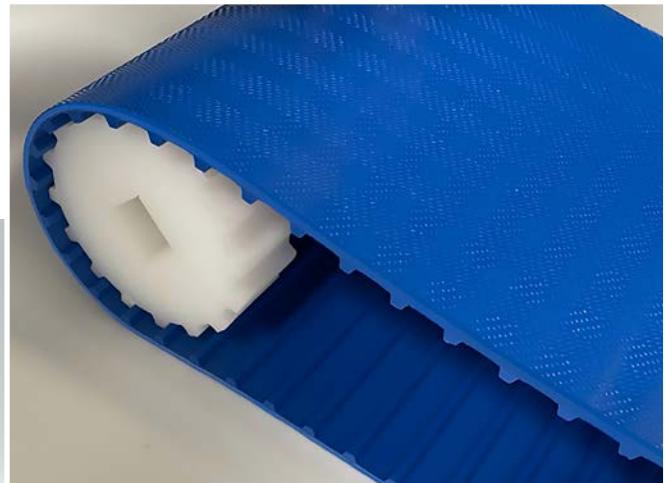


esbelt.com



Conveyor belts



ISO 9001:2015

## SMART DRIVE

Positive Drive  
Conveyor Belts

# SMART DRIVE

## Flexible, hygienic and safe design

Smart Drive is the new proposal from **esbelt** that replaces modular and homogeneous belts. It is a positive drive belt that meets the most demanding needs. Smart Drive is made of Premium TPU with high resistance to animal and vegetable fats, abrasion, and hydrolysis, complying with FDA and EU food regulations.

The flexibility of its design and material quality are its key to excellent performance.



### Advantages

#### Over modular belts

Easy to clean. Reduced risk of contamination.  
More security.

Water savings, reduction in cleaning hours, less waste water treatment.

Less noise pollution.

Weight less and saves energy.

#### Over monolithic belts

Less elongation.

No misalignment if there is an accidental cut.

High dimensional stability, avoiding undulations and deformations on the surface.

Allows for customized design and fabrication of long conveyors.

Anti-microbial formulation.

### Codes

Smart Drive	<b>SD4-20 / NPX-09UA2 MT-AM</b>	<b>SD</b> Smart Drive
	<b>SD4-20 / NPX-09UA2 MT-AM</b>	<b>4</b> Trapezoidal profile 6x4mm ; <b>7</b> Square profile 7x7mm
	<b>SD4-20 / NPX-09UA2 MT-AM</b>	Pitch*: <b>20mm</b> ; <b>40mm</b> ; <b>50mm</b>
Base belt	<b>SD4-20 / NPX-09UA2 MT-AM</b>	Belt code: <b>NPX</b> Novak Premium ; <b>CPX</b> Clina Premium
	<b>SD4-20 / NPX-09UA2 MT-AM</b>	Working load at 1% elongation N/mm: <b>09</b> ; <b>20</b>
	<b>SD4-20 / NPX-09UA2 MT-AM</b>	<b>U</b> Thermoplastic Polyurethane cover
	<b>SD4-20 / NPX-09UA2 MT-AM</b>	<b>A2</b> Cover pattern
	<b>SD4-20 / NPX-09UA2 MT-AM</b>	<b>MT</b> Matt finish
	<b>SD4-20 / NPX-09UA2 MT-AM</b>	<b>AM</b> Antimicrobial quality

\* Pitch 20 and 50mm, available with 6x4mm toothed profile.

40mm pitch, available with 7x7mm toothed profile.

# Hygiene and safety



## Anti-Hydrolysis

TPU with high resistance to hydrolytic degradation. Resistant to hot water and steam, strengthens the life of the belt.



## Easy to clean, savings in water consumption

Its design and material allow easy cleaning and maintenance of the belt. Due to its anti-hydrolysis quality, it can withstand frequent washing sessions and stay in perfect condition.



## Antimicrobial

Antimicrobial belt, prevents the formation of biofilms. The formulation in its TPU layers, not just the surfaces, reduces microbial growth by more than 99%.



## Contributes to the application of a HACCP system

We are committed to the highest quality standards, our Smart Drive helps in the implementation of a HACCP system.



## FDA and EU food regulations

Smart Drive complies with FDA and EU food regulations to come in direct contact with food products.

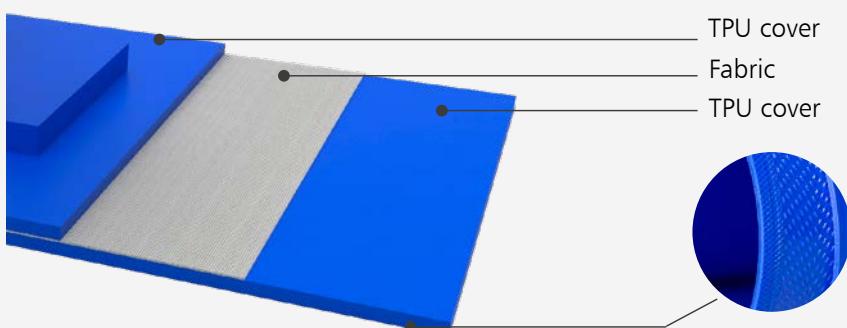


## Data

Type of base belt	Top cover					Bottom cover		Constant (intermittent) temperature °C	Fabrics		Belt thickness mm	Belt weight Kg/m²	at 20°C	Working load at 1% elongation N/mm	Max roll width mm	
	Material*	Hardness °ShA	Color	Thickness mm	Finish	Color	Finish		Nº plies	Weft						
NPX09UA2MT-AM	TPU	85	blue 06	0,3	matt	blue 06		-25 (-30)+90 (110)	2	rigid	2,10	2,20	30	50	9	1250
NPX20UA2MT-AM	TPU	85	blue 06	0,5	matt	blue 06	A2 pattern	-25 (-30)+90 (110)	2	rigid	3,15	3,20	100	100	12	1250
CPX09UA2MT-AM	TPU	85	white	0,3	matt	white		-25 (-30)+90 (110)	2	rigid	2,10	2,20	30	50	9	1250

\*Consult us for PVC.

## Structure



### Sealed edges (optional)

Additional measure of safety and protection. They prevent the accumulation of dirt that proliferates microbial growth and ply separation.

## Finishings of the belt

- Color blue 06 or white.
- A2 pattern on one side and matt on the other.



**Positive A2 pattern.** It allows the cover to work on a slider bed and on rollers. It is easy to clean and release food residue. It has a low coefficient of friction under humid conditions.

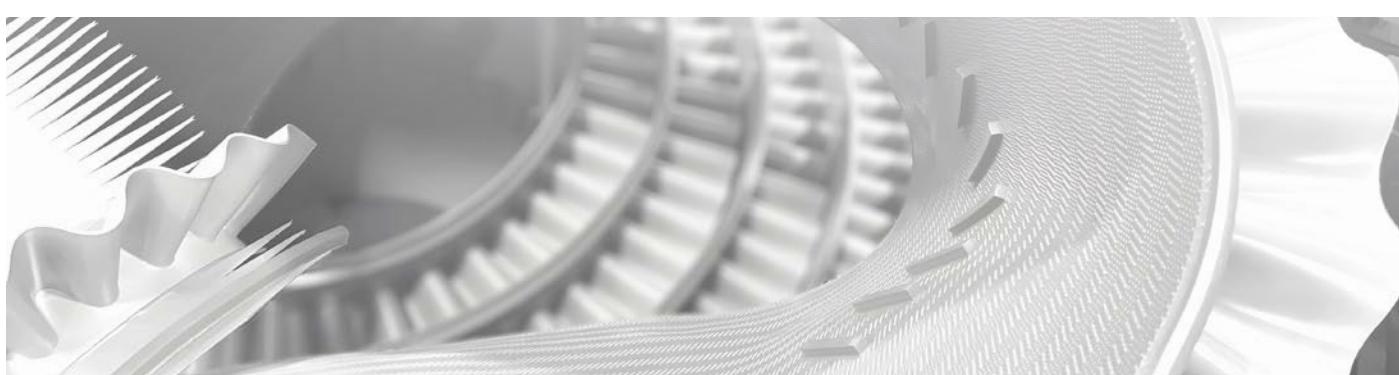


**Silk-matt finish.** Homogeneous and non-porous. It guarantees a good release of products and easy cleaning.



### Perforations

Possibility to perforate the base belt for draining applications.



# Sprockets and Discs

Sprockets					
Type	Number of teeth	$\varnothing$ mm	Square Hole mm	Round Hole mm	Width mm
Pitch 20 mm					
SD/Z8 P20	8	51,2	25	20	31
SD/Z16 P20	16	102,4	25 / 40	20 / 30	31
Pitch 40 mm					
SD/Z8 P40	8	102,4	25 / 40	20 / 30	31
SD/Z12 P40	12	152,8	25 / 40	20 / 30	31
SD/Z13 P40	13	165,2	25 / 40	30	31
SD/Z14 P40	14	178,8	25 / 40	20 / 30	31
SD/Z16 P40	16	204,8	25 / 40	30	31

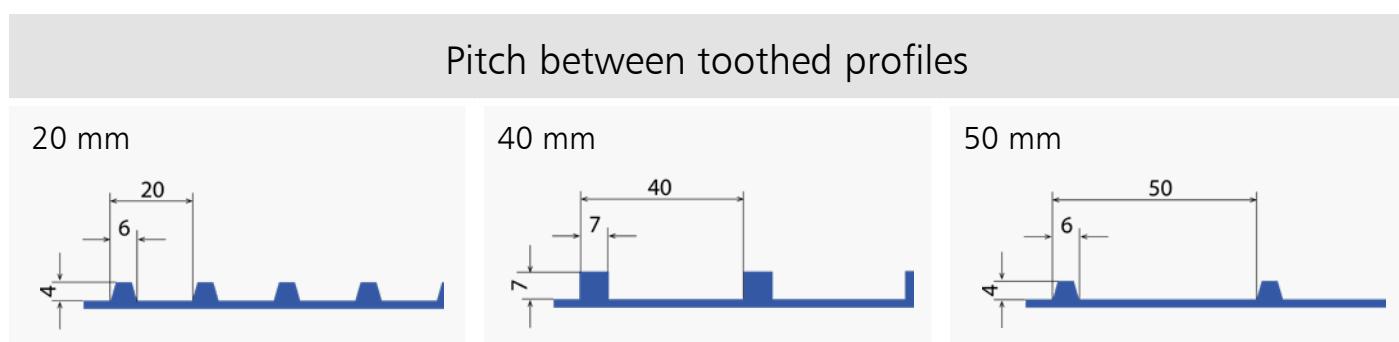
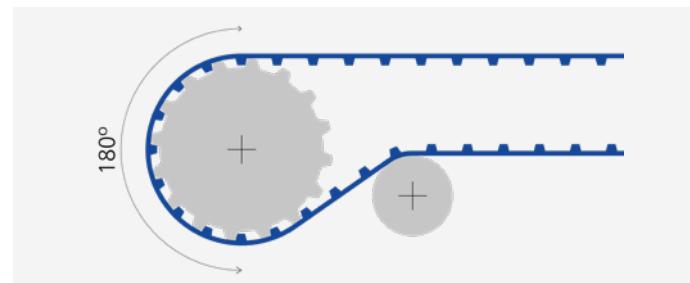
Discs				
Type	$\varnothing$ mm	Square Hole mm	Round Hole mm	Width mm
SD/Z0 D51	51,2	25	40	31
SD/Z0 D102	102,4	25 / 40	30	31
SD/Z0 D152	152,8	25 / 40	30	31
SD/Z0 D165	165,2	25 / 40	30	31
SD/Z0 D178	178,8	25 / 40	30	31
SD/Z0 D204	204,8	25 / 40	30	31

Material of sprockets and discs: PEHD.  
Consult sprockets for 50 mm pitch.

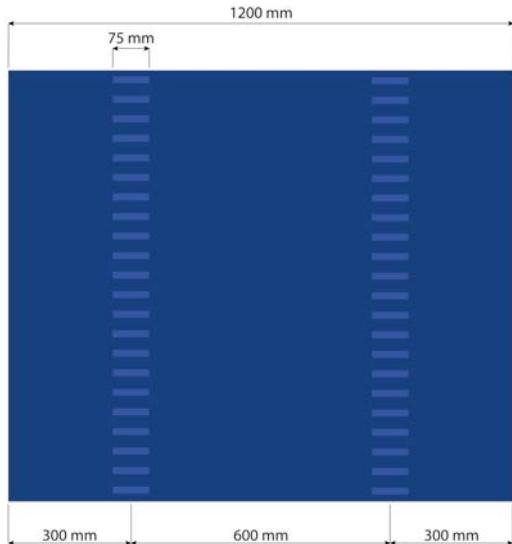
## Toothed Profiles

The toothed profiles, on the bottom cover, enable optimal centering, prevent damage due to misalignment, save costs and maintenance time.

They can be configured in different ways to achieve maximum self-centering of the belt.

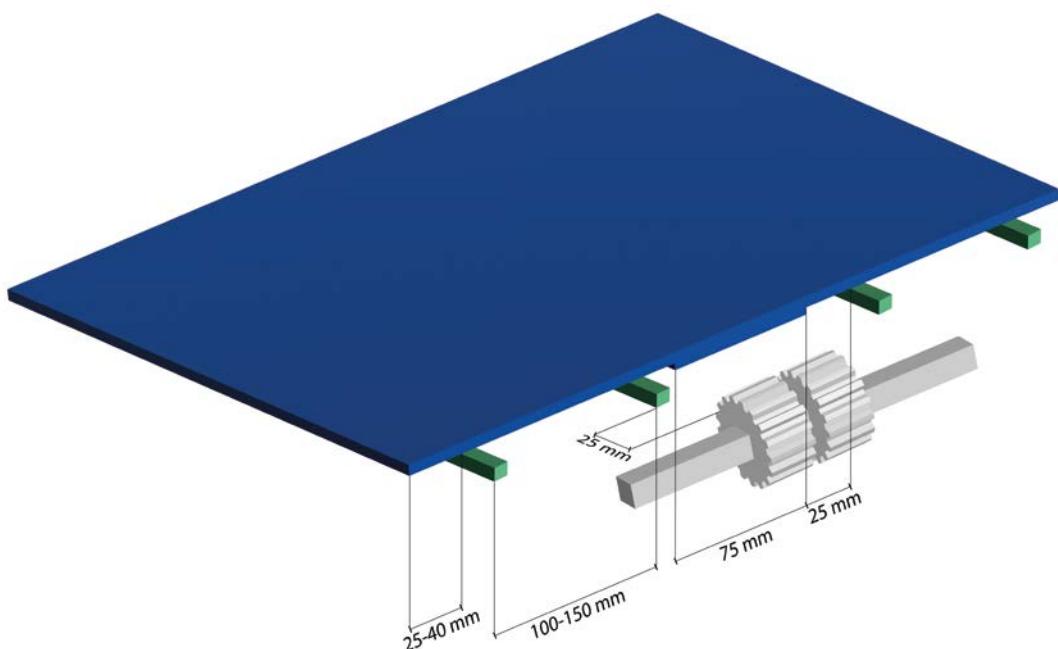


## Position of the toothed profiles



- Belt width  $\leq$  600 mm:  
1 row centered toothed profile.
- Belt width  $>$  600 mm:  
2 rows of toothed profiles.

## Position of support bars for Smart Drive



### Recommended dimensions:

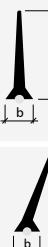
- Standard length of the centered profile: 75 mm.
- Lateral margin between belt edge and support bar: min. 25mm max. 40mm.
- Pitch between support bars: between 100 - 150 mm.
- Distance between end of support bars and sprockets: 25 mm.

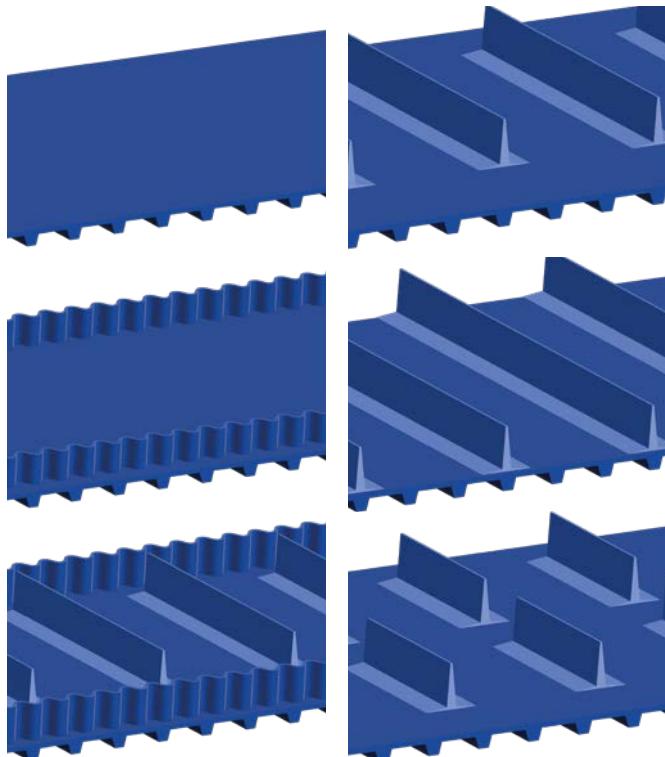
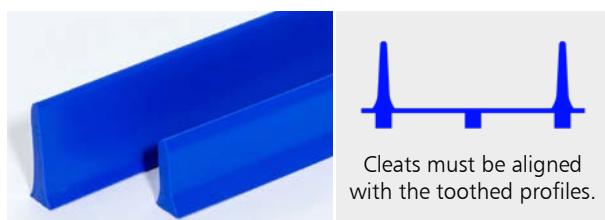
# Accessories

One of Smart Drive's priorities is to efficiently adapt to the requirements of each application and the product to be conveyed.

For this reason, different accessories such as cleats and sidewalls (Runner) can be welded on its top cover in multiple configurations, depending on the requirements.

## Cleats and Runner configurations

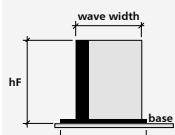
Cleats (Flights)					
Section	Type	Dimensions		Material	Min ø mm
		b mm	h mm		
	UV.020	10	20	TPU	40
	UV.030	10	30		45
	UV.040	10	40		50
	UV.050	10	50		50
	UL.030	10	30	TPU	45
	UL.040	10	40		50
	UL.050	10	50		50
	UL2-020	15	20		65
	UL2-030	15	30	TPU	65
	UL2-040	15	40		65
	UL2-050	15	50		65
	UL2-060	15	60		65
	UL2-070	20	70		80
	UL2-080	20	80		80



## Reinforced profiles

Section	Type	Dimensions			Min ø mm
		b mm	h mm	Material	
	URRL030	25	30	TPU	75
	URRL050	25	50		75
	URRL070	25	70		75
	URRL080	25	80		75
	URRL100	25	100		75

To prevent damage on the return side, the transverse cleats must always be 10 to 20 mm lower than the Runner sidewall.

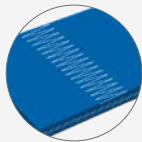
TPU Runner with base							
Section	Type*	Height hf mm	Width af mm	Wave width mm	Pitch cf mm	Min ø mm	Thickness mm
	BB20	20	30	20	22	33	2,3
	BB30	30	30	20	22	50	2,3
	BB40	40	30	20	22	70	2,3
	BB50	50	60	30	36	85	2,3
	BB60	60	47	34	40	110	2,5
	BB80	80	47	34	40	140	2,5
	BB100	100	52	34	40	180	3,0



\*Available colors: White (WH) and Blue (BL).

# Types of joint

## Vulcanized



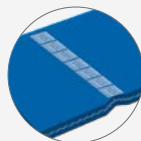
Maximum resistance and hygiene. In addition, with our air-cooled compact press, splices can be made on-site without the need for access to running water.



## Fasteners



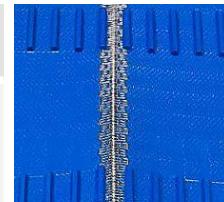
Metalic



Plastic



Wire Hook



We have several types of fasteners, they are not as hygienic and resistant as vulcanized joint, but they facilitate fast installation and dismantling.

## Examples of Smart Drive applications



Feather treatment



Corn cob processing



Pet food



Shrimp processing



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