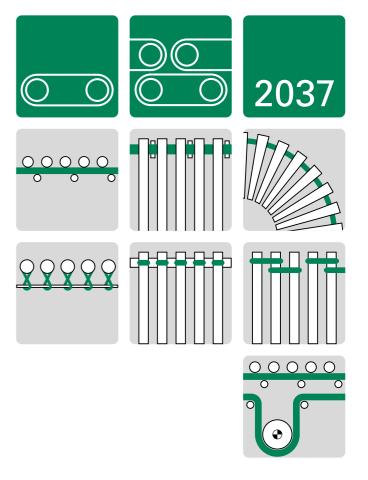
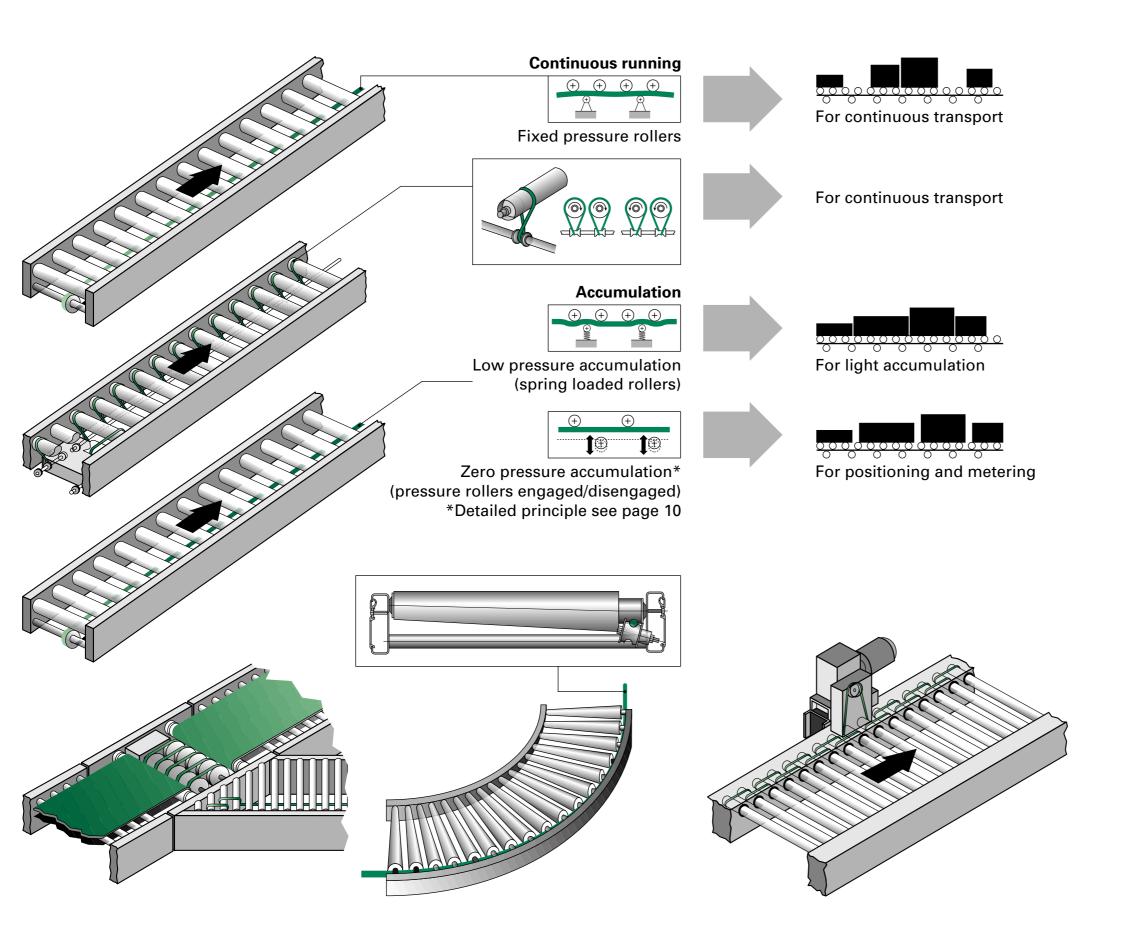
Edition: December 2001 Replaces edition: –



Application brochure

Habasit drive belts for live roller conveyors (LRC)





## **Some questions**

Are any of following live roller problems a challenge?

- Noise level?
- Long downtimes/ interruptions?
- Reduced productivity?
- Mis-sorts?
- Belt tracking?
- High maintenance (lost chainpads, excessive crease, etc.)
- Use in cold stores
- Others

One YES is enough for you to be talking to Habasit

4 pressure rollers

5 drive belt 6 tail pulley

1 carried goods

3 carrying rollers

2 drive pulley

### A fine selection of belts for live roller conveyors

Requirements Some Belt design Continuous Habasit running belt types Fixed pressure rollers CM-types adhesive surface positive power TC-types input from  $\overline{\sim}$ drive pulley TF-types adhesive surface positive power MAM-types transfer to carrying rollers • positive power **Polycord Central shaft drive** input and roundbelts adhesive surface transfer **Accumulation** Low pressure accumulation • selected power MAM-5P non-adhesive transfer to FAB-12E carrying rollers FAB-8E surface positive power input from adhesive surface drive pulley CM-types Zero pressure accumulation positive power adhesive surface TC-types input and transfer **TF-types** 1 adhesive surface

Technical data						Specially suited for							
Belt type	Tensile force for k1% (dynamic) [N/mm]	Belt thickness [mm]	Minimum pulley diameter of drive pulley and of tail pulley [mm]	Traction layer/element	For continuous running	⊕ ⊕ ⊕ ⊕ Eor low pressure accumulation	For zero pressure accumulation	*************************************	Low noise	Shock absorbing in start and stop operation	High dimensional stability	Short take-up	
TF-15	15.0	2.0	32	Aramid									
TF-22	22.0	2.4	63	Aramid		$\bigcirc$				$\bigcirc$			
TF-33	33.0	3.0	90	Aramid		0				$\bigcirc$		•	
<b></b>													
TC-20EF	9.5	2.0	25	Polyester		$\bigcirc$							
TC-35ER	17.0	2.5	50	Polyester		$\bigcirc$							
TC-55ER	26.0	3.0	70	Polyester		$\bigcirc$							
CM-14/30F	7.0	3.0	30	Polyester		$\bigcirc$		0					
CM-18/30F	15.0	3.0	40	Polyester		O		0					
FAB-12E	20.0	2.5	60	Polyester			0						
FAB-8E	12.0	1.6	20/30	Polyester			O						
I AD VL	12.0	1.0	20,00	1 Olycotol									
MAM-5E	3.0	1.4	25	Polyester	0		0						
MAM-5P	3.0	1.4	20	Polyamide	•		0					0	
Polycord 415		415	40150	Polyurethane									

### **Features and benefits** of the Habasit live roller drive belts

The belt joining: **The Habasit** Flexproof joining system

**Joining** in less than 15 minutes without any No special adhesives skills required for joining

The joining of Habasit **Polycord round belts** 

Cutting

S-16 cutting device

PQ-18 welding device

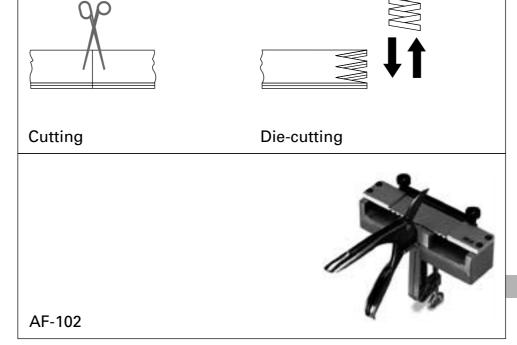
Melting



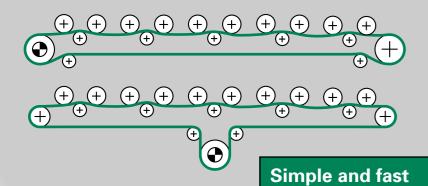
- Optimum process reliability
- → Positive flow response
- → No retensioning => troublefree production
  - => no downtimes



- → Small pulley diameters → Energy efficient
- => economical operation



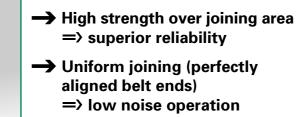




**Durable and high** quality friction covers/coatings



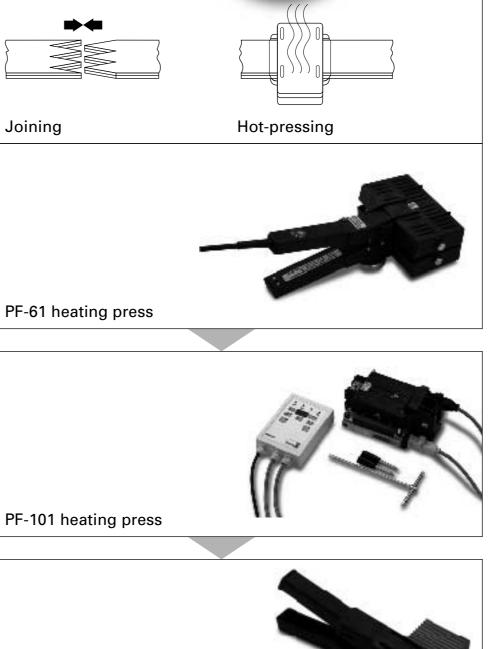
- → Superior power input (negligible slip)
- → Positive flow response
- → Long service life ⇒ high output/throughput



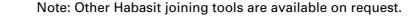
joining system

(Flexproof)

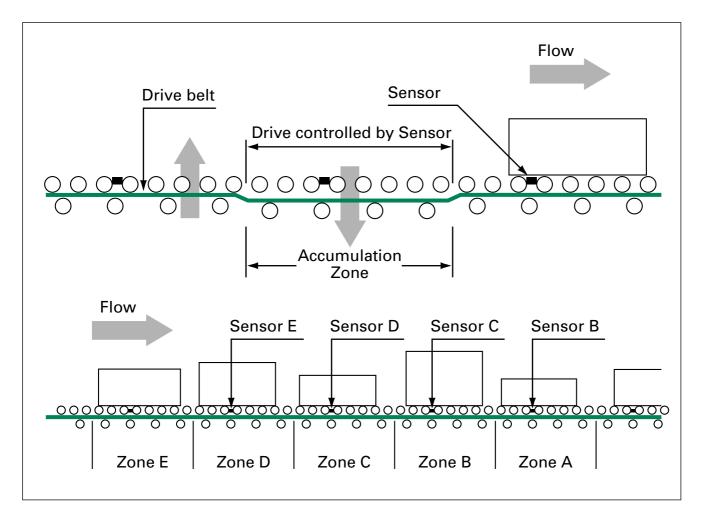
- → Highly flexible over joining area (no adhesives – no stiffening) => optimum service life
- → On site installation => shorter downtimes



CD-61 cooling tongs



# System: The zero pressure accumulation system/principle



- Zero pressure accumulation occurs when the driving force is completely removed from the conveyed product.
- The above is depicting a LRC with sensors spaced along the conveyor. When a product comes to standstill on a sensor the belt in the zone upstream drops away from the carrying rollers and thereby removes the driving force, while the belt continues to run.
- Actuating mechanisms can be mechanical, electric or by pneumatic or fluid control.
- To re-activate a zone the product is driven off the sensor, activating the next zone. This in turn drives the product off its sensor. The operation mode is called singulation.

# Belt design worksheet for live roller conveyor belts



Computer aided belt calculation available. We will determine the most suitable belt for you in accordance with the following information.

Customer	Originator/name:							
information	Customer:							
	Address:							
	Contact person:							
	Title:							
	Phone number:							
	Fax number:							
	E-mail:							
Equipment	1. Total conveying length mm							
<b>data</b> Use reverse side	2. Conveying velocity m/min							
for sketches (i.e., drive configuration)	3. Number of pressure rollers per carrying rollers (i.e., 1 for 2, 1 for 1)							
and additional comments	4. Weight of one carrying roller kg							
comments	5. Number of carrying rollers							
	6. Carrying roller diameter mm							
	7. Head drive							
	8. Tail drive							
	9. Center drive							
	10. Diameter of drive pulley mm							
	11. Arc of belt contact on drive pulley°							
	12. Drive pulley with lagging  YES  NO							
	Smallest tail pulley (idler/deflection/return pulley) in drive train with arc of contact > 20° mm							
Application	14. Total load of carried goods kg							
data	Individual loads of carried goods kg							
	Material conveyed with Soft bottom (i.e., corrugated card board)							
	☐ medium soft bottom							
	hard bottom (i.e., hard plastic, wood, etc.)							
	Operating environment, temperature range°C to°C							
	18. Other influences, if applicable							
Belt data	Required belt thickness from mm to mm							
	20. Required belt width from mm to mm							

For support of new equipment design please contact Habasit

# Belt design worksheet for live roller conveyor belts, sketches, comments

#### **Habasit – The No. 1 Belting Company**

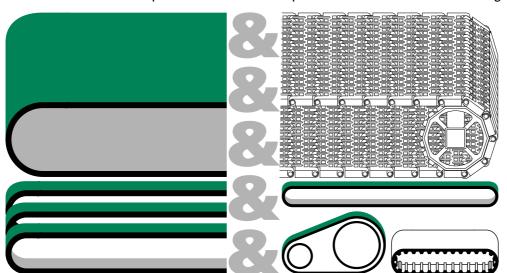
or some reasons to choose Habasit as your belting partner

#### 1 Experience

Habasit was founded in 1946 and has accumulated more than 50 years of belting experience backed by our own state-of-the-art engineered processing machinery. Production at Habasit is maintained by well trained and committed teams. Our activities are supported by in-house Research & Development teams and aim at excellence in application and customer-oriented solutions. We have extensive experience in most industries including: food – materials handling – printing & paper – textile – wood – aluminium – glass – metal working – canning – bottling – automotive – electronics – business machines.

#### 2 One partner – one source

Habasit – One partner for all your belting needs such as – traditional conveyor and processing belts – modular belts – machine tapes – seamless belts – power transmission belts – timing belts – round belts – etc.



#### 3 Worldwide service

Habasit's engineering consulting and service network extends worldwide with local distribution and service associates in more than 70 countries.





#### 4 Quality

Habasit has been certified according to the ISO 9001/EN 29001 quality standards since 1987.



#### **5 References**

**Example: Live roller belt users.** 

Please contact your local Habasit representation for further information:

Antriebs-, Transportelemente Eléments de transmission, de transport Power transmission, conveyor belts Elementos de transmisión, de transporte Elementi di trasmissione, di trasporto Elementos de transmissão, de trasporte Aandrijf-, transportelementen Transmissions-, transportelement Voimansiirto-, kuljetuselementit Kraftoverførings-, transportelementer

動力の伝達及びコンベヤーの原理

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