

Habasit TC and TCF Power Transmission Belts

For Textile, Printing & Paper, Letter Sorting and Materials Handling

Description

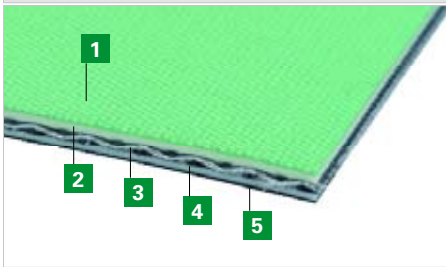
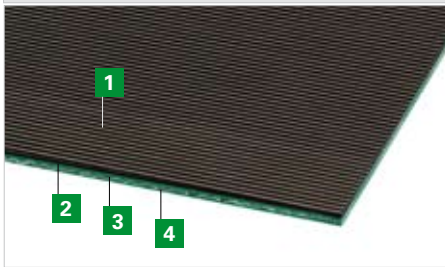
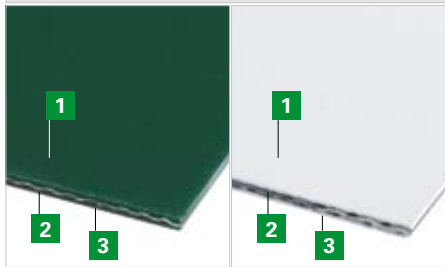


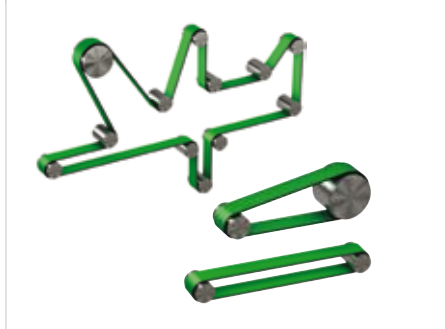
With the highest standards of quality and an extensive variety of products, Habasit really gets things moving. Our high efficiency flat- and tangential belts are ideal for high power transmission, while further tasks are best fulfilled by spindle tapes, machine tapes and round belts. Seamless power transmission belts guarantee the highest degree of precision for specialized applications.

Your benefits

- Comprehensive product range meeting all customer requirements
- Suitable for a large variety of different applications
- Optimized technical solutions using most advanced materials and product design
- Outstanding price/value ratio
- Reduced energy consumption



Habasit has developed a comprehensive range of thermoplastic power transmission belts that allows customers to choose the most suitable belt for their specific application requirements.

Power Transmission Belts			
<p>TC Polyester (PET)</p> 	<p>TCF-xxEL</p> 	<p>TCF-xxH</p> 	
<p>1</p> <ul style="list-style-type: none"> • Light green • Low-aging and abrasion resistant NBR rubber • Rough or fine structure depending on belt type 	<p>1</p> <ul style="list-style-type: none"> • Black, antistatic • Low-aging NBR rubber • Longitudinal groove structure 	<p>1</p> <ul style="list-style-type: none"> • Dark green • Thermoplastic polyurethane foil • Fine structure 	<p>1</p> <ul style="list-style-type: none"> • White • Hamid foil • Fine structure
<p>2</p> <ul style="list-style-type: none"> • Intermediate thermoplastic foil (Hamid or TPU) 	<p>2</p> <ul style="list-style-type: none"> • Intermediate thermoplastic foil (Hamid) 	<p>2</p> <ul style="list-style-type: none"> • Highly flexible polyester traction fabric 	
<p>3</p> <ul style="list-style-type: none"> • Highly flexible polyester traction fabric 	<p>3</p> <ul style="list-style-type: none"> • Highly flexible polyester traction fabric 	<p>3</p> <ul style="list-style-type: none"> • Dark green • Thermoplastic polyurethane foil • Fine structure 	<p>3</p> <ul style="list-style-type: none"> • White • Hamid foil • Fine structure
<p>4</p> <ul style="list-style-type: none"> • Intermediate thermoplastic foil (Hamid or TPU) 	<p>4</p> <ul style="list-style-type: none"> • Green • Hamid foil • Fine structure 		
<p>5</p> <ul style="list-style-type: none"> • Black, antistatic • Low-aging NBR rubber • Rough structure 			
<p>Application / drive configurations</p>	<p>Application / drive configurations</p>	<p>Application / drive configurations</p>	
			

Features and Benefits

The Unique TC and TCF Ranges

A product range with an outstanding price-to-value ratio

Habasit has developed the unique TC and TCF product ranges based on its experience, ongoing research, close contacts with the textile, printing & paper and materials handling industries, as well as long-term partnerships with leading machine manufacturers worldwide.

The result is a product range with an outstanding price-to-value ratio. PET power transmission belts (TC and TCF) are the perfect solution for compact driving configurations, serpentine drives and very high speeds.

	Features	Benefits
	<ul style="list-style-type: none"> • Very flexible belt • Uniform longitudinal flexibility thanks to adhesive-free joining system 	<ul style="list-style-type: none"> • Excellent resistance to flex fatigue • Belt can cope with small pulley diameters and compact design • Longest service life • Outstanding reliability
	<ul style="list-style-type: none"> • Reduced energy consumption 	<ul style="list-style-type: none"> • Maximum efficiency • Economical production • Energy cost savings
	<ul style="list-style-type: none"> • Stable modulus of elasticity • Low sensitivity to humidity 	<ul style="list-style-type: none"> • High dimensional stability • No retensioning • No downtimes
	<ul style="list-style-type: none"> • Covers tailor-made for the application • Best-in-class abrasion resistance • Constant coefficient of friction 	<ul style="list-style-type: none"> • Most economic, application-oriented solution and optimized price/value ratio • Uniform driving conditions • Reliable conveying properties • Long belt life
	<ul style="list-style-type: none"> • Constant and uniform yarn twist 	<ul style="list-style-type: none"> • Best yarn quality • Highest productivity
	<ul style="list-style-type: none"> • Constant and uniform driving conditions 	<ul style="list-style-type: none"> • Highest throughput • Reliable sorting procedure

Application Table

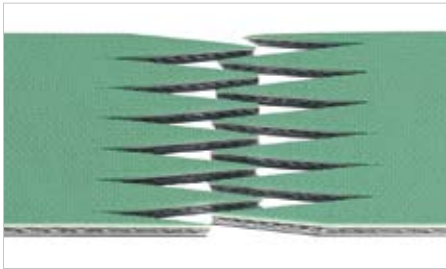
Belt Selection Guide and Technical Key Data (Selection Only)

Industry processes / Belt applications	TC and TCF Polyester power transmission belts (HabaDRIVE®)				
	TC-10EF	TC-20EF	TC-20/25EF	TC-35ER	TC-50ER
General driving applications					
Driving belt	•	•	•	•	•
Textile industry applications					
Tangential drive	•	•	•	•	•
Rotor drive			•	•	•
Combing roll drive		•	•	•	•
Main drive	•	•	•	•	•
Fan drive	•	•		•	•
Dust cleaner belt		•		•	•
Printing & paper					
Finishing systems / bookbinding	•	•	•		
Tube winder					
Tissue and diaper production	•	•			
Paper and cardboard converting, various kinds of applications	•	•	•	•	
Letter sorting					
Driving belts	•	•			
Materials handling					
Live roller conveyor	•	•		•	
Product construction/design					
Friction cover (material)	NBR	NBR	NBR	NBR	NBR
Friction cover (surface structure)	Fine structure	Rough structure	Rough structure	Rough structure	Rough structure
Friction cover (color)	Black	Black	Black	Black	Black
Traction layer (material)	PET	PET	PET	PET	PET
Reverse cover (material)	NBR	NBR	NBR	NBR	NBR
Reverse cover (surface structure)	Fine structure	Fine structure	Fine structure	Rough structure	Rough structure
Reverse cover (color)	Light green	Light green	Light green	Light green	Light green
Product characteristics					
Drive determination	DSPT	DSPT	DSPT	DSPT	DSPT
Permanently antistatic	Yes	Yes	Yes	Yes	Yes
Technical key data					
Thickness [mm]	1.8	2	2.5	2.5	2.5
[in.]	0.07	0.08	0.1	0.1	0.1
Pulley diameter minimum with counterflexion [mm]	25	25	50	50	50
[in.]	1	1	2	2	2
Tensile force for 1% elongation (k1% after running-in) [N/mm]	5	10	11	18	18
per unit of width (Habasit standard SOP3-013) [lbs./in.]	29	57	63	103	103
Nominal peripheral force per unit of width [N/mm]	10	21	23	38	38
[lbs./in.]	57	120	131	217	217
Operating temperature, admissible (continuous) [°C]	-20/70	-20/70	-20/70	-20/70	-20/70
[°F]	-4/158	-4/158	-4/158	-4/158	-4/158
Seamless manufacturing width [mm]	1100	1100	1100	1100	1100
[in.]	43	43	43	43	43
Joining system					
Thermofix					
Flexproof	•	•	•	•	•
Stepflex					
Quickmelt					
Mechanical					
Remarks	TC-10EF	TC-20EF	TC-20/25EF	TC-35ER	TC-50ER

Remarks

- This application / belt matrix is not exhaustive and serves an indication of potential solutions. For detailed material and belt selection please contact your local Habasit partner
- All data are approximate values under standard climatic conditions: 23°C / 73°F, 50% relative humidity (DIN 50005 / ISO 554), and are based on the Habasit Master Joining Method

Joining Method, Tools and Installation

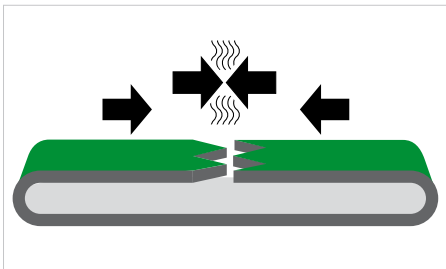


Fabrication

All TC- and TCF- belt types can be joined with the adhesive-free Flexproof method.

The Flexproof joining method stands for

- Simple handling steps
- Fast execution/joining



The Flexproof joining benefits are

- Easy handling
- Adhesive-free joint = high belt flexibility
- Minimum equipment needed
- Short machine downtimes



Tools, fabrication tools and auxiliaries

Offering superior fabrication capabilities is a key element in Habasit’s service concept. Fabrication can take place either in the facilities of the belt supplier or on-site at the end-user. The joining can be done either by the customer or by Habasit’s on-site service. These two approaches are based on two different principles. Habasit provides solutions for both: a well-adapted range of joining tools / systems and an extensive service network.

Installation services



Tools for on-site fabrication

Because we understand your processes, we can support you with cost-effective high-quality tools that keep your equipment up and running. In case of emergencies our tools will help you to minimize downtimes and efficiently support the joining process. Habasit offers zig-zag cutting devices to prepare polyester power transmission belts. A selection of hot pressing devices to fit your applications and to guarantee optimum quality complement the tool package.



On-site installation service

In cases where it is not economical to have the tools ready on-site, you can rely on a nearby Habasit affiliate or service partner who will provide the equipment necessary for the required fabrication and installing service.

At Habasit, we listen to our customers, innovate continuously and deliver reliable solutions to meet your every need.

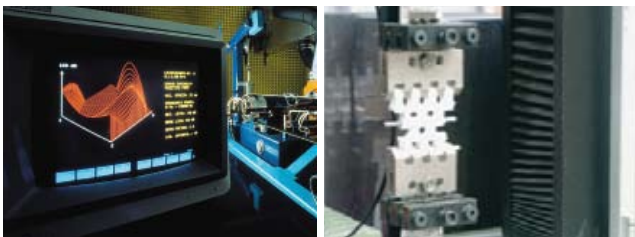
Customers come first

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.



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.

A selection of our product ranges:



HabaFLOW®
Fabric based conveyor and processing belts



HabasitLINK® & KVP®
Plastic modular belts



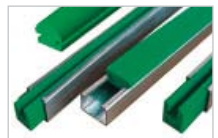
HabaDRIVE®
Power transmission belts



HabaSYNC®
Timing belts



HabaCHAIN®
Chains (slat and conveyor chains)



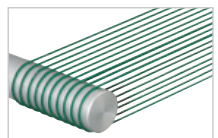
HabiPLAST®
Profiles
Guides
Wear strips



Machine tapes



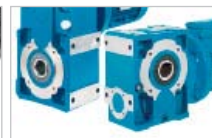
Seamless belts



Round belts



Fabrication tools (joining tools)



Gear reducers
Gearmotors
Motion control



Electric motors

Worldwide support

Our extensive organization is ready 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.

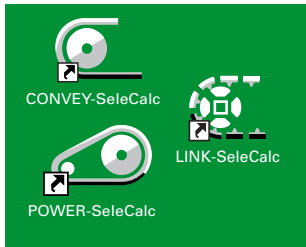
For additional information please visit:
www.habasit.com

Services



Consulting and technical support

Habasit offers the best consulting and technical support on the belting market. Everything revolves around our customers. Each affiliate has its own experts. The Habasit team proudly provides the highest levels of support and top-quality products enjoyed by the global market for over 60 years.



Assistance with 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."

POWER-SeleCalc = Power transmission belt selection and calculation

CONVEY-SeleCalc = Fabric conveyor belt selection and calculation

LINK-SeleCalc = Plastic modular belt selection and calculation



Customer training programs

Habasit offers training programs and provides support tools to ensure optimal use of our products and to prolong their lifecycles. 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, e.g. 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.



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Product liability, application considerations

If the proper selection and application of Habasit products are not 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.

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