Habasit Super HyCLEAN®

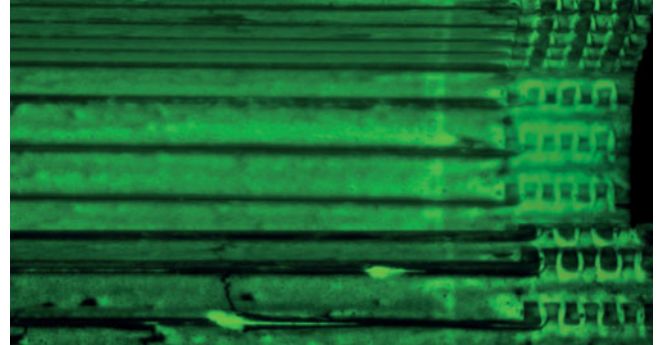
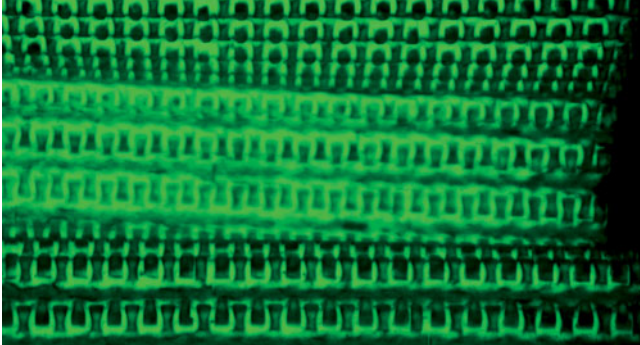
An automated nozzle was used to guarantee uniform foaming and repetitive rinsing.



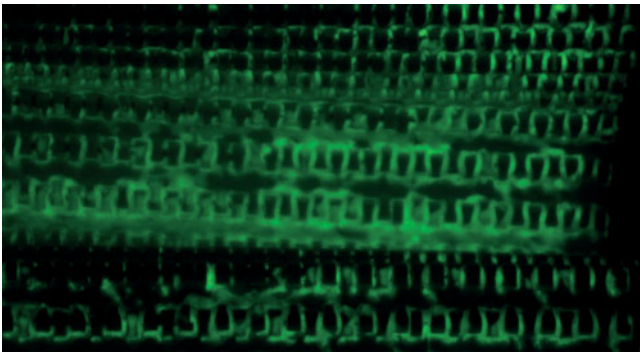
Habasit M2510

Habasit Super HyCLEAN®

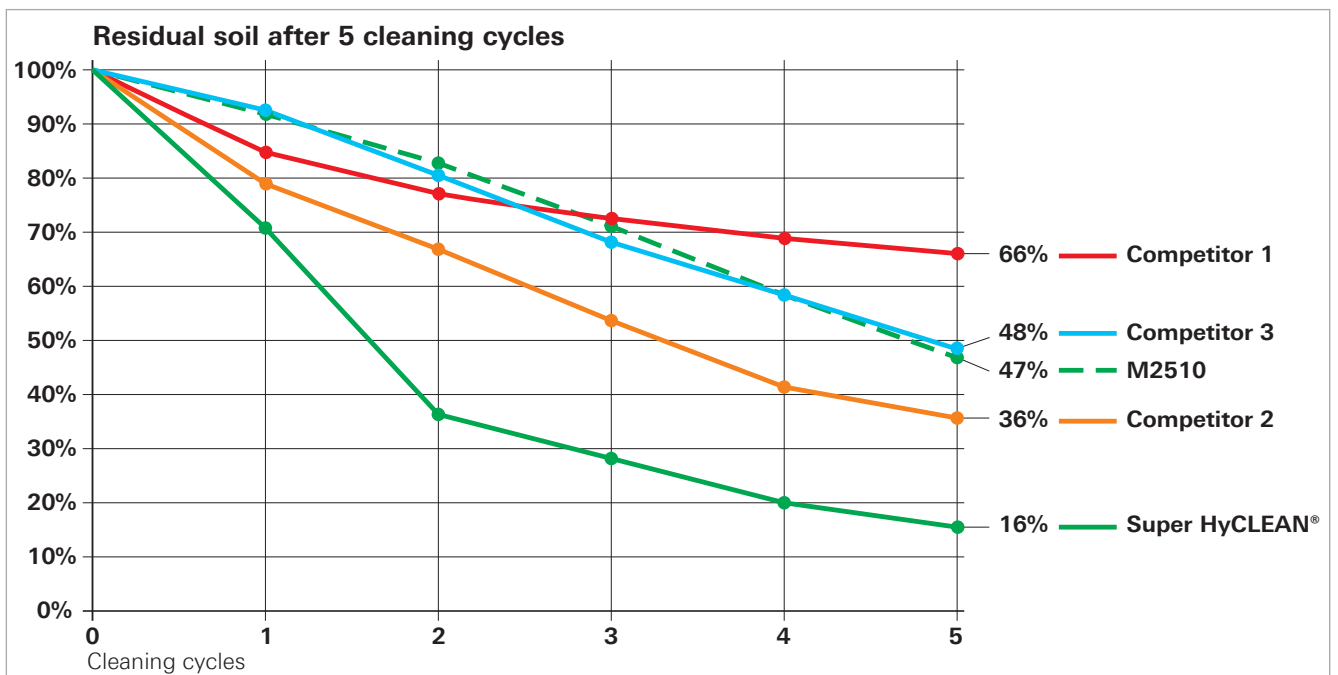
Fluorescent tracer detected by the cleaning sensor before rinsing.



Fluorescent tracer detected by the cleaning sensor after 5 rinsing cycles.



The Super HyCLEAN® belt traps less soil than all the other tested belts. With the same cleaning resources, after 5 rinsing cycles, the remaining soil on the Super HyCLEAN® belt is between **2.2 to 4.1 times lower** than the residual soil on the other tested belts.



Microbiological Test

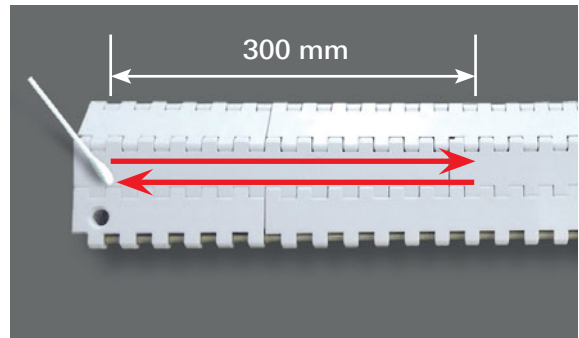
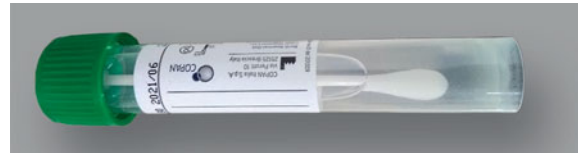
The microbiological test has been designed to measure the sanitation performance of the Super HyCLEAN® versus a standard hygienic modular belt (M2510 Flat Top).

Detection was run on the belt surface that is in direct contact with the processed food stuff.

Both samples were first disinfected and then contaminated with the same batch of meat soiling. Each sample was then rinsed using an identical procedure.

In a sterile environment, the samples have been swabbed along a 300 mm line on the top side of the belts. Swab contents have then been incubated for 36 hours at 30°C (86°F).

Finally, the CFU (Colony Forming Unit) counts indicate a much lower number of bacteria colonies on the Super HyCLEAN® in comparison to the standard modular belt M2510.



Habasit M2510

| Test 1 | Test 2 | Test 3 |
|------------------------------|--------|--------|
| | | |
| Number of bacteria colonies* | | |
| 108 | > 300 | 187 |

Habasit Super HyCLEAN®

| Test 1 | Test 2 | Test 3 |
|------------------------------|--------|--------|
| | | |
| Number of bacteria colonies* | | |
| 5 | 23 | 2 |

*Sampled on belt surfaces which were rinsed only, without final disinfection

The number of bacteria colonies on Super HyCLEAN® belt is, on average, around 1/20 of the number of bacteria colonies detected on the M2510 Flat Top 1".

Increased food safety: the Super HyCLEAN® hygienic design, without pockets and corners that can trap contaminants, reduces risk of bacteria colony proliferation, which are the main cause of product cross-contamination.

Improved cleanability: flat surfaces and minimized usage of hinges and rods make cleaning operations quicker and more cost effective: less water consumption, as well as labor cost and sewage treatment savings.

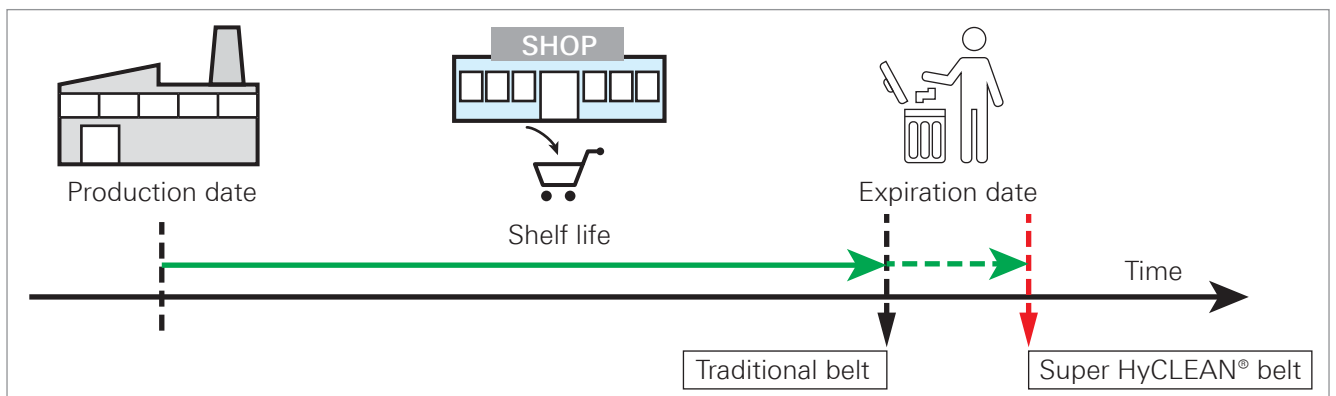
50% belt sanitation time reduction

Environment friendly: the Super HyCLEAN® hygienic design supports the reduction of fresh water and cleaning agents consumption, saving natural resources.

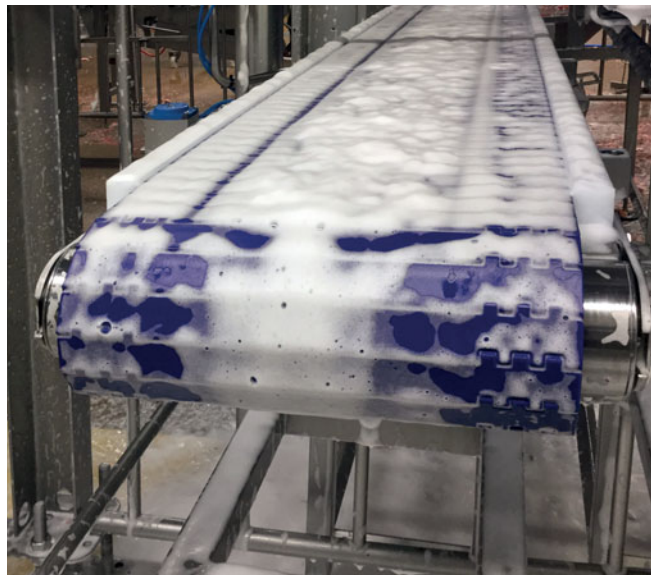
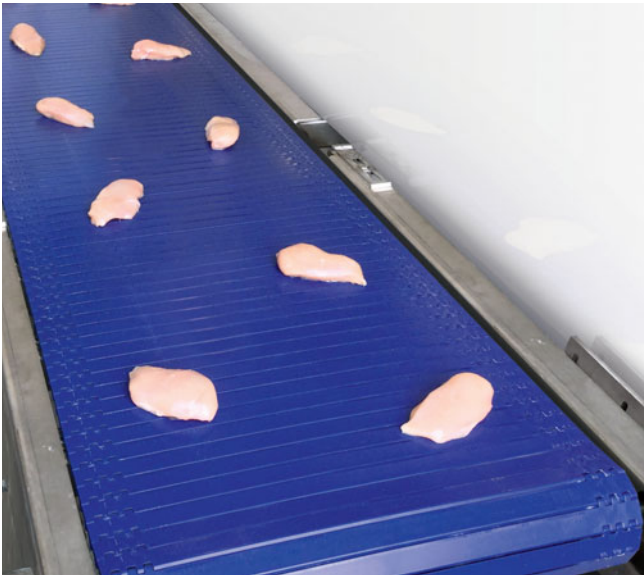
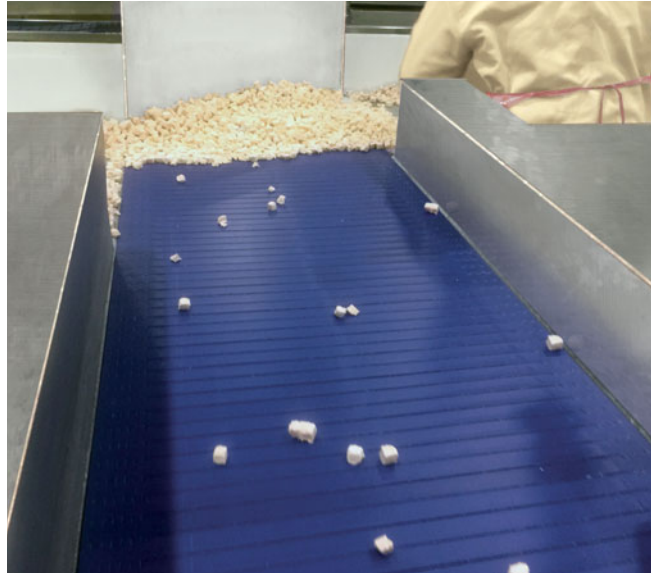
Enhanced shelf life: lower deposit of unhealthy residues and improved cleanability reduce cross contamination of the food stuffs, thus contributing to enhance the product's shelf life and, consequently, enhancing the likelihood of sale before expiry date.

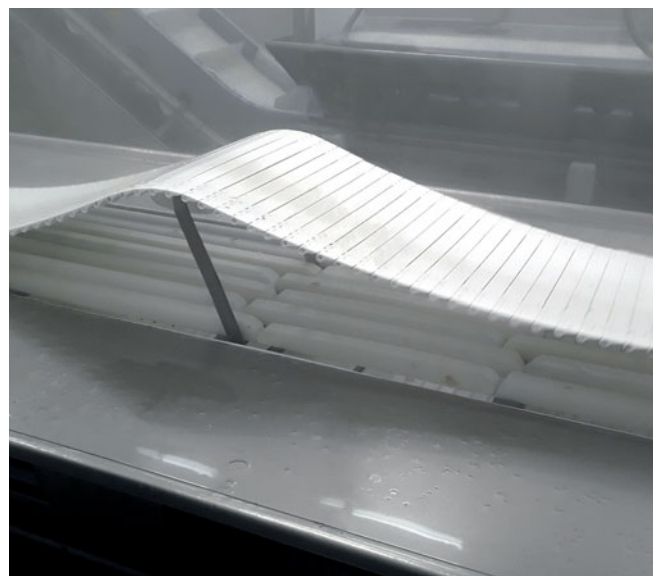


Fresh food shelf life depends on the residual bacterial charge on the product. Cross contamination coming from the conveyor belts is one of the main factors reducing the food shelf-life and compromising its organoleptic properties. The possibility to efficiently remove organic residues from the process belts can significantly extend the product shelf life.



Super HyCLEAN® belts, together with efficient sanitation protocols and hygienic conveyor design, contribute to enhanced product shelf life.

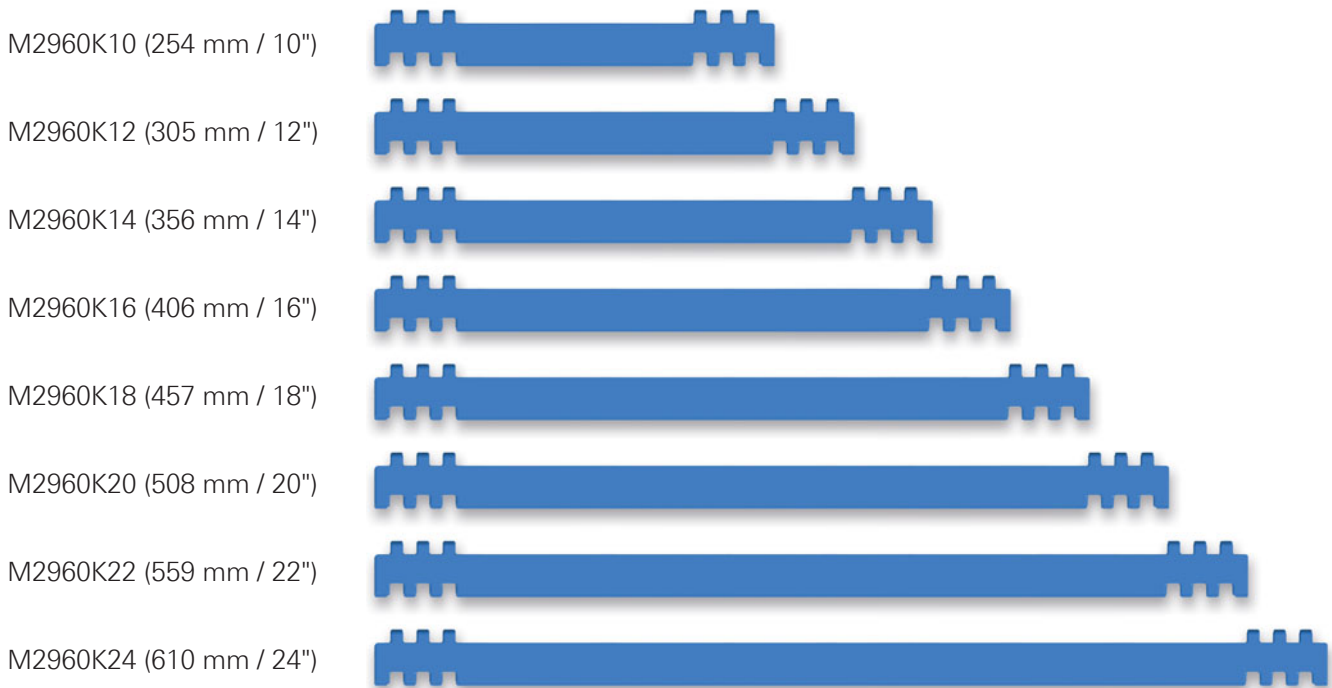
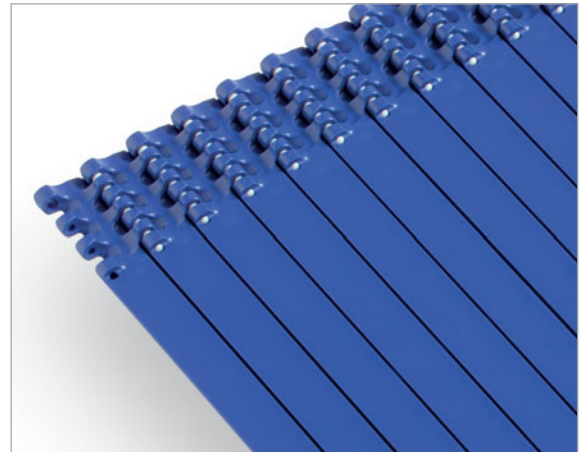




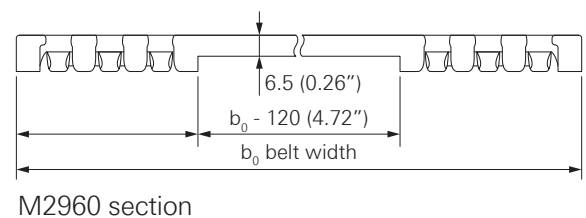
Belting

Super HyCLEAN® modular belt 1" pitch product range covers medium-light applications within the food industry.

Standard belts are made of white or blue POM with PBT rods. All materials are certified for contact with food.



| Pitch | Belt | Width | | Material | Color |
|-------|----------|-------|--------|----------|------------|
| | | mm | inches | | |
| 1" | M2960K10 | 254 | 10" | POM+JM | White/Blue |
| | M2960K12 | 305 | 12" | POM+JM | White/Blue |
| | M2960K14 | 356 | 14" | POM+JM | White/Blue |
| | M2960K16 | 406 | 16" | POM+JM | White/Blue |
| | M2960K18 | 457 | 18" | POM+JM | White/Blue |
| | M2960K20 | 508 | 20" | POM+JM | White/Blue |
| | M2960K22 | 559 | 22" | POM+JM | White/Blue |
| | M2960K24 | 610 | 24" | POM+JM | White/Blue |

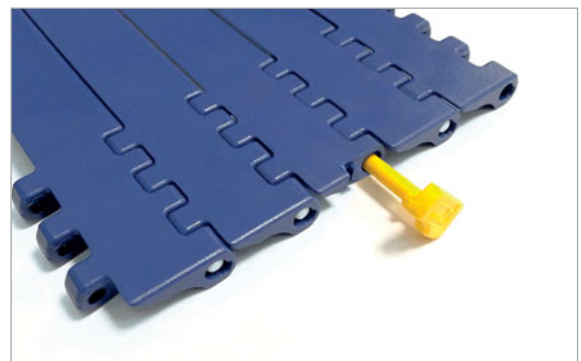


Saniclip

Habasit Saniclip is an innovative and patented device for quick belt assembly and easy belt sanitation.

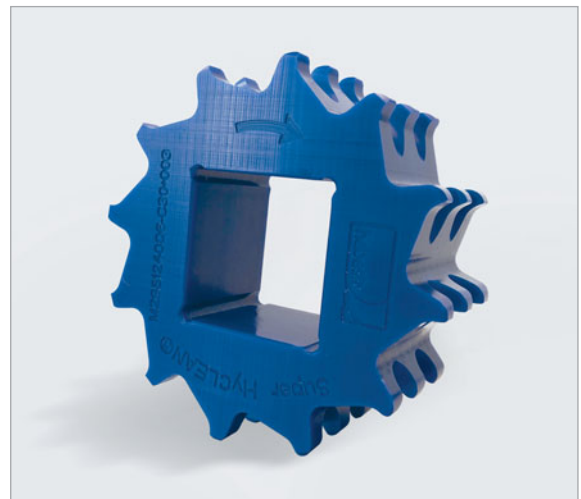
It allows simple rod installation and removal in applications where frequent belt sanitation is required. Multiple Habasit Saniclips can be installed in a single belt to allow easy opening at several locations.

- Extracted or installed in seconds
- No tools required
- Skilled personnel not required
- Reduced downtime
- Easy removal and installation in wet/fatty environments



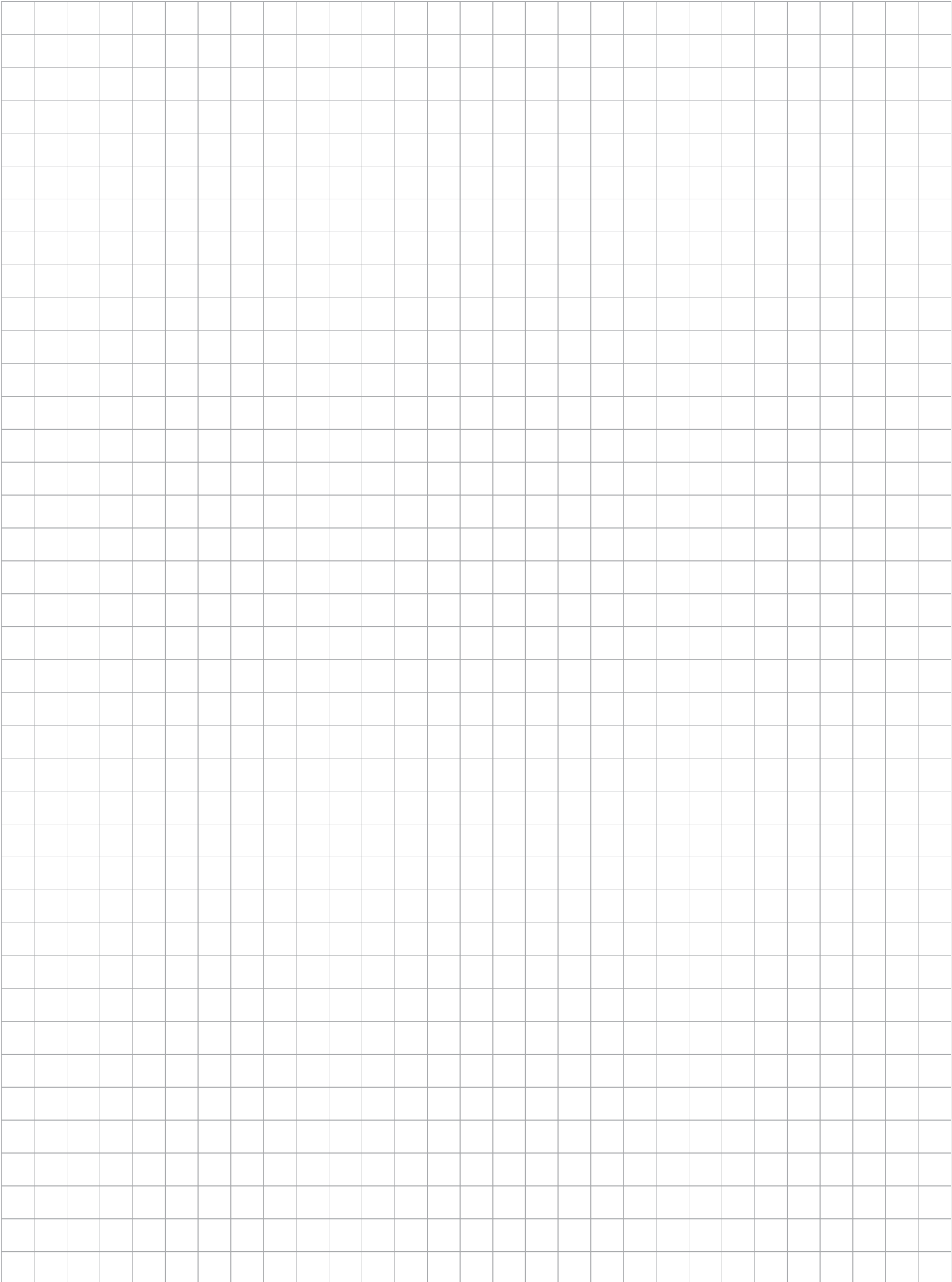
Sprockets

Sprockets are available in metric and imperial bore sizes. Standard sprockets are mono directional. Bidirectional sprockets are available on request. Sprockets are also available for use in combination with drum motors.



| Type | Teeth number | Bore Type | Bore dimension |
|--------------|--------------|--------------|----------------|
| Metric bores | 10 | Square | 40 |
| | 12 | Round/Keyway | 30 |
| | 12 | Square | 40 |
| | 15 | Round/Keyway | 30 |
| | 15 | Square | 40 |
| | 15 | Drum | 80 |
| | 18 | Round/Keyway | 30 |

| Type | Teeth number | Bore Type | Bore dimension |
|----------------|--------------|--------------|----------------|
| Imperial bores | 10 | Square | 1.5" |
| | 10 | Round/Keyway | 1" |
| | 12 | Square | 1.5" |
| | 12 | Round/Keyway | 1" |
| | 12 | Round/Keyway | 1" |







Comprehensive consulting and technical support

Profit from the best consulting and technical support in the lightweight belting industry. Local experts are always available to assist you with your belting needs. The Habasit team is proud to provide the highest levels of support, together with top-quality products that have led the global market for decades.



Belt selection and calculation assistance

We are always glad to help you select the most suitable belt for any application. We now also provide the free online tool 'SeleCalc' that makes it easy to make selections and calculations yourself. Simply register online at selecalc.habasit.com.



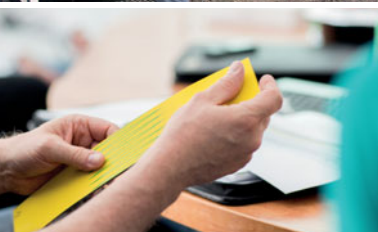
Fabrication, assembly and local installation services

As a full-service belting provider, we offer joining and assembly services either at our own locations or directly on your equipment.



Habasit has over 30 affiliates worldwide, each with its own inventory, fabrication, assembly and service facilities.

Together with representative offices and numerous qualified distributors, we can react quickly and efficiently to meet all your needs.



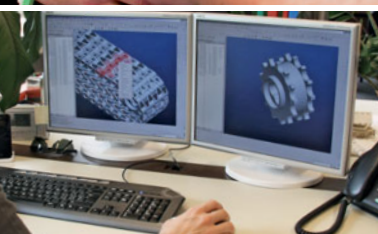
Customer training programs

To ensure the optimal performance and maximum lifespan of all our products, we offer training programs and various support tools. These include procedures for fabrication, installation, assembly, maintenance and belt repair, all of which take place at a Habasit site or at your location.



Belt monitoring, inspections, analyses and process optimization proposals

We organize and handle belt maintenance, inspections, analyses and surveys at customer sites. Upon request, we are ready to develop optimization proposals to ensure you're getting maximum value from your machinery and process output.



Design assistance for customized solutions

Habasit believes in building partnerships with our customers. Our engineering team will work closely with your engineers on joint design developments from initial design to final implementation. This expert service can be invaluable for projects involving new technologies or large-scale modifications and adaptations.

Information provided herein does not constitute legal representations or warranties and may change without notice. Please refer to the specifications/disclaimers provided in the respective product data sheets.

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