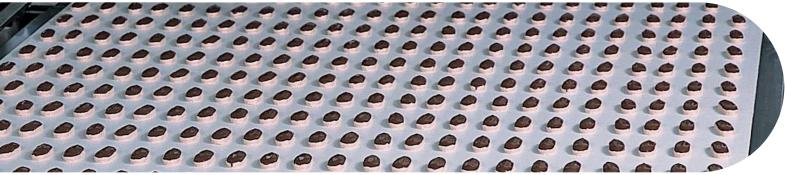


# Bakery Industry Conveyor and Processing Belts

# Habasit-Solutions in motion





#### Contents

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#### Product liability, application considerations

If the proper selection and application of Habasit products are <u>not</u> recommended by an authorized Habasit sales specialist, the selection and application of Habasit products, including the related area of product safety, are the responsibility of the customer. All indications / information are recommendations and believed to be reliable, but no representations, guarantees, or warranties of any kind are made as to their accuracy or suitability for particular applications. The data provided herein are based on laboratory work with small-scale test equipment, running at standard conditions, and do not necessarily match product performance in industrial use. New knowledge and experiences can lead to modifications and changes within a short time without prior notice.

BECAUSE CONDITIONS OF USE ARE OUTSIDE OF HABASIT'S AND ITS AFFILIATED COMPANIES' CONTROL, WE CANNOT ASSUME ANY LIABILITY CONCERNING THE SUITABILITY AND PROCESS ABILITY OF THE PRODUCTS MENTIONED HEREIN. THIS ALSO APPLIES TO PROCESS RESULTS / OUTPUT / MANUFACTURING GOODS AS WELL AS TO POSSIBLE DEFECTS, DAMAGES, CONSEQUENTIAL DAMAGES, AND FURTHER-REACHING CONSEQUENCES.





#### Innovation is a key word at Habasit

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 the increasing hygiene standards within the food industry. Habasit offers products that comply with HACCP principles and guarantee trouble-free and safe food production. Beyond this, to provide additional safety, Habasit has introduced unique products such as <code>HyGUARD®</code> and <code>HabaGUARD®</code> conveyor belts containing antimicrobial additives, Habasit <code>Cleanline®</code> food belts coated with a modified polyolefin and <code>HySAN®</code>, high oil and fat resistant PVC coated belts.

Special features offer the **TPU non-fray** and **fray-less** belts, which minimize fiber contamination due to their specific fabric construction. Complemental high grade Silicone coated product range.

The extruded positive driven Habasit Cleandrive™ belts enable performance and hygiene upgrades. Additional products like HabasitLINK® plastic modular belts, HabaCHAIN® plastic chains, HabaSYNC® timing belts and accessories like cleats, edge-sealing profiles and side-walls complete the range.

Habasit is the only belt supplier to manufacture and offer the full package of fabric based and plastic modular belts.

#### More than 60 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 bakery and biscuit processing

Whether handling dough, cooling baked products, molding, cutting or packaging, Habasit offers a complete product range for the bakery, biscuit and snack processing industry.

This includes all kind of fabric belts and modular belts with different surface finish.

Habasit is able to provide dedicated spiral belts for proofing, cooling and freezing. This includes belts for new systems as well as retrofits.





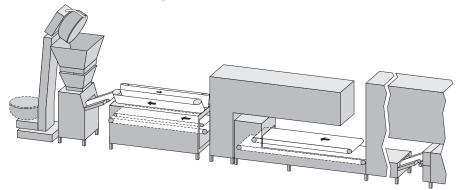








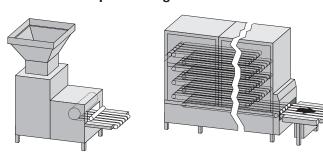
# Hearth bread processing



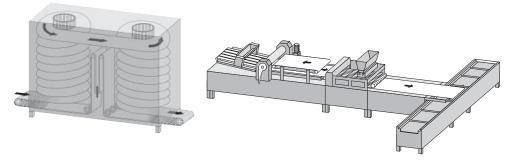
# **Belt applications**

- Dough loader
- Dough divider
- Molder, rounder
- Preproofer
- Final proofer
- Feeding belt
- Round loaf shaping belt
- Cooling conveyor

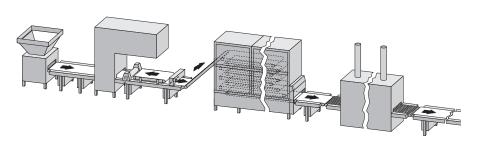
# Bread and bun processing



- Dough divider/rounder
- Spreader conveyor belt
- Linear proofer
- Spiral proofer
- Forming station
- Molder belt
- Transfer conveyor belt



# Flatbread line



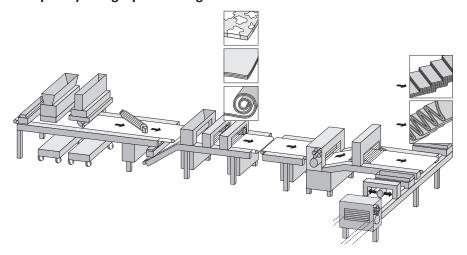
- Dough divider
- Preproofer
- Proofer
- Sheeter belt
- Transfer conveyor belt







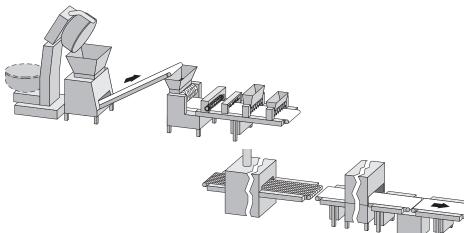
#### Puff pastry dough processing



# **Belt applications**

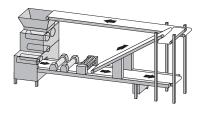
- Dough sheeter
- Shortening extruder
- Curling roller
- Guillotine cutter
- Folding station
- Dough conveyor belt
- Gauge roll
- Crossroller
- Reversing conveyor belt

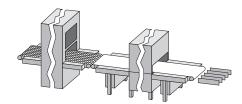
# **Biscuits manufacturing**



- Dough feeder
- Rotary molder
- Feeding belt
- Functional belt
- Cooling belt
- Transfer conveyor belt

#### Crackers





- Laminator for crackers
- Rotary cutter
- Scrap take away/rework system
- Cooling system
- Rework conveyor belt

**Remark:** The drawings are schematic examples of selected applications/processes. The drawings do not claim completeness. Due to the complexity of various processes, technical requirements and decisive external influences (e.g. nature or property of transported goods, process speed, steps of treatment/ handling, environment or process temperature, humidity, chemicals, additives, ingredients, recipes, etc.) there are many possible solutions.





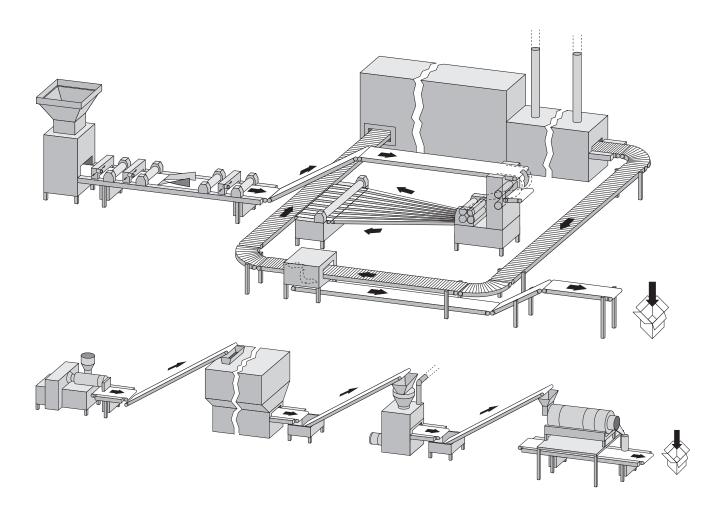


# Baked, salty snacks and direct expanded snacks

# **Belt applications**

- Dough sheeter
- Folding device
- Inclined belt
- Transfer belt
- Process belt

- Proofer
- Transfer belt
- Tray loader/unloader
- Spreader belt
- Cooling conveyor



**Remark:** The drawings are schematic examples of selected applications/processes. The drawings do not claim completeness. Due to the complexity of various processes, technical requirements and decisive external influences (e.g. nature or property of transported goods, process speed, steps of treatment/ handling, environment or process temperature, humidity, chemicals, additives, ingredients, recipes, etc.) there are many possible solutions.

## The right choice

Habasit has developed an extensive variety of solutions that allow customers to choose the best product for their specific application. Habasit is the only belt supplier to manufacture and offer the full package from fabric based and plastic modular belts to accessories

Fabric-based/coated conveyor belts



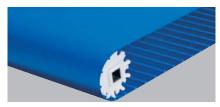
Fabric surface TPU coated TPO coated PVC coated Silicone coated Non-woven belts

Plastic modular belts HabasitLINK®



PP (Polypropylene)
PE (Polyethylene)
POM/AC (Polyoxymethylene/Acetal)
PA and high temperature materials
Please consult brochures 4128 and 4178

Habasit Cleandrive™



Extruded positive driven and flat conveyor belts made of abrasion- and hydrolysis-resistant TPU, which can be combined with a comprehensive range of accessories.

Please consult brochure 4238

HabaSYNC® timing belts



Polyurethane with steel cord or aramide tensile member.

Belts with special covers

Please consult brochures 4107, 4246 and 4282

HabaCHAIN® slat and conveyor chains



POM/AC (Polyoxymethylene/Acetal) Glass reinforced PP Special materials

Please consult brochure 4122

**Special solutions**HyCLEAN CIP



A modular, customized Cleaning-In-Place system (CIP) for the reliable and efficient cleaning of plastic modular belts. (EHEDG certified)

Please consult brochure 4317





#### Food conveyor belt surfaces

To fulfill a specific process step or a defined function the belt surface plays a key role. Based on surface structure and material inherent properties a multitude of function possibilities are given. See below some examples of the large variety of surface structures and properties.

#### Fabric based belts



Blank surface (smooth white)



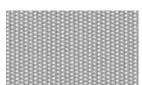
Saw tooth profile structure



Blank surface (smooth blue)



Waffle structure



Fabric surface



Quadrillé (quadrangular) pattern/structure

# Available belt surface properties

- Super adhesive
- Adhesive
- Medium adhesive
- Non-adhesive

#### Plastic modular belts



Flat Top 0.5"



Radius Flush Grid 1"



Micropitch Flat Top 0.3"



Diamond Top 1"



Flush Grid 0.5"



Texture Top 0.5"

# Positive drive belts



Habasit Cleandrive™

# **Timing belts**



HabaSYNC®

#### **Round belts**



Habiblue

Habasit's belting solutions deliver improved efficiency in conveying and processing, of industrial bakery products.

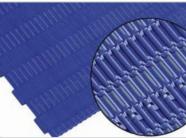
#### **Key features**

#### Fabric-based/coated conveyor belts

- Abrasion- and temperature-resistant coatings
- Dedicated fabric construction e.g. frayless and non-fray
- Specific coatings for improved release and oil/fat resistance

### Your benefits

- → Reliable performance and long belt service life
- → Reduced risk of product contamination
- → Increased production output and waste reduction
- → Improved hygiene conditions



# HabasitLINK® plastic modular belts

- Robust design and dedicated surfaces for conveying of bakery goods
- Broad selection of materials
- → Reliable product handling and conveying
- → Good release and yield increase
- → Belts for elevated temperature, proofing, cooling, freezing and for spiral systems



# Habasit Cleandrive™ combines

- Closed homogeneous surface
- Continuous drive bars over entire belt width
- Longitudinal reinforcement
- Abrasion- and hydrolysis-resistant TPU
- → Innovative combination of homogeneous surface and positive drive
- → No gaps or hinges
- → Easy to clean
- → No creep, dimensional stability
- → Reliable sprocket engagement
- → Excellent chemical resistance



# HabaSYNC® timing belts with

- Improved design and materials for wet and humid applications
- Ability to apply special coatings
- → Precise positioning and conveying of goods
- → Easy to clean surfaces
- → Excellent chemical resistance
- → Various surface finishes for specific tasks in application



# HabaCHAIN® plastic chains

- Various belt styles for radius and straight conveying
- Wear-resistant and low-noise/lowfriction materials
- → Positive drive and low tension
- → Reliable and versatile conveying of packed goods or trays/pans



## HyCLEAN CIP system

- Works with low water pressure
- Outside spray tube
- Idle spray bar with nozzles
- Edge cleaning nozzles
- → Fast and efficient cleaning and reduced water consumption
- → Cleans entire belt conveying side
- → Cleans hinge area and reverse side, exactly when hinges are most open
- → Cleans the belt edges and especially the rod head and retention system

# Application table

This application/belt matrix does not apply to be complete and shall serve as indication of potential solutions.			Fabr	ic belt	ts unc	oated				Fabrio mpre					
For detailed material and belt selection please contact your local Habasit partner: www.habasit.com															
	FNT-2M	FNT-5E	T22	FNT-5EC	FNT-5P	FNT-5PC	FNR-5RFWR	FNT-8EEWE	FNI-5E	FNI-6EIC	1759	TC13/NM	FAB-2E	FAB-5E	FAB-5EB
Hearth bread processing															
Dough loader															•
Dough divider / feeder belt				•		•	•	_	•						•
Moulder/rounder Proofer/pre-proofer		•	•	•		•	•	•		•	•				•
Oven infeed							•								
Oven take-off	•														
Cooling conveyor/lines							•	•		•	•			•	
Bread and bun processing															
Spreader conveyor				•		•	•	•				•			
Belt proofer		•	•	•			•	•		•	•				
Moulder/forming station Transfer conveyor (sprinkler)				•		•	•	•	•	•	•				•
Oven infeed							•								
Oven take-off	•														
Pan dump conveyor														•	
Cooling conveyor							•	•							
Freezing line															
Slicing/bun cutting										•	•				•
Pan return conveyor  Puff pastry processing															
Dough conveyor (sheeter/extruder/curling) Cross roller line									•	•	•				
Transfer conveyor									•	•	•				
Gauge roll/calibration										•	•				
Folding station/reversing conveyor										•	•				•
Cross roller line Oven infeed															
Oven take-off															
Cooling conveyor															
Biscuit and cracker manufacturing															
Dough feeder						_									•
Rotary moulder						•				•	•				
Sprinkler/depositor Laminator line										•	•				•
Rotary cutter						•						•		•	•
Scrap/rework line															•
Oven infeed															
Oven take-off	•														
Cooling conveyor		•	•			•	•	•		•	•		•	•	•
Enrobing/icing  Baked and salty snacks															
Processing belt									•		•				•
Inclined belt														•	•
Spreader belt										•		•			•
transfer belt															•
Corn/potato and direct expanded snacks														•	•
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Corn/potato and direct expanded snacks Feeding belt Inclined belt Transfer belt Flatbread processing															
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TPU coated belts												TPI	J fray	less b	elts		TPU	J non- belts	-fray	TPO coated Cleanline® belts					
FA B-SEINA/H	FAB-8E	FAW-5E	FNB-2E	FNB-5E	FNB-5EQ	FNB-8E	FNB-5EIC	FMB-7EIC	FAW-7EIC	F-3EXWT 09	T11/U	FMB-5EQ	TT12 frayless	TT12/U	TT12 MATT BLUE	TT12 MATT WHITE	T154/U	T131/U MATT	TT173/U	CAB-6EB	CNB-6EBC	CNB-5E	CNB-6EB	CNW-5E	
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# Application table

P\	/C belts	s HySA	N®									
FAB-8EOWV	FAB-8EOCV	FAW-8EOCV	FAW-8EOWV	NAB-8EEWV 11	NAB-10EECV 11	FAB-5ER 10	FNI-5ER 10	WVF-135	WVT-137	WVT-138	WVT-140	CM100FBS Cottonmate
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	EAB-8EOWV	EAB-8EOWV	• FAB-8EOWV • FAB-8EOCV • FAW-8EOCV		N-line N-	FAB-8EOWV FAB-8EOWV FAW-8EOWV FAW-8E	PAB-8ECWV N-line belts  In the second of the	PAB-BEDWN  PAM-BEDWN  PAM-BEDWN	Page Book Name of the page of	N-line belts  N-	N-line belts N-lin	ANAT-135  WAYT-140  WAYT-1

Nonwo	oven bel	lts Plastic modular belts HabasitLINK®														Ext Hak	truded basit Cl	TPU be	elts ve <sup>TM</sup>	
CM200FBS Cottonmate	Felt Top	UM100-W	Micropitch Flat and Diamond Top	M1220 Flat Top	M1230/1233 Flush Grid	M2510 Flat Top	M2516 Diamond Top	M2533 Flush Grid	M2540 Radius Flush Grid	M2543 Tight Radius	M5290 Radius Flush Grid	M5293 Tight radius	HDS605 TT Texture Top	CM605 Curved Mesh	CT610-R Radius Curved Top	IS610-R Radius Flush Grid	CD.M50.S-UA white/blue	CD.M25.S-UA white/blue	CD.M00.B-UA.CB.20 white/blue	CD.M00.B-UA.CB.30 white/blue
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Comprehensive services are central to Habasit's belting solution approach.

As committed partners to our customers, we are dedicated to sharing our knowledge and to providing full support.



## Comprehensive consulting and technical support

Habasit offers the best consulting and technical support on the belting market. Everything revolves around our customers and each affiliate has its own belting experts. The Habasit team is proud to provide the highest levels of support together with top-quality products that have been leaders on the global market for decades.



#### Assistance with belt selection and calculation

We will select and calculate the most suitable belt for your specific application. You also may do this yourself with our state-of-the-art Habasit selection and calculation program "SeleCalc". To order this program free of charge, simply call your nearest Habasit partner or contact: info@habasit.com.



# Fabrication, assembly and local installation services for quick reaction times

We make belts endless or assemble modular belts or chains, either at our own locations or on-site directly on your machine or system. Habasit operates over 30 affiliated companies worldwide, each with its own inventory, fabrication, assembly and service facilities. Together with our representative offices and numerous qualified distributors, we can react quickly, competently and reliably to satisfy all your demands.



#### **Customer training programs**

Habasit offers training programs and provides support tools to ensure optimal use of our products and to prolong their lifetimes. Training on fabrication, installation, assembly, maintenance and belt repair takes place at Habasit sites or at your location.



#### Belt monitoring, inspections, analyses and process optimization proposals

We organize and handle belt maintenance, inspections, analyses and surveys for your locations. On request we will also work with you to develop optimization proposals, for example, to achieve added value from the machinery or process output.



#### Design assistance for customized solutions

Habasit believes in partnership. Our engineering team will work closely with your engineers on joint design developments, preferably from a very early stage. We particularly recommend this for projects involving new technologies or large-scale modifications and adaptations.



#### **Customers first**

At Habasit we understand that our success depends on your success. This is why we offer solutions, not just products; partnership, not just sales.

Since our foundation in 1946, Habasit has brought this understanding of customer needs to life every day and for every application. That's why we're the No. 1 in belting today. Worldwide.

Learn more on www.habasit.com

#### Committed to innovation

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

#### Certified for quality

We deliver the highest quality standards not only in our products and solutions, but also in our employees' daily work processes. Habasit AG is certified according to ISO 9001:2000.



#### Worldwide leading product range

Habasit offers the largest selection of belting, conveying, processing and complementary products in the industry. Our response to any request is nothing less than a specific, tailor-made solution.



Fabric based conveyor and processing belts HabaFLOW®



Plastic modular belts **HabasitLINK**®



Positive drive conveyor and processing belts **Habasit Cleandrive**<sup>™</sup>



Power transmission belts





Timing belts **HabaSYNC**®



Chains (slat and conveyor chains)
HabaCHAIN®



Machine tapes



Round belts



Seamless belts



Profiles, Guides, Wear strips HabiPLAST®



Fabrication tools (joining tools)



Gearmotors Electric motors Motion control

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Habasit America Seamless belts, timing belts Middletown, Connecticut Phone: +1 860 632 2211 www.habasitamerica.com

Rossi is one of Europe's largest manufacturers of gear reducers, gearmotors, inverters, standard and brakemotors, and is a member of the Habasit Group.

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