

Meat and Poultry
Habasit Belts
for the Processing of
Meat and Poultry







# Introduction Contents

### Innovation is a key word at Habasit

Industrial food processing requires a wide range of conveyor and processing belts. Habasit has developed an extensive variety of solutions that allow customers to choose the best product for their application. Special focus of all developments is on increasing hygiene standards in the food industry. Habasit's food conveyor and processing belts outstanding surface quality is due to the calendar coating. Industry know-how, a complete product range, the introduction of new coating materials and a unique product construction enable Habasit to offer products that comply with HACCP principles and guarantee trouble-free and safe food production. Beyond this, to provide additional safety, Habasit has recently introduced unique products such as **HabasitLINK**® plastic modular belts, HySAN oil and fat resistant

food PVC conveyor belts, HyGUARD® and HabaGUARD® conveyor belts containing antimicrobial additives and Cleanline® food belts coated with a modified polyolefin (Habilene®) and, to complete the range the well known and established Habasit TPU coated food belts.

Habasit is the only belt supplier who manufactures and offers the full package of fabric based belts and plastic modular belts.

In addition we offer accessories like cleats, edge-sealing profiles and side-walls.

### More than 50 years of experience

With a comprehensive global network, Habasit is able to respond to any request that you may have with nothing less than an outstanding belting solution of highest quality, tailored to your specific needs.

### Focus on meat and poultry processing

Whether slaughtering, cutting, deboning, weighing, grading, portioning, shrink-wrapping, labeling or packaging, Habasit offers a complete product range for the meat and poultry industry.

This includes all kind of fabric belts and modular belts. Habasit applies several coatings in order to achieve a defined surface finish.

Customers can choose the well known HabasitLINK® modular belts, high quality TPU, cost efficient HySAN food PVC belts or most modern materials, such as TPO Habilene® coating, a modified polyolefin coating from the new Cleanline® range.

### Your manufacturing processes

See multiple uses of Habasit food conveyor and processing belts for:

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- Slaughtering
- Primary processing
- Further processing
- Sausage making

These processes are just samples – Habasit belts can be used in all steps of meat and poultry manufacturing.

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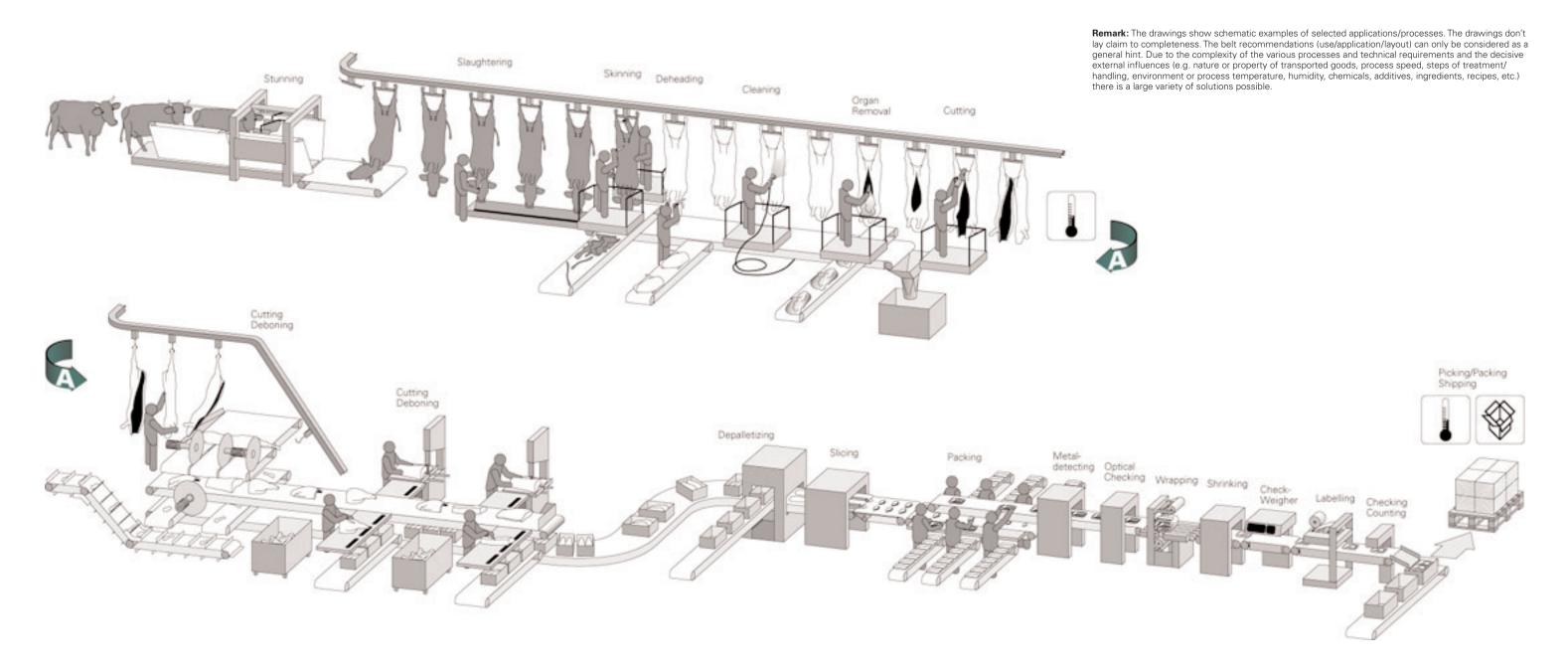






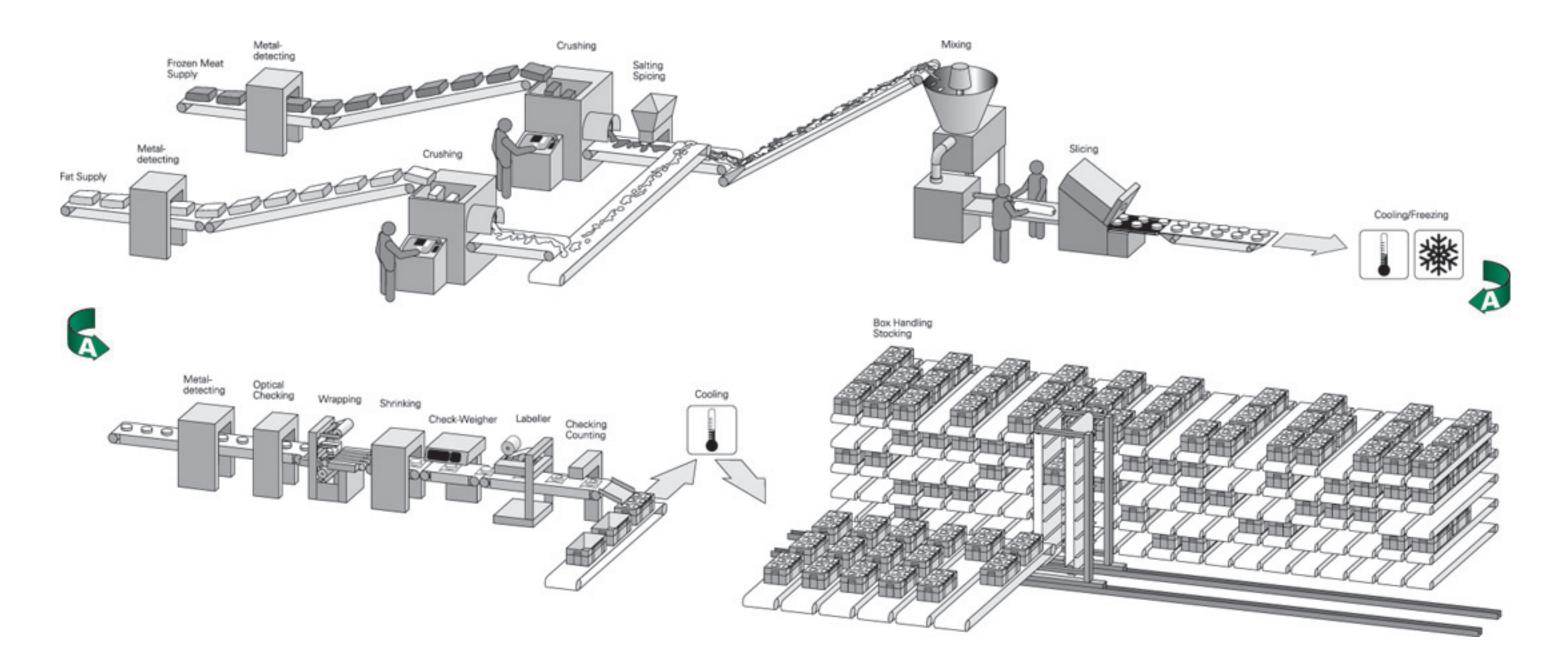
## Slaughtering • Primary processing • Further processing • Packaging





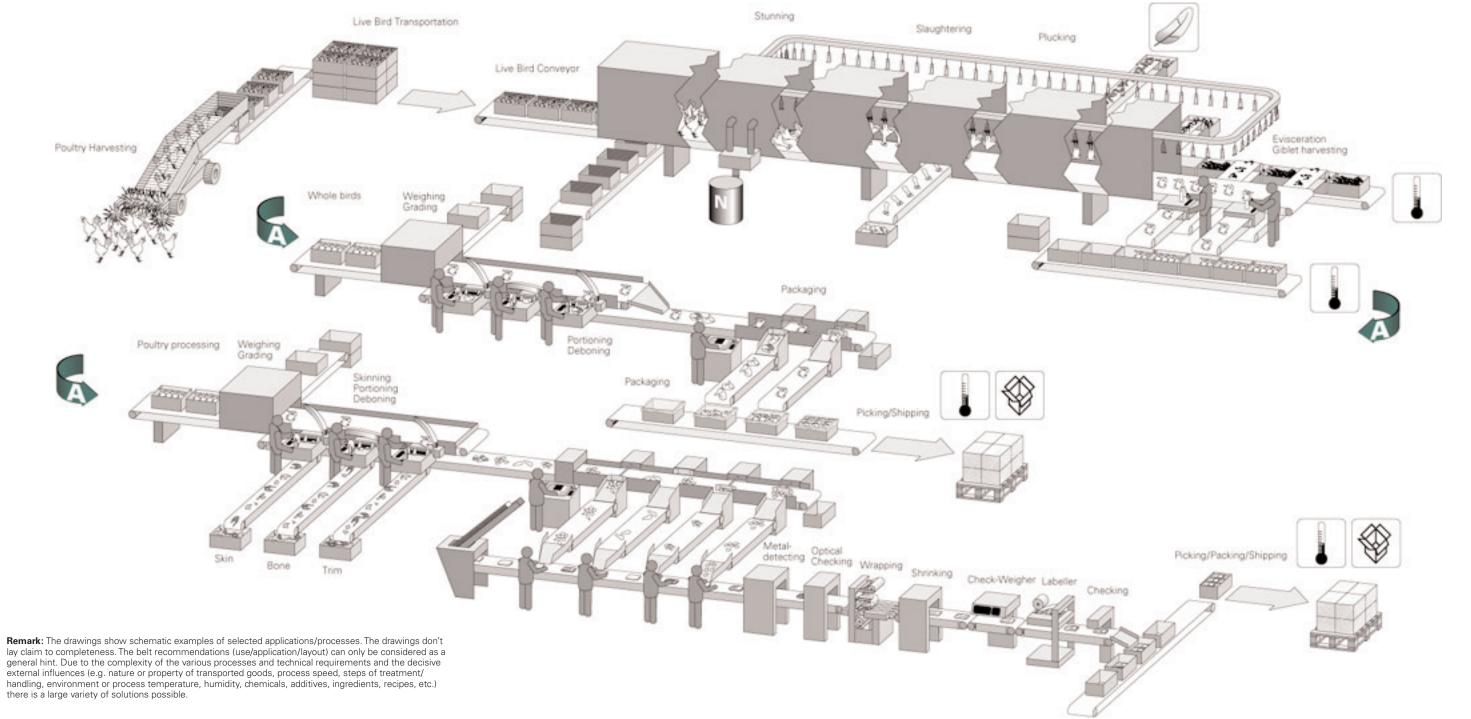
## Further processes • Sausage manufacturing





## Slaughtering • Primary processing • Further processing • Packaging



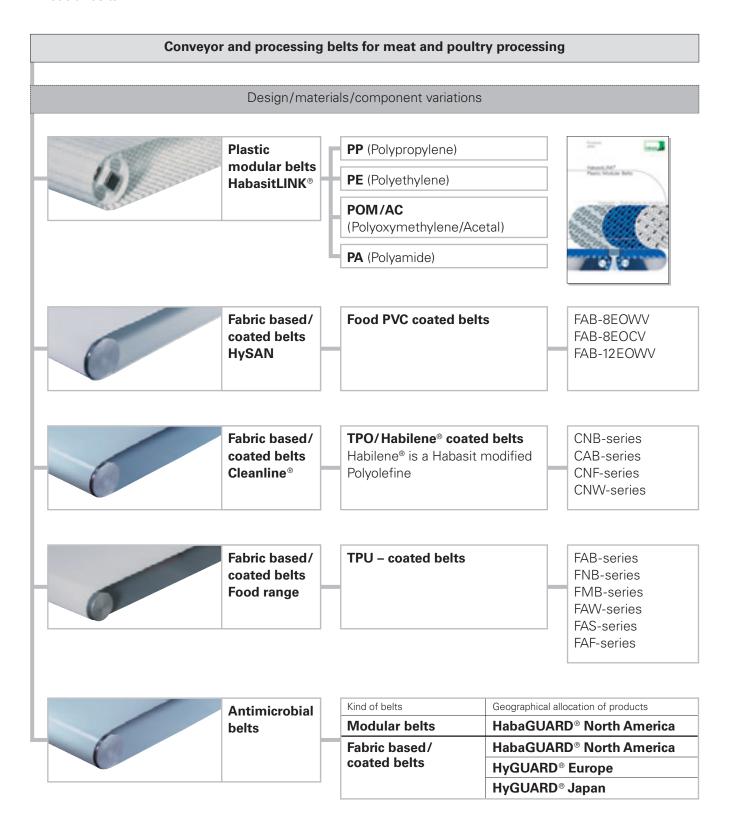


## Variety of belt surface structures/styles (selection only)

### The right choice

Habasit has developed an extensive variety of solutions that allow customers to choose the best belting product for their specific application.

Habasit is the only belt supplier who manufactures and offers the full package of fabric based belts and plastic modular belts.



### Belt surface or style function

To fulfill a specific process step or a defined function the belt surface/style plays a key role. Based on the surface structure/style and the material inherent properties a multitude of function possibilities are given. Following is a selection of the available varieties of belt surface structures/styles and properties.

Pictures: Product view from above and bird's view (running direction from left to right).

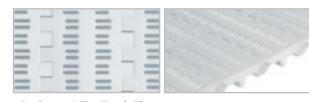
### Plastic modular belt styles



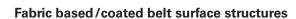
Flat Top (2")



Cone Top (2")



Perforated Flat Top (2")





Blank/smooth surface

Super adhesive, adhesive, medium adhesive

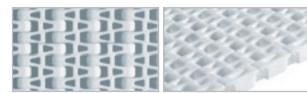


Blank/smooth surface

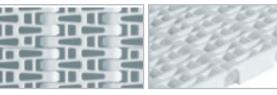
Non-adhesive



Mat, medium adhesive, blue



Flush Grid (1")





Radius Flush Grid (1.5")



Waffle structure



Saw tooth profile structure



Fish/herringbone structure

		Pla	astic	c mo	odul	ar b	elts	Haba	asitL	.INK	®															Chains	5	Fabric	based l	oelts
		Seri M12 0.5"	200	Serie M25 1"	es 000									Serie M380 1.5"	es 00	Serie M500 2"	s 00									Heavy Duty	У		s are also ava e side coatin ealing	
Application	Belt type	M1220 Flat Top	M1233 Flush Grid	M2510 Flat Top	M2511 Mesh Top	M2520 Flat Top	M2520 GripTop M2520 BollerTon	M2533 Flush Grid	M2533 GripTop	M2533 Roller Top	M2540 Radius Flush Grid	M2540 Roller Top	M2543 Tight Radius	M3840 Radius Flush Grid	M3840 Roller Top	M5010 Flat Top	M5010 Roller Top	M5011 Perforated Flat Top	M5014 Nub Top	M5020 Flat Top Heavy	M5020 GripTop	M5032 Flush Grid Heavy	M5032 Roller Top	M5033 Flush Grid	M5033 Roller Top	C3200 Straight Chain	C3210 Radius Chain	PVC coated belts (Food PVC) HySAN	TPO coated belts Habilene® coated Cleanline®	TPU coated Food belts
Meat (beef and pork)																														
Slaughtering	Slaughterin															•				•				•						
Primary Processing	Cutting lines Deboning lines Dressing lines															•			•									•	•	
	Trim lines Fast deboning lines															•												•	•	
Further Processing	Slicing Packing lines															•												•	•	•
	Freezing Cold-discharge Elevator			•	•			•	•		•		•	•	•	•			•					•				•	•	•
Packaging	Metal detectors Shrink wrap Check-Weigher	٠	•	•				•								•												•	•	•
	Packaging Accumulation Box/Crate Handling					•	•			•		•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•
Poultry	Box/ Grate Handing																													
Slaughtering	Live Bird Conveyor Slaughtering/Evisceration			•		•		•								•			•	•		•								
Primary Processing	Skinning Deboning Portioning			•				•								•			• •									•	•	
	Grading Freezing Cold-discharge			•	•			•	•		•		•	•	٠	•			•					•				•	•	•
Further Processing	Elevator General conveyance	•	•	•			•	•	•		•		•			•			•		•			•				•	•	•
Packaging	Metal detectors Shrink wrap Check-Weigher	•	•	•				•								•												•	•	•
	Packaging Accumulation Box/Crate Handling					•				•		•		•	•	•	•	•			•		•	•	•	•	•	•	•	•

This application/belt matrix does not apply to be complete and shall serve as indication of potential solutions. For detailed material and belt selection please contact your local Habasit partner.

### Product key data overview

You will find the key data for most Habasit products on the Habasit website:

## www.habasit.com

How to find (example) www.habasit.com

Worldwide

Select continent (Europe)

Select country (Great Britain)

- Products
- Conveyor belts

Select product group

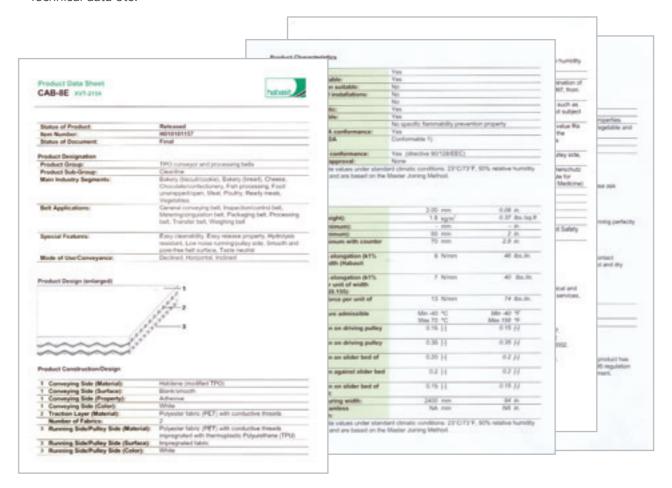
Overview

		Technical Bu		Frede									
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### Detailed technical data for each product/belt type

With one more click on the respective belt type, you will obtain a technical data overview, showing details such as:

- Product designation/features
- Product design/built-up
- Product characteristics
- Technical data etc.



## Plastic modular belts

### HabasitLINK® modular belts

Based on Habasit's comprehensive knowledge and the leadership position in traditional fabric based belting, we have developed the HabasitLINK® modular belt range. This state-of-the-art product line completes our offer as a single source supplier and partner for your success. Plastic modular belts are used successfully in a wide range of industries like meat, poultry, fish, fruit, vegetable, bakery, snacks, beverage and bottling, materials handling, paper and cardboard, tires, automotive, and many more.



### **Features**

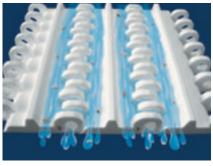


- Belt opens when moving over sprocket
- Oblong hole improves water access to rod

### **Benefits**

- → Easy cleaning through enlarged hinge gap
- → Optimal cleanability
- → Reduced cleaning time and cost
- → Reduced risk of cross contamination





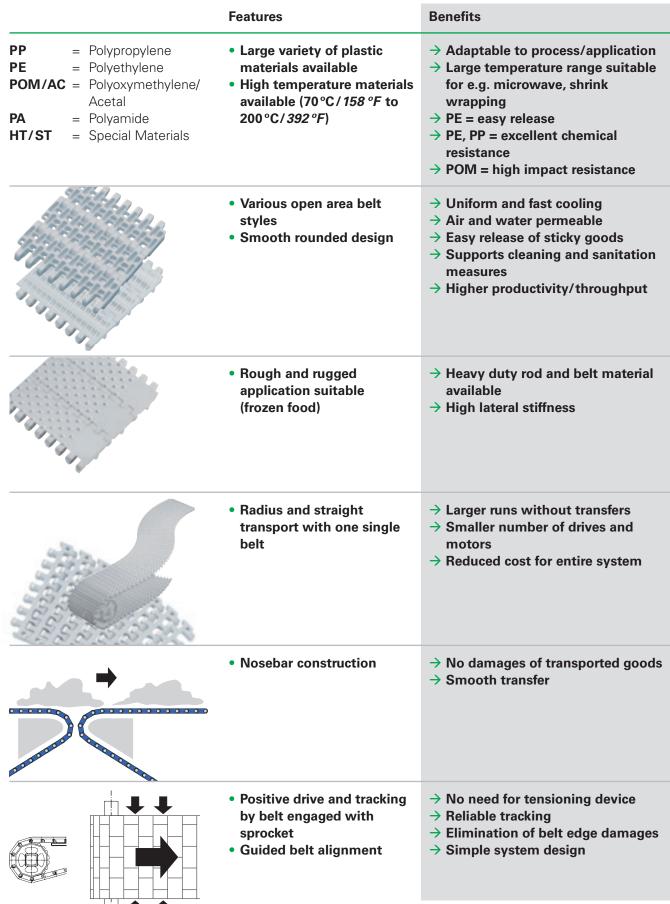
- Offset hinge enables water access and deflects water jet into hinge area and oblong holes
- → Increased water-surface contact "self-cleaning effect"
- → Efficient cleaning
- → Reduced risk of crosscontamination
- → Optimal support of hygiene and sanitary measures

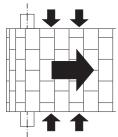




- Integrated cleaning with "ModulCLEAN"
- Cleaning directly at the hinge area as it opens
- Improved cleaning through inside out forces
- Automatic operation (no personnel needed)
- Detergents and sanitizers can be automatically applied

- → Increased cleaning efficiency
- → Consistent cleaning procedure
- → Increased productivity
- → Reduced cleaning cost



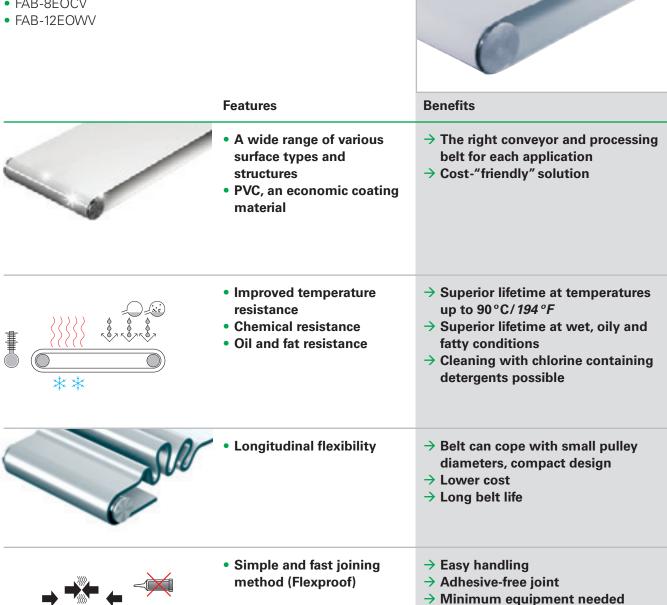


## Features and benefits

## **PVC-coated belts – HySAN food PVC**

Habasit HySAN food PVC belts feature a new, highly oil and fat resistant coating material. PVC coated belts are widely used in food processing applications and are often a cost saving solution.

- FAB-8EOWV
- FAB-8EOCV



→ Short machine downtimes

## Features and benefits

## TPO/Habilene® coated belts (TPO = Thermoplastic Polyolefine)

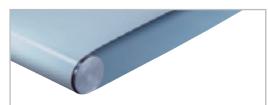
Habilene® is a Habasit modified Polyolefine which represents the newest development of Habasit food belts with unique features among food conveyor belt coatings.

### Cleanline® belts

CNB-series

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- CAB-series
- CNF-series
- CNW-series

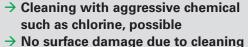


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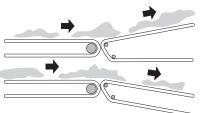
## **Features**

### Very good chemical resistance





- agents
- → Longer service life



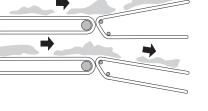
- Excellent release properties
- → Less soiling
- → Increased hygiene and product quality

→ Excellent release of sticky products

→ Reduction of waste



- Environment friendly product construction
- → Belts contain no glues or toxic chemicals
- → HACCP support, reduced risk of contamination
- → Lower belt disposal costs



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## **TPU – coated belts**

TPU food conveyor and processing belts combine many features that are supporting reliable and hygienic production processes.

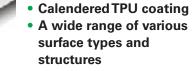
- FAB-series
- FNB-series
- FMB-series
- FAW-series
- FAS-series
- FAF-series



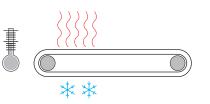
### **Features**



### **Benefits**



- → Abrasion and cut-resistant belt surface
- → Constant coefficient of friction over entire belt lifetime
- → Long belt life



Temperature resistant

- → Usable in low temperature environments and warm conditions without changing its features
- → High temperature belt available up to 100°C/212°F



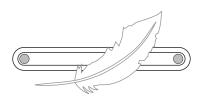
Oil and fat resistant

- → Reliable transport/flow
- → Long service life of belt



Longitudinal flexibility

- → Belt can cope with small pulley diameters, compact design
- → smooth and trouble-free product transfer
- → Low energy consumption



- Light weight belt construction, designed for heavy duty application
- Wide range of different strength classes and traction layers
- → Low belt weight/mass
- → Suitable for high speed and rapid acceleration
- → Low energy consumption
- → Economic, high output/flow/production

## Features and benefits

## Antimicrobial conveyor and processing belts

### **Antimicrobial belts**

Habasit offers belts with antimicrobial additives. A belt concept especially designed to complement existing hygiene and safety procedures in food processing plants.

Daily use and cleaning cause mechanical stress and damage to belt surfaces. This leads to increased retention of soil and growth of microorganisms, as neither optimal cleaning intervals nor a sophisticated HACCP concept can guarantee effective cleaning. HabaGUARD® and HyGUARD® antimicrobial belts contain an additive that protects the entire belt throughout its service life against microorganisms, especially in micro cracks and cuts that are inaccessible to cleaning procedures.

## Compliance with legal regulations and geographical allocation

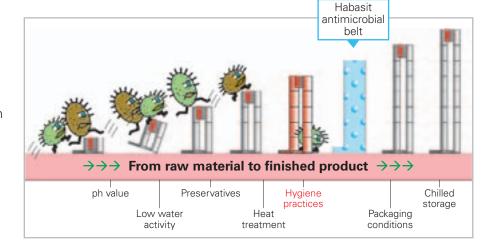
Legal requirements for products containing antimicrobials are specific to each geographical region. Therefore Habasit offers different ranges of products, which comply fully with the regulations of various geographical regions, e.g. North America, European Union, Japan, East and South-East Asia. The products are not exchangeable.

Kind of belts	Geographical allocation of products						
Modular belts	HabaGUARD® North America						
Fabric based/	HabaGUARD® North America						
coated belts	HyGUARD® Europe						
	HyGUARD® Japan						

## Prevention of growth of microorganism

With HabaGUARD® and HyGUARD® antimicrobial belts Habasit offers an additional hurdle to help prevent the growth of microorganisms.

Illustration: Main hurdles with antimicrobial belts



### Advantages of Habasit antimicrobial belts

- → Full compliance with legal regulations
- → Additional hurdle against microorganisms
- → Delay formation of biofilms
- → Avoid build-up of bacteria in areas difficult to reach by common cleaning procedures

### **General Remark**

The use of HabaGUARD® or HyGUARD® antimicrobial belts are an important and precautionary step in the prevention of microbial growth and supports efficiently hygiene and sanitary measures. But it does not replace usual cleaning measures and does not protect users against food-borne disease. Adhering to proper cleaning procedures is always essential.

### Information

More detailed information is available from any Habasit representative or in the respective Habasit literature.

## Services (contd.) General services, customized services

Offering a comprehensive range of services is part of Habasit's belting solutions approach. We are committed partners of our customers, and we consider the sharing of knowledge and providing of support as an essential task. And this we offer:



### Consulting and technical support

Habasit offers the best consulting and technical support on the belting market for fabric belts and plastic modular belts based on the experience and competence acquired in more than 50 years.



### Belt selection and calculation

For our customers we select and calculate the most suitable belt for a specific application. However, customers may do it themselves thanks to the state-of-the-art Habasit selection and calculation programs "SeleCalc." For ordering these programs free of charge simply call the nearest Habasit partner or contact: info@habasit.com **CONVEY-SeleCalc** = Fabric conveyor belt selection and calculation **LINK-SeleCalc** = Plastic modular belt selection and calculation



### **Fabrication or assembling**

We join fabric belts or assemble plastic modular belts at our locations or on-site directly on the machine or on the system.



### Shortest lead times and installing service at hand

Habasit owns 25 Affiliated Companies located in North America, Europe, Japan and Asia, each with own inventory, fabrication, assembling and service facilities. Together with our country managers, representative offices and a large number of qualified distributors we are in a position to react quickly, competently and reliably to customers' demands on an international scale.



### Testing at customer's site

If desired we are testing process functionality, alternative products and variations of fabric belts or modular belts at the customer's site.



### Legal and conformity check

We are supporting our customers with respect to declaration issues, conformity issues or conformance with national laws/authorities like FDA, USDA, EU, Safety data sheets, Flame-retardant conformity, etc.



### Belt inspections and analyses

We are carrying through belt inspections, analyses, surveys per location and work out the necessary reports and recommendations.



### Belt repair

We have developed sophisticated repair methods and equipments with proven effectiveness.



### **Process optimization proposals**

We analyze processes together with the customer and submit proposals for optimization, e.g. added value for the machinery/process output, output increase.



We offer special fabrications, such as longitudinal joining, edge sealing, profile welding, guide profiles welding, hole punching, side skirt installations, curve conveyor layout/cutting preparation, etc.



### Joining tools and auxiliaries equipment

To support an effective and efficient fabrication of our belts, we developed and offer a broad range of tools and devices designed to meet the needs of our customers and distribution/service partners. This range covers the requirements of inhouse fabrication (series and specialties) as well as those of on-site installations of conveyor and power transmission belts and tapes.



For example slitters, skiving tools, Flexproof (zig/zag) finger cutting tools, hot-presses and auxiliaries like coiling and welding devices.

For plastic modular belts HabasitLINK® we are well equipped with own designed and manufactured semi-automated assembling machines.



### Training

Habasit organizes training programs and provides supporting tools to ensure optimal use of our products and prolonging their life cycle. Fabrication, installing, assembling, maintenance and belt repair training is carried through at Habasit's or at customer's site.



### Specific application knowledge transfer

Habasit provides application specific knowledge transfer for process specific issues to allow for optimal use of our products and to optimize machinery and processes.



### **Guaranteed** performance

Our faith in our products is such that if one of our sales specialists has recommended a belt for a specific application, we will guarantee its performance. Should for any reason that belt not perform optimally, your money will be refunded unconditionally.

## Customized services



### Designing the future "Partner in Design"

Habasit believes in partnership. For joint design developments our engineering team is looking for strong cooperation with the customer's engineering team, preferably at a very early stage. We offer this cooperation to large customers. Co-design: We work together for success



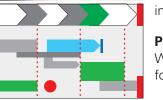
### **Testing offer for customer**

R&D expertise, laboratory and test equipment are offered for the customer's specific process needs like mechanical endurance testing, influence of customer/process used chemicals/ingredients or thermal influence behavior on belts.



### **Belt monitoring**

A customized Habasit service that includes maintenance, regular belt monitoring reports, regular review meetings with the responsible person for process/production at customer's site.



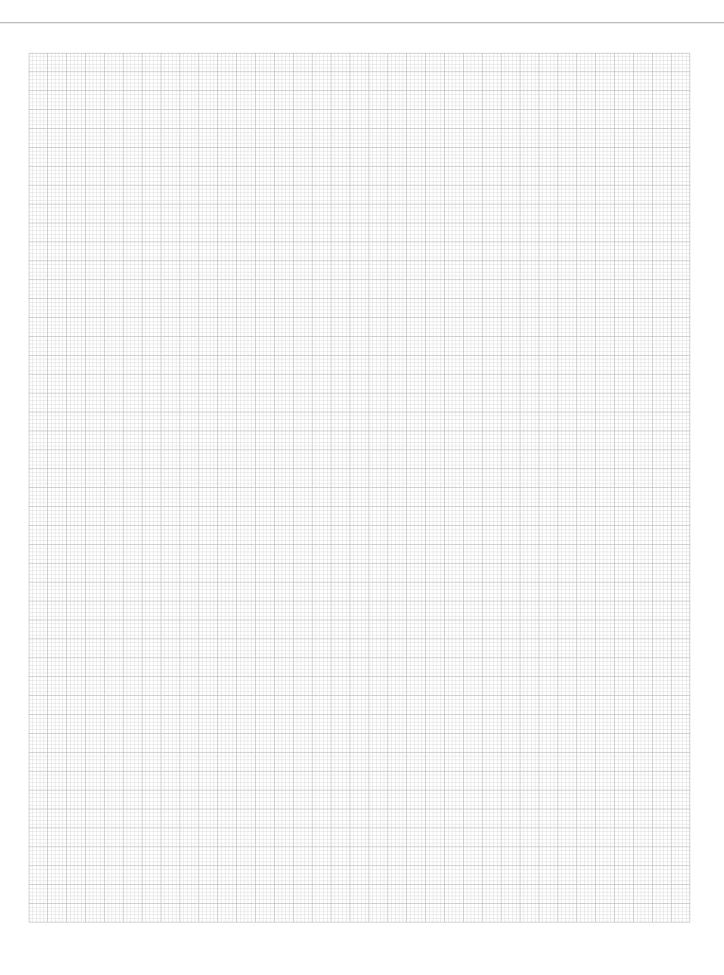
### **Customized service agreements**

According to the specific needs of our customers we offer customized services like inventory, emergency service, belt exchange services or order/re-order management.



We are experienced partners for belting project co-ordination on an international scale for globally operating customers.

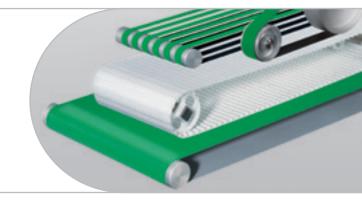
Comments/sketches



## The Habasit Solution

At Habasit, we listen. We innovate.

And we deliver integrated belting solutions – right first time.



### **Customer first**

Habasit understands that our success depends on the success of our customers. That's why we offer solutions, not just products; partnership, not just sales. Our innovative belting solutions are tailored exactly to specific needs. We guarantee best value for money in every application. Since its foundation in 1946, Habasit has proven this understanding of customer needs for more than 50 years. That's why we are no. 1 in belting. Worldwide.

### **Product range**

Habasit offers the largest selection of fabric and plastic modular belts in the industry. Our answer to any request is nothing less than a specific, tailor-made solution.

-abric convoyor 9, proceeding bolts
Fabric conveyor & processing belts
Plastic modular belts
Power transmission belts
Machine tapes
Seamless belts
Round belts
Timing belts
Auxiliaries (e.g. profiles, tools)









### Innovation/R&D

Habasit is strongly committed to the continuous development of innovative, value-added solutions. More than 3% of our staff is dedicated exclusively to R&D; the annual investment in this area exceeds 8% of the turnover.





## Global network Facts & figures

Founded	1946
Turnover 2002	CHF 422 million
Sales to market	4 million m <sup>2</sup>
Employees	2200
Production plants	12
Affiliated companies	25
Representatives	50 countries
Service centers	250 globally

### Quality



Highest quality standards are found not only in our products, but also in our employees´ daily work process. Based on a worldwideTQM approach, Habasit was awarded ISO 9001 certification already in 1989.

In the year 2002 we achieved certification according to the revised standard ISO 9001/2000

### Services & guarantees

Our extensive organization is prepared to support you anywhere in the world. Engineering and emergency assistance, quotes and order status are just a phone call away. Wherever you are. Whenever you need us.



### Austria

Habasit GmbH, Wien Phone: +43 1 690 66 www.habasit.at

### Belgium

Habasit Belgium N.V., Zaventem Phone: +32 2 725 04 30 www.habasit.be

### Canada

Habasit Canada Ltd., Oakville Phone: +1 905 827 4131 www.habasit.ca

### China

Habasit East Asia Ltd., Hong Kong Phone: +852 2145 01 50 www.habasit.com

### Czech Republic

Habasit Bohemia spol. s.r.o., Brno Phone: +4205 41 421 651 www.habasit.cz

### France

Habasit France S.A., Mulhouse Phone: +33 389 33 89 03 www.habasit.fr

### Germany

Habasit ĠmbH, Eppertshausen Phone: +49 6071 969 0 www.habasit.de

### Hungary

Habasit Hungária Kft., Esztergom Phone: +36 33 510 610 www.habasit.hu

### India

Habasit-lakoka Pvt. Ltd., Coimbatore Phone: +91 422 262 78 79 www.habasitiakoka.com

### Italv

Habasit Italiana Spa Customer Care: Phone: 199 199 333 For int. calls: +39 0438 911444

www.habasit.it

### Japan

Habasit Nippon Co. Ltd., Yokohama Phone: +81 45 476 03 71 www.habasit.co.jp

### Latvia

Habasit Baltic SIA, Daugavpils Phone: +371 54 074 88 www.habasit.lv

### Netherlands

Habasit Netherlands BV, Nijkerk Phone: +31 33 24 72 030 www.habasit.nl

### Norway

Habasit Norge A/S, Oslo Phone: +47 22 90 92 80 www.habasit.no

### Romania

Habasit Import/Export Romania SRL, Bucuresti, Phone: +40 21 323 95 65 www.habasit.ro Habasit Moscow Phone: +7 09 59 561 508 www.habasit.ru

### Singapore

Russia

Habasit Far East Pte. Ltd., Singapore Phone: +65 6862 55 66 www.habasit.com.sg

### Spain

Habasit Hispanica S.A., Barberà del Vallès Phone: +34 93 719 19 12 www.habasit.com

### Sweden

Habasit AB, Hindas Phone: +46 301 226 00 www.habasit.se

### Switzerland

Habasit Schweiz, Reinach Phone: +41 61 715 15 75 www.habasit.ch

### Taiwan

Habasit East Asia (Taiwan) Ltd. Taipei Hsien Phone: +886 2 8261 8330 www.habasit.com

### Ukraine

Habasit Ukraina, Vinnica Phone: +38 0432 53 17 35 or +38 0432 53 67 38 www.habasit.ua

### United Kingdom and Ireland

Habasit, Corby Phone: +44 1536 402 340 www.habasit.co.uk

### USA

Habasit Belting Inc., Suwanee, Georgia, Phone: +1 678 288 3600 www.habasitusa.com

USA (Seamless belts only)
Habasit ABT Inc., Middletown,
Connecticut, Phone: +1 860 632 2211
www.habasitabt.com

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Headquarters
Habasit AG
Römerstrasse 1
CH-4153 Reinach, Switzerland
Phone +41 61 715 15 15
Fax +41 61 715 15 55
E-mail info@habasit.com
www.habasit.com

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