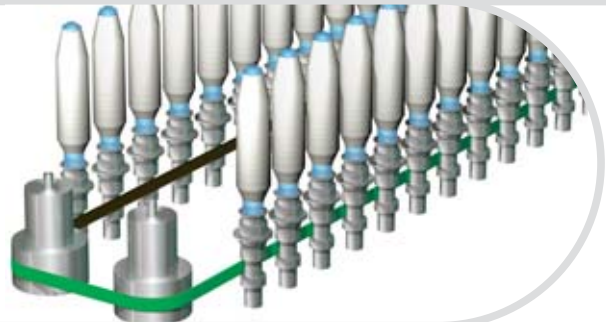


HabaDRIVE® Power Transmission Belts

Habasit – Solutions in motion



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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.



HabaDRIVE® power transmission belts

Habasit gets things moving with an extensive variety of high quality belt solutions.

HabaDRIVE® power transmission belts are ideal for reliable and economical power transmission.

Key benefits

- Low energy consumption
- Long belt service life
- Maintenance free
- No unexpected machine downtime
- Smooth and quiet running
- Unlimited pulley service life

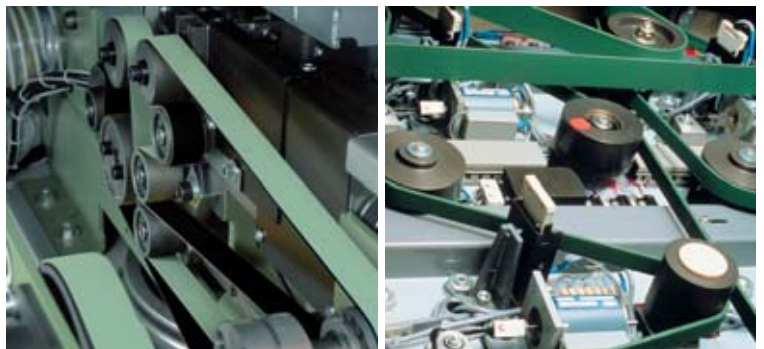
Your solutions partner

Habasit is totally committed to understanding your design parameters and application needs. After reviewing your requirements, our specialists will suggest the best belt solution for each application.

Global expertise

With over 60 years of experience, the widest and most innovative product range, and an extensive global network, Habasit is the clear No. 1 in belting worldwide.

We put every effort into meeting your needs for high quality belting solutions tailored to your specific requirements.



HabaDRIVE® power transmission belts are tailor-made to suit specific industry needs and a wide variety of machine designs. This overview shows just some of the industries and applications Habasit is currently serving.

Textile industry

- Cards
- Draw frames
- Roving frames
- Ring spinning frames
- OE machines
- Twisting machines
- Texturing machines
- Winders
- Overhead cleaners

Paper and postal industry

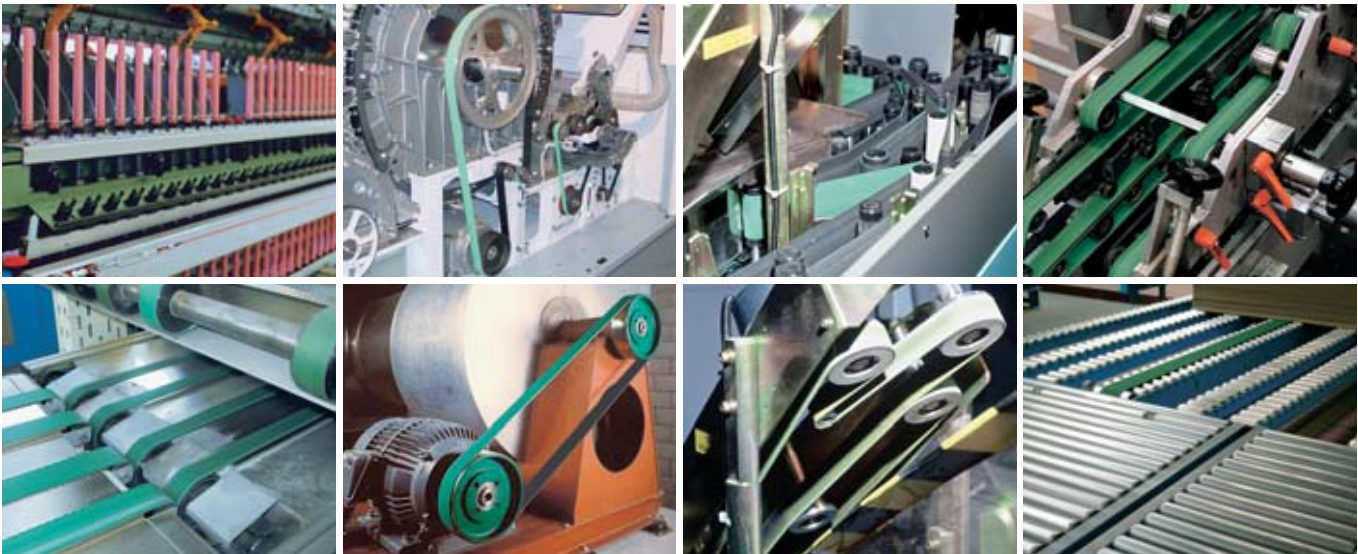
- Calenders
- Letter sorters
- Paper mills
- Pulpers
- Slitters
- Web feeders
- Finishing machines
- Converting lines

Materials handling

- Live roller drives

Various industries

- Air conditioning
- Blowers
- Centrifuges
- Compressors
- Extruders
- Fans
- Feeding devices
- Frame saws
- Mills
- Presses
- Pumps
- Stone crushers

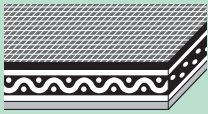

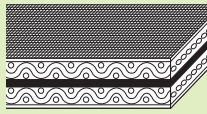
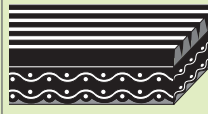



Three belt concepts – make the right choice

5

Habasit has developed the HabaDRIVE® range of power transmission belts to allow you to choose the most suitable belt for your specific application.

Below is an overview of the three traction layer materials used by the different belt concepts:

	Polyester power transmission belts		Polyamide power transmission belts		Aramide power transmission belts
	The versatile belt		The hard-working belt		The sophisticated belt
	Outstanding price-to-value ratio First choice of machine manufacturers and end users worldwide		Well known for its reliability and long service life Robust and highly resilient, copes with intermittent overload and high temperatures (up to 100°C)		Best choice for long belts. Short take-up and highest accuracy for numbers of revolutions (rpm)
	TC-	TCF-xxEL	S-	A-	TF-
	<ul style="list-style-type: none"> • Low energy consumption • Highly flexible • Simple to join • Reliable performance 	<ul style="list-style-type: none"> • Low energy consumption • Grooves enable high grip • Highly flexible • Simple to join 	<ul style="list-style-type: none"> • Resilient • Shock resistant 	<ul style="list-style-type: none"> • Resilient • Shock resistant • Grooves enable high grip 	<ul style="list-style-type: none"> • Low energy consumption • Highly flexible • Simple to join • High E-modulus
Application as / for					
Tangential drive	●	–	●	–	●
Multiple pulley drive	●	●	●	●	●
Live roller drive	●	–	●	–	●
Double-sided power transmission	●	–	●	–	●
Design and materials	e.g.: TC-55ER 	e.g.: TCF-20EL 	e.g.: S-250H 	e.g.: A-2 	e.g.: TF-50 
Friction cover (Material)	NBR-Rubber	NBR-Rubber or Hamid for TCF-xxH	NBR-Rubber	NBR-Rubber	NBR-Rubber
Traction layer (Material)	Polyester		Polyamide		Aramide
Reverse cover (Material)	NBR-Rubber	Hamid	NBR-Rubber	NBR-Rubber (protection cover)	NBR-Rubber
Operating temperature admissible (continuous)	-20°C / 70°C		-20°C / 100°C		-20°C / 65°C
Fabrication / joining system	Flexproof (adhesive-free)		Thermofix		Flexproof (adhesive-free)

	Polyester power transmission belts	Polyamide power transmission belts ¹⁾	Aramid power transmission belts	
	TC-TCF-xxEL	S-A-	TF-	
Benefits				Reasons
Low energy consumption	● ● ●	● ●	● ● ●	– High belt flexibility
Resilient and shock resistant	● ●	● ● ●	●	– Properties of traction layer
Suitable for compact machine design and small pulley diameters	● ● ●	●	● ● ●	– High belt flexibility
Recommended for very short take-up and accuracy of rpm	● ●	●	● ● ●	– High modulus of elasticity
Temperature resistance	● ●	● ● ●	● ●	– Belt concept
Adhesive-free joining method	● ● ●	○	● ● ●	– Belt concept
Long bearing lifetime (bearing protection)	● ● ●	● ●	● ● ●	– Low belt vibration due to homogeneous joining system (Flexproof)

Key

- ● ● = excellent
- ● = good
- = fair
- = not applicable

Legend

- ¹⁾ dimensionally sensitive to changing ambient humidity

	Belt group	Belt code	Double-sided power transmission, tangential drives	One-sided power transmission	Thickness [mm]	Pulley diameter minimum with counter flexion [mm]	Tensile force for 1% elongation per unit of width [N/mm] (k ₁ % after running in)	Nominal peripheral force per unit of width [N/mm]
Polyester power transmission belts	TC-	TC-10EF	●	●	1.8	25	5	10
		TC-20EF	●	●	2.0	25	10	21
		TC-20/25EF	●	●	2.5	50	11	23
		TC-35ER	●	●	2.5	50	18	38
		TC-35/30ER	●	●	3.0	50	18	38
		TC-35/35ER	●	●	3.5	70	18	38
		TC-55ER	●	●	3.0	70	25	53
	TCF-	TCF-20EL	○	●	2.6	80	10	21
		TCF-35EL	○	●	3.0	100	18	38
		TCF-55EL	○	●	3.5	150	25	53
		TCF-20H	●	●	1.5	25	10	20
		TCF-50H	●	●	2.0	60	24	48
Polyamide power transmission belts	S-	S-10/15	●	●	1.5	40	4.4	12
		S-18/20	●	●	2.0	63	8	22
		S-18/30	●	●	3.0	63	8	22
		S-33/40	●	●	4.0	125	13	37
		S-33/50	●	●	5.0	125	13	37
		S-140H	●	●	1.7	40	4.8	13
		S-141H	●	●	2.3	40	4.8	13
		S-250H	●	●	2.3	100	11	29
		S-250HR	●	●	2.6	100	11	29
		S-251H	●	●	3.0	100	11	29
		S-321H	●	●	3.2	132	13	35
		S-390H	●	●	3.2	160	14	38
		S-391H	●	●	4.0	160	14	38
	A-	A-2	○	●	2.7	56	7.5	22
		A-3	○	●	3.4	125	12	36
		A-4	○	●	5.0	280	21	63
		A-5	○	●	6.8	450	30	92
Aramide power transmission belts	TF-	TF-10	●	●	1.7	25	10	10
		TF-15	●	●	2.0	32	15	15
		TF-15H	●	●	1.5	32	15	15
		TF-22	●	●	2.4	63	22	22
		TF-33	●	●	3.0	90	33	33
		TF-50	●	●	3.9	140	50	50
		TF-75TE	○	●	4.4	200	70	70

Belt selection and calculation

See the next page.

Additional information

For detailed and up-to-date Product Data Sheets, the Habasit website **www.habasit.com**

Key

● = Yes

○ = No

Please note

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.

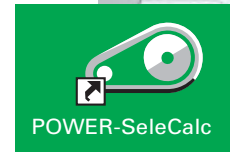
Belt selection and calculation

Additional information

8

Belt selection and calculation

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



The principles behind our computer-based selection and calculation process

Single stage drive / open drive (two pulley drive)

Selection / input mask



Further input mask

Belt selector mask



Result screen

Result printout



Option: Printout of Product Data Sheets

Tangential belt drive

Selection / input mask



Drive configuration input / selection mask

Additional information: www.habasit.com

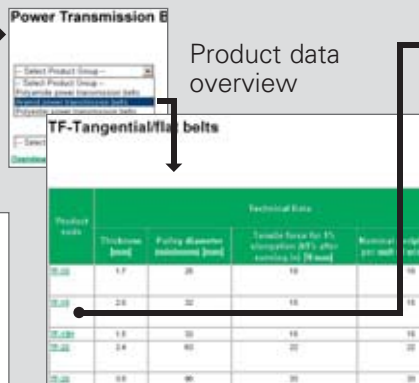
Navigation



General overview



Product group selection



Product data overview

Product Data Sheet



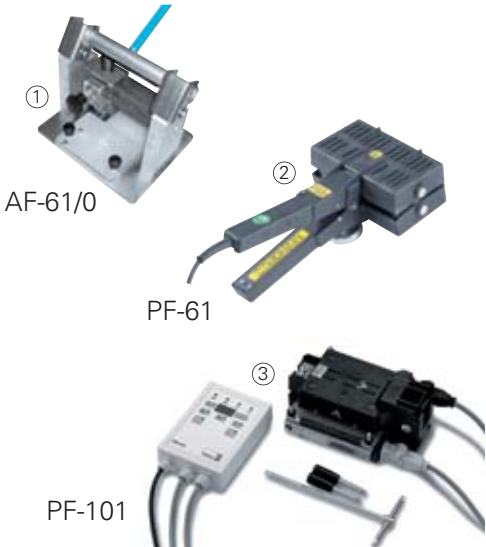



Engineering Guidelines for HabaDRIVE®

For: Machine designers, project leaders, engineers, technicians, fitters, maintenance staff.
Benefits: Optimized engineering design, belt selection, and long and trouble-free belt service life.
Main contents: Technical know-how, Application examples, Assistance with selection and calculation of the optimal belt type, Guidelines for the design of flat belt drives, Joining methods and tools, Belt installation, maintenance and storage, Trouble shooting.

Two joining methods

Both joining methods, the adhesive-free **Flexproof** method for Polyester and Aramide belts and the **Thermofix** (skived and with adhesive) method for Polyamide belts, are safe and absolutely reliable. Both are suitable for on-site installation. We provide a selection of cost-effective, high-quality preparing and hot-pressing devices to support the joining process.

Method	Flexproof	Thermofix
Suitable for	Polyester and Aramide (TC-, TCF-) power transmission belts	Polyamide (S-, A-) power transmission belts
Principle		
Key features	<ul style="list-style-type: none"> • Adhesive-free method • Easy handling, fast process • Homogeneous joining area • Short machine downtimes 	<ul style="list-style-type: none"> • Adhesive-based method • High temperature resistance
Fabrication tools	<p>Preparing devices ①</p> <p>Hot-pressing devices (hand tools) ②</p> <p>Hot-pressing devices (large size tools) ③</p> 	

Joining instructions

For detailed and updated Joining Data Sheets (instructions) and Fabrication Tool Data Sheets visit the Habasit website at www.habasit.com (Fabrication – Joining Data Sheets – Select Product Range – Select Product Group – Select Product).

Fabrication, tools and services

The provision of superior fabrication capabilities is a key element of Habasit's service concept. Fabrication can take place either at the belt supplier's facility, on-site at the machine manufacturer, or at the end user. Joining can be made either by the customer or by Habasit's on-site service. Habasit has solutions for both cases, supported by our specially adapted range of joining tools and systems, and our extensive service network.

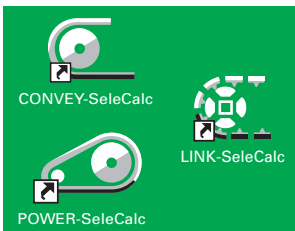
Comprehensive services are central to Habasit's belting solution approach.

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. Each affiliate has its own belting 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 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 33 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 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.

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

Customers come first

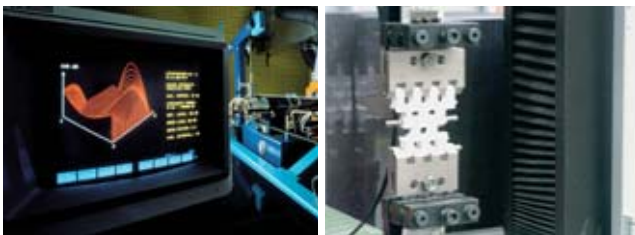
At Habasit we understand that our success depends on your success. This is why we offer solutions, not just products; partnership, not just sales.

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



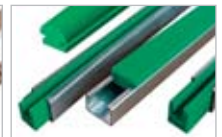
HabaDRIVE®
Power
transmission
belts



HabaSYNC®
Timing belts



HabaCHAIN®
Chains (slat and
conveyor chains)



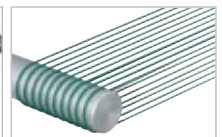
HabiPLAST®
Profiles
Guides
Wear strips



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.

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Suwanee, Georgia
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www.habasitamerica.com

Habasit America (Habasit ABT)
Seamless Belts
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