

# ELATECH® Conveying applications



# Polyurethane belts for conveying applications:

## Backings

The unique chemical and mechanical features of ELATECH® belts together with the possibility of a wide range of backings in different materials make ELATECH® belts ideal for all conveying applications where synchronization is required. The engineer designer has unlimited possibilities to make a unique design.

### Minimum pulley diameter

The minimum pulley diameter can be calculated by means of the "pulley multiplier" shown for each type of backing.

$$\text{Minimum pulley diameter} = \text{backing thickness} \times \text{pulley multiplier } C_D$$

As a general rule, we may say that the smaller the pulley, the thinner the backing has to be.

The diameters obtained are valid for application with speed up to 1 m/s and a temperature of 20° C.

If smaller pulley diameters are needed, please contact ELATECH's technical dept.

### Drive with reverse bending

ELATECH® polyurethane timing belts are suitable for drives with reverse bending. Tension should be adjusted, depending on backing hardness.

### Temperature range

The choice of the correct backing may allow the conveying of hot items. However, the toothed structure of the belt must not be exposed to temperatures over 80° C.

The minimum contact temperature should be -10° C for all backing materials, however, special material compounds may be available for lower temperatures. In such cases, please check with ELATECH's technical department.

### Coefficient of friction

The values shown in the table refer to the approximate static coefficient of friction against steel.

In order to reduce the pulley's diameter, it is possible to splice the backing allowing a better flexibility. Pulley diameter, should never be smaller than the minimum diameter recommended for the standard belt.

Please ask ELATECH's technical dept. for further details on coefficient of friction with other materials.

### Colours

Standard colours shown in the table may change without notice. Special/personalized colours are available on request.

### Chemical resistance

The values given in the table for the resistance to oils and fat of each backing material are purely indicative and may vary depending on the concentration and the temperature of chemical agents. When in doubt, please check with ELATECH's technical department.

### General remarks

ELATECH's wide range of different backings can be grouped into four main categories: cellular, PVC & PU, rubber, and special. Each different category provides special features and top quality performance and endurance making the various backings especially suitable for specific applications. These features include different degrees of hardness, cellular, fabric, felt or solid material compounds, different levels of grip, FDA-compliant materials, antistatic materials, different resistance to oils and fats, and different resistance to abrasion, tear and wear.

Such variety, combined with top quality mechanical and technical properties and state of the art manufacturing systems and techniques including the application of different flights and cleats, the combination of different backing materials, the slitting and grinding of the final product to match exact dimensions and shapes without any burrs or any other imperfections left on the surface, as well as water jet cutting for extremely precise perforations, make ELATECH®'s coated belts the best and the most reliable solution for specific applications in the most diversified fields of industry.

## Covering Materials

**FABRIC****Polyamide fabric backings**

The special polyamide fabric backings allow a reduction of the friction coefficient and when applied on teeth, decrease noise in high speed drives. They are very useful in applications with sliding surfaces or product accumulation.

**Polyamide fabrics with antistatic properties are available.**

**PAZ:** Polyamide backing on tooth side.  
Reduces coefficient of friction and allows a smoother tooth engagement.

**PAR:** Polyamide backing on back side.  
Reduces coefficient of friction.

**PAZ-PAR:** Polyamide backing on both tooth and back side

**Coefficient of static friction**

- Polyurethane on steel  $\mu = 0,7$
- Polyamide on steel  $\mu = 0,35$
- Polyurethane on aluminum  $\mu = 0,8$
- Polyamide on aluminum  $\mu = 0,45$

Elatech Code	Description		
TZ11	PAZ Standard		Nylon fabric on teeth
TZ21	PAR Standard		Nylon fabric on back
TZ15	PAZ Antistatic		Antistatic nylon fabric on teeth
TZ25	PAR Antistatic		Antistatic nylon fabric on back



## Covering Materials CELLULAR

Polyurethane / Rubber foam backings are easily compressible according to the cellular structure of the material. Due to this main characteristic, common applications are: labelling equipment, light and/or fragile materials conveying, glass and paper industry, vacuum conveyors.

**Pulley diameter: C<sub>D</sub> • Backing Thickness**

Elatech Code	Description		Material	Color	Hardness [°Sh A]	Standard thickness [mm]	Max contact temperature	Oil and fat resistance	Coefficient of static friction on steel	FDA food grade	Pulley multiplier C <sub>D</sub>
CFX	CELLOFLEX		Microcellular elastomeric polyurethane	brown / yellow	-	3 - 10	+80°C	medium	0,3	No	16
POR	POROL		cellular rubber	black	ca 15	3, 5, 8,10,15	+70°C	medium	0,8	No	6
PY50	PU YELLOW 50		polyurethane	yellow	50	2, 3, 4, 5 6, 8,10	+70°C	high	0,8	No	20
PY70	PU YELLOW 70		polyurethane	yellow	70	2, 3, 4, 5, 6, 8,10	+80°C	high	0,75	No	25
SYL-B	SYLOMER BLU		Elastomeric PUR	blue	-	6, 12, 25	+70°C	medium	0,5	No	12
SYL-V	SYLOMER GREEN		Elastomeric PUR	green	-	6, 12, 25	+70°C	medium	0,5	No	14
SYL-M	SYLOMER BROWN		Elastomeric PUR	brown	-	6, 12, 25	+70°C	medium	0,5	No	15

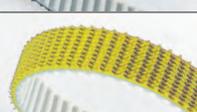
## Covering Materials

### PVC and PU

PVC has a high coefficient of friction and a good resistance to acids. Due to its versatility, it is used in many applications in the paper, glass, ceramic industry, labelling and packing equipment. FDA quality allows the application in food industry processes.

Among all synthetic materials and rubber compounds, polyurethane is the material which offers the best resistance to abrasion. Polyurethane films of different thickness and different shore hardness, applied on ELATECH® belts, are an ideal solution in many applications in the wood processing, ceramic and glass industry. On request it is possible to supply polyurethane backings FDA approved.

#### Pulley diameter: $C_D$ • Backing Thickness

Elatech Code	Description	Material	Color	Hardness [°Sh A]	Standard thickness [mm]	Max contact temperature	Oil and fat resistance	Coefficient of static friction on steel	FDA food grade	Pulley multiplier $C_D$
FBPU	FISHBONE PU 	PU	transparent	70 / 85	4	+70°C	medium	0,7	No	18
FBPVC	FISHBONE PVC 	PVC	white	65	4	+80°C	high	0,7	Yes	18
PUR70	PUR70 	PU	transparent	70	2 - 5	+70°C	high	0,7	No	25
PUR85	PUR85 	PU	transparent	85	2 - 5	+70°C	high	0,6	No	30
PVCW	PVC WHITE 	PVC	white	ca 65	2,3	+90°C	medium	1,0	Yes	35
PVCG	PVC GREEN 	PVC	green	ca 40	1	+90°C	high	0,9	No	40
SG50R	SUPERGRIP 50 R 	Thermoplastic compound	red	55	4,5 - 12	+80°C	medium	0,9	No	12
SG60	SUPERGRIP 60 GL 	PVC	green	60	4,5	+90°C	medium	0,9	No	12
SG70	SUPERGRIP 70 Y 	PU	yellow	70	4,5	+80°C	high	0,8	No	12
MG	MINIGRIP PVC 	PVC	green	ca 65	1,5	+100°C	medium	0,4	No	40

## Covering Materials RUBBER

Many different rubber backings in both synthetic and natural rubber are available. Due to rubber's high friction coefficient and high temperature resistance, ELATECH® polyurethane belt with rubber backing is used in many different conveying application: paper industry, ceramic industry, wood processing industry, glass industry, labelling and packaging machines.

**Pulley diameter: C<sub>D</sub> • Backing Thickness**

Elatech Code	Description	Material	Color	Hardness [°Sh A]	Standard thickness [mm]	Max contact temperature	Oil and fat resistance	Coefficient of static friction on steel	FDA food grade	Pulley multiplier C <sub>D</sub>
SG50T	SUPERGRIP 50 RT 	natural rubber	red	40	4,5	+80°C	low	1,0	No	15
LTX	LINATEX 	natural rubber	red	ca 40	2,4 - 3,2 - 4,8 6,4 - 8,0 - 9,6	+70°C	low	1,1	No	15
LNP	LINAPLUS 	natural rubber	white	ca 40	2,4 - 3,2 - 4,8 6,4 - 8,0 - 9,6	+70°C	low	1,1	Yes	15
LTR	LINATRILE 	nitrile rubber	orange	ca 55	3 - 6	+110°C	medium	1,0	No	20
NBR	NITRILE 	nitrile rubber	black	65	-	+110°C	high	0,7	No	18
NBR-W	NITRILE 	nitrile rubber	white	65	-	+80°C	high	0,7	No	18
TNX	TENAX / ISOGUM 	rubber	red	40	2 - 15	+60°C	low	0,75	No	15
VTN	VITON 	FKM Fluoroelastomer	black	ca 75	2/4	+275°C	high	0,7	No	30
RP400	YELLOW RUBBER 	natural rubber	yellow	ca 35	3 - 4 - 5 - 6 - 8 10 - 12 - 15 20 - 25 - 30	+65°C	low	1,2	No	13
CRX	CORREX 	para rubber	brown	ca 40	6 - 10	+60°C	low	0,9	No	15

## Covering Materials

# SPECIAL

Special backings are available in quite a different range of materials to cover even the most demanding design requirements.

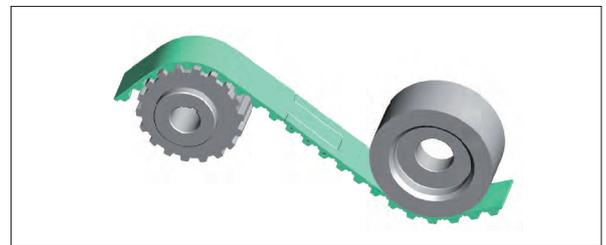
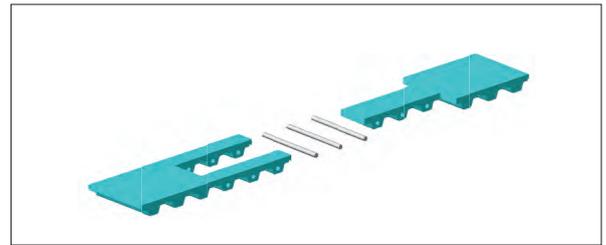
Pulley diameter:  $C_D$  • Backing Thickness

Elatech Code	Description	Material	Color	Hardness [°Sh A]	Standard thickness [mm]	Max contact temperature	Oil and fat resistance	Coefficient of static friction on steel	FDA food grade	Pulley multiplier $C_D$
APL	APL 	Thermoplastic compound	red-purple	55	3,5	+60°C	high	0,7	No	25
SLC	SILICONE 	Silicon	transparent	30	3 - 10	+200°C	high	1,0	No	20
SLCPU	SILICONE 	Special Silicon Compound	white	60	3 - 10	+200°C	high	0,85	No	20
SLCF	SILICONE FDA 	Silicon	blue	30	3 - 10	+220°C	high	1,1	Yes	20
TG50	TECNOGUM 50 	Thermoplastic rubber compound	red	ca 50	1 - 6	+80°C	high	0,7	No	20
TG70	TECNOGUM 70 	Thermoplastic rubber compound	red	ca 70	1 - 6	+80°C	high	0,6	No	25
CHRL	CHROME LEATHER 	Chrome leather	grey / blue	-	3	+80°C	high	0,8	No	30
TZ26	TZ PAR 	HDPE	green	-	0,3	+80°C	high	0,18	No	-
APLM	MULTIRIB 	Thermoplastic compound	red	60	3,5	+80°C	medium	-	No	-
APLM-T	MULTIRIB 	Thermoplastic compound	transparent	60	3,5	+80°C	medium	-	No	-

# ELATECH® EMF - Mechanical Fastening System

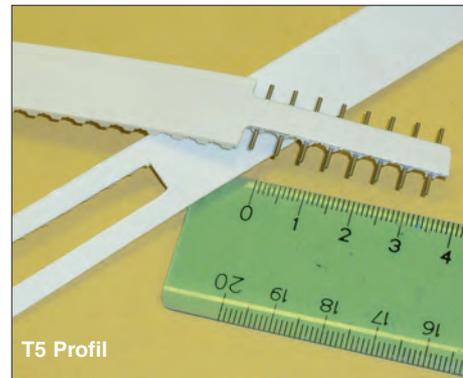
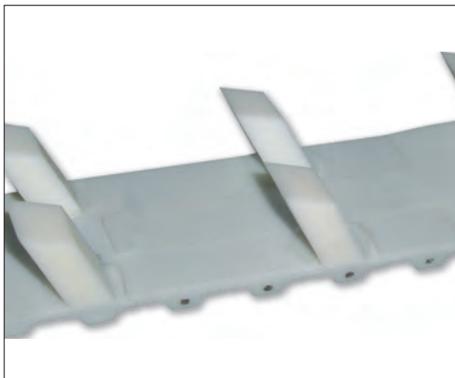
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ELATECH® EMF - Mechanical Fastening System allows in many conveying applications cost savings associated with being able to design equipment around the installation principle of EMF.



## Features

- EMF has no exposed metal parts, therefore no metal contact is made with pulleys, so it runs very quietly. Since there are no exposed metal parts, EMF will not damage conveyed products like competing metal based mechanical fastening alternatives.
- EMF maintains the same minimum pulley requirements as the belt and can operate with back bend idlers.
- It is excellent for belt applications with special backings such as Linatex, Supergrip, PVC, Fishbone, etc. EMF fits snug, which eliminates gaps otherwise seen in competing designs.
- It is suitable for belts with profiles for quick installation, saving time and money.
- EMF installs in seconds, making it the fastest timing belt installation for product conveyance. There is no need for time-consuming field welding.
- It is simple to install and requires no cumbersome or expensive field welding equipment.
- It can be custom designed according to the application strength needed. EMF can reach the same strength as the traditional welding.
- It is available on all pitches, making it a "must have" for all of your customer's conveying applications.



**No tools needed**

# ELATECH® EMF - Module

Profile	Width [mm]	Number of pins	Max working tension [N]	Carbon pin available	
T 5	10	5	96		
		8	144		
	16	5	176		
		8	224		
	20	5	232		
		8	296		
	25	5	304		
		8	320		
	32	5	450		
		8	480		
	50	5	360		
		8	480		
T 10	16	4	216		
		8	320		
		12	640		
	20	4	240		
		8	304	•	
	25	8	504	•	
		11	680	•	
	32	4	400	•	
		8	576	•	
	12	880	•		
		4	624	•	
	50	8	1120	•	
		11	1480	•	
	75	4	800		
		8	1600		
		11	1760		
		4	1040		
		8	2000		
		11	2280		
	T 20	25	4	536	
			11	1600	
		32	4	784	
			6	1200	
		50	4	960	
11			3040		
75		4	1600		
		11	3560		
100		4	2130		
		11	7600		
AT 5		10	5	144	
			8	168	
	16	5	280		
		8	320		
	25	5	208		
		8	288		
	32	5	320		
		8	380		
	50	5	440		
		8	600		
	AT 10	16	4	256	
			8	500	
12			960		
20		4	344		
		8	384	•	
25		8	624	•	
		11	904	•	
32		4	640	•	
		8	800	•	
12		1200	•		
		4	880	•	
50		8	1680	•	
		11	2160	•	
75		4	1040		
		8	2320		
		11	2640		
		4	1440		
100		8	2720		
		11	3440		

Profile	Width [mm]	Number of pins	Max working tension [N]	Carbon pin available	
AT 20	25	4	800		
		11	1760		
	32	4	1200		
		6	1520		
	50	4	1600		
		11	4400		
	75	4	1920		
		11	6080		
	100	4	2700		
		11	7700		
	HT 5	10	5	120	
			8	168	
15		5	240		
		8	296		
20		5	224		
		8	296		
25		5	280	•	
		8	376	•	
32		5	320	•	
		8	510	•	
50		5	480	•	
		8	640	•	
75	4	728			
	8	1096			
100	5	800			
	8	1520			
HT 8	15	5	256		
		8	360		
	20	5	376	•	
		10	784	•	
	25	10	960	•	
		14	960	•	
	30	5	400	•	
		11	960		
	50	5	800	•	
		10	1440	•	
	14	2080	•		
		22	2300	•	
75	5	1320			
	10	2400			
14	2880				
	85	9	2320		
100	5	1760			
	10	3200			
14	3600				
	40	5	1120		
55	5	1600			
	85	5	2400		

Profile	Width [mm]	Number of pins	Max working tension [N]	Carbon pin available
RP 5	10	5	120	
		8	168	
	15	5	240	
		8	224	
	20	5	296	
		8	280	•
	25	5	320	•
		8	376	•
	32	5	510	•
		8	640	•
	50	5	480	•
		8	640	•
RP 8	15	5	256	
		8	360	
	20	5	376	•
		10	784	•
	25	10	960	•
		14	960	•
	30	5	400	
		11	960	
	50	5	800	•
		10	1440	•
	14	2080	•	
		22	2300	•
75	5	1320		
	10	2400		
14	2880			
	85	9	2320	
100	5	1760		
	10	3200		
14	3600			
	40	5	1120	
55	5	1600		
	85	5	2400	

Profile	Width [mm]	Number of pins	Max working tension [N]	Carbon pin available
ST 5	10	5	120	
		8	168	
	15	5	224	
		8	296	
	20	5	280	•
		8	376	•
	25	5	320	•
		8	480	•
	32	5	510	•
		8	640	•
	50	4	728	
		8	1096	
75	5	800		
	8	1520		
ST 8	15	5	256	
		8	360	
	20	5	376	•
		10	784	•
	25	14	960	•
		5	400	
	30	11	960	
		5	800	•
	50	10	1440	•
		14	2080	•
	22	2300	•	
		5	1320	
75	10	2400		
	14	2880		
85	9	2320		
	5	1760		
100	10	3200		
	14	3600		
40	5	1120		
	55	5	1600	
85	5	2400		
	L	12,7	4	144
19,05		5	256	
25,4		5	288	•
38,1		5	480	
50,8		5	560	•
76,2		5	1000	
H	101,6	5	1200	
	12,7	3	120	
	19,05	4	240	
	25,4	4	304	•
	38,1	4	520	
	50,8	4	640	•
XH	76,2	4	880	
	101,6	4	1120	
50,8	10	3060		



EMF available with carbon pins.

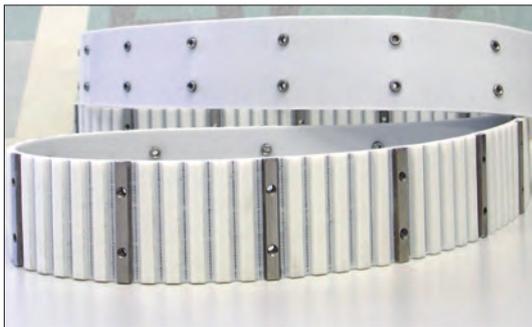
ELATECH® Conveying applications

# ELATECH® EFT - False Tooth System

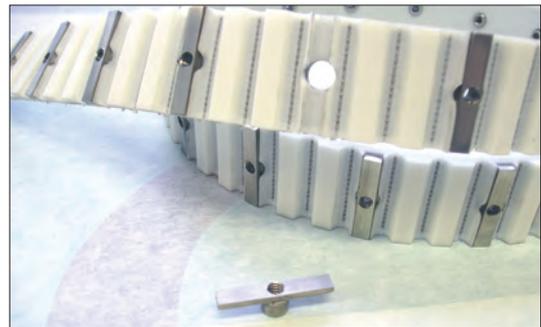
EFT is ELATECH's mechanical profile application system specially designed for fastening cleats that cannot be welded onto polyurethane timing belts.

Zinc-coated or stainless steel teeth are available, either with our embedded tooth or total tooth design. With the total tooth design, the EFT replaces the entire tooth of the belt and is safely secured by means of two threaded holes. The embedded tooth design prevents any metal-to-metal contact, ensuring more silent operation.

**Total tooth design**

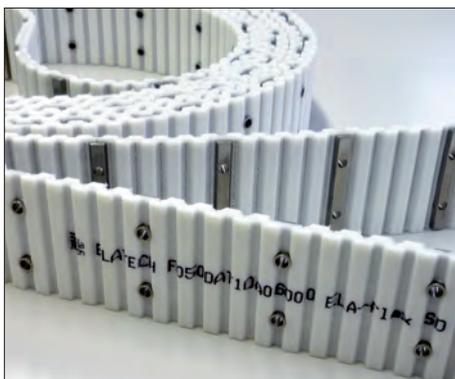


**Embedded tooth design**

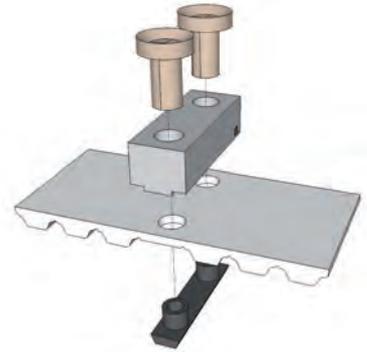
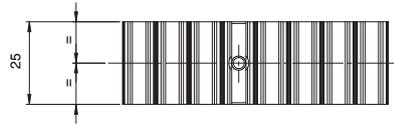
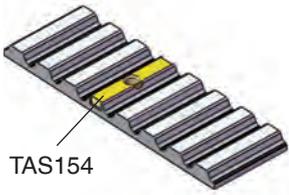


Many are the advantages offered by ELATECH® EFT:

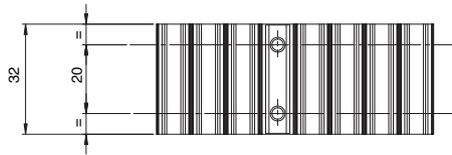
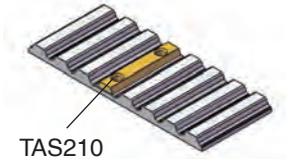
- EFT allows to apply cleats that cannot be welded onto polyurethane timing belts because of their overall dimension and/or material (such as steel, stainless steel, plastic, urethane, wood etc.)
- EFT is in stock in stainless suitable for food and pharmaceutical industry and humid environments
- EFT design has a self-centering effect on profile positioning, which makes it more precise than welded profiles
- EFT can handle much higher loads than welded profiles, making it a strong solution
- EFT is the precise solution eliminating any welded profile positioning tolerances. The profile positioning tolerance for EFT mirrors the ELATECH® timing belt tooth pitch tolerance
- EFT is flexible, allowing customers to reposition cleats for regularly scheduled application changes
- EFT is economical because customers can replace worn profiles without having to replace the entire belt.
- EFT is available in any of the following pitches: AT10, AT20, H, XH with or without self-tracking guide.
- EFT allows to use basic belts in all their possible executions: Flex, welded, with PAZ or PAR, FDA PU, steel, aramid or stainless steel cord.



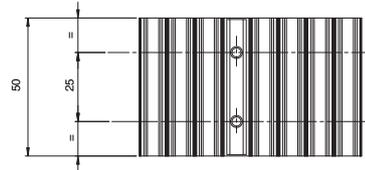
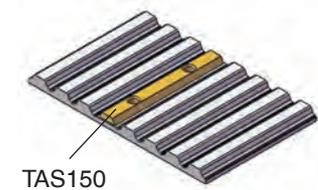
**TAS154** - suitable for AT10 and H profile 25 mm wide, one pin



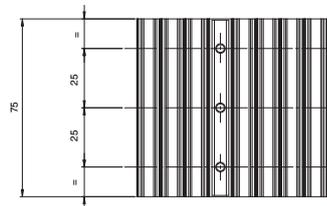
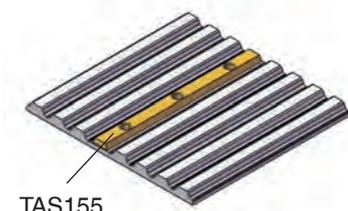
**TAS210** - suitable for AT10 profile 32 mm wide, two pins at 20 mm centre distance



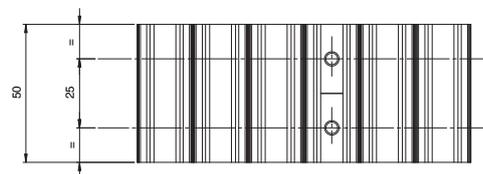
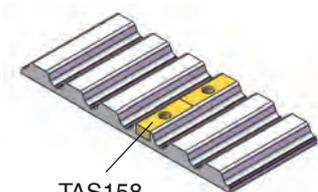
**TAS150** - suitable for AT10 profile, 50 mm wide, two pins at 25 mm centre distance



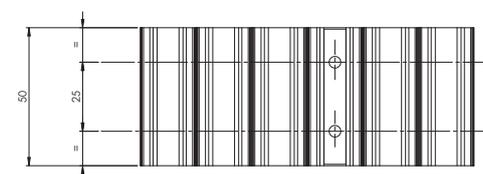
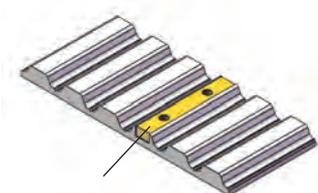
**TAS155** - suitable for AT10 profile, 75 mm wide, three pins at 25 mm centre distance



**TAS158** - suitable for AT20 and XH profile, 25-50-75-100 mm wide, number of pins multiple of 25 mm centre distance



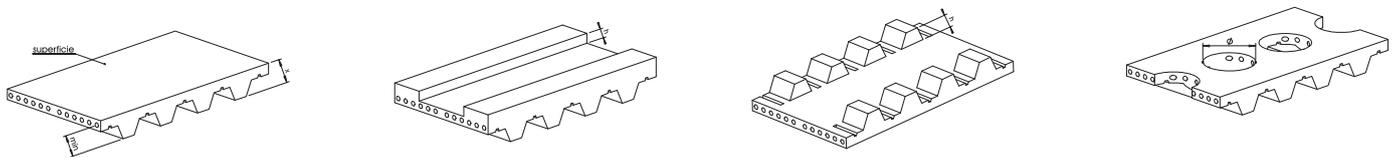
**TAS160** - suitable for AT20 and XH profile, 50 mm wide, two pins at 25 mm centre distance



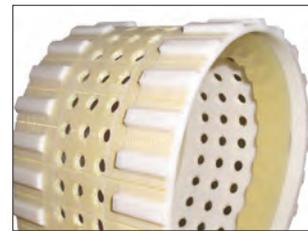
# Mechanical processing

Thanks to top-quality, state-of-the-art machinery and techniques such as water jet cutting, ELATECH® timing belts can be mechanically processed to perform special and complex tasks. The extremely precise machining and finishing operations guarantee the respect of the strictest tolerance requirements and the maximum reliability of ELATECH® timing belts in all the most complex and demanding industrial applications.

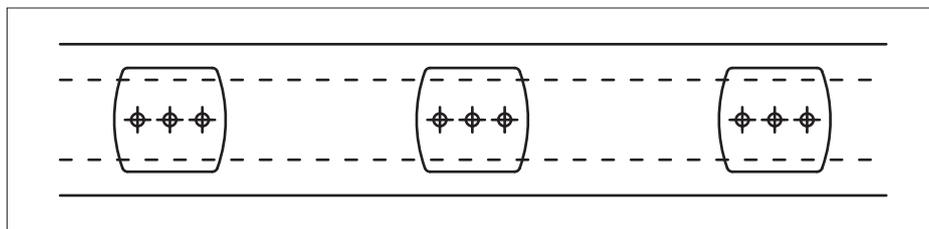
Depending on the application requirements, mechanical processing may include longitudinal milling of the teeth and/or of the back, back and side grinding, teeth removal, belt surface perforation and/or engraving, as well as surface preparation for the application of special profiles.



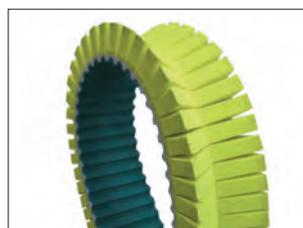
The great precision and the versatility of water jet cutting technology allow the creation of bores of any dimensions and shapes, from the smallest to the largest, from perfectly circular to oval or square.



Special backings can also be machined to optimize the performance of the belts in special applications. A typical example is the hollow milling of the backing to create a “vacuum cup effect” and maximize the suction provided by water jet cut bores. In this case, perfect suction is also granted by the absence of any tension members within the vacuum areas.



In another application, the thick V-shaped yellow PU backing on a belt used for transporting aluminium bars is slitted transversely to enhance the flexibility of the belt itself and to improve its revolution around smaller pulleys.



# ELATECH® polyurethane belts with profiles

It is possible to attach profiles on all ELATECH®, ELA-flex SD™ and iSync™ polyurethane belts for conveying, handling and positioning applications. The cleats are produced in the same material of the belts in order to guarantee the maximum strength. The belts with profiles allow a synchronised translation of the products at very high speeds and low noise. A very wide range of profiles is available. If the required profile is not shown in the following pages, please contact our technical office.



### Arc of contact

It is to be noted that the belt's arc of contact may be restricted by the jointed profile. It is therefore recommended to select profiles with the minimum allowable thickness "U".

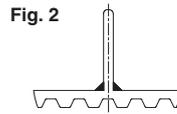
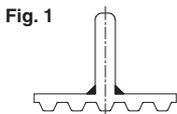


### Pitch

It is recommended to choose the pitch of the profile corresponding to the belt profile or multiple. This allows to minimize the effects of the belt overall length tolerance on profile spacing.

### Position

Profile position may be over the tooth or not over the tooth. Belt Flexibility is maximized when the profiles are applied over the tooth.



### Tolerances

The tolerance of position of the profiles is +/- 0,5 mm. If required it is possible to reduce the tolerance down to +/- 0,2 mm with an extra machining. During the welding process a bead of polyurethane of about 0,5-1 mm develops at the meeting point between the profile and the belt. Should it be necessary for the application, it is possible to remove the bead with mechanical machining.

Belt type	Profile thickness "U" [mm]																							
	2	3	5	6	8	10	12	14	16	20	25	30	2	3	5	6	8	10	12	14	16	20	25	30
	Recommended minimum pulley number of teeth z																							
T5	14	20	14	30	20	45	25	50	40	60	60	100	80	-	100	-	-	-	-	-	-	-	-	-
T10	16	20	16	20	16	30	16	40	20	50	25	50	35	60	50	70	80	80	100	100	120	120	-	-
T20	20	20	18	20	18	25	18	40	18	50	20	50	25	50	30	60	40	60	50	60	70	80	-	-
AT5	12	20	12	30	20	45	25	50	40	60	60	100	-	-	100	-	-	-	-	-	-	-	-	-
AT10	18	20	18	20	18	30	18	40	20	50	25	50	35	60	50	70	80	80	100	100	120	120	-	-
AT20	20	20	20	20	20	25	20	40	20	50	20	50	25	50	40	40	50	50	50	60	70	80	100	100
XL	10	20	10	30	20	45	25	50	40	60	50	100	60	100	-	-	-	-	-	-	-	-	-	-
L	12	16	12	20	12	40	20	50	30	60	40	60	50	70	60	80	100	100	-	-	-	-	-	-
H	14	16	14	16	14	25	14	30	20	50	25	50	40	60	50	70	80	80	100	100	120	120	-	-
XH	18	18	18	20	18	20	18	30	18	40	20	50	20	50	25	55	35	60	50	60	70	80	-	-
HTD5M	12	20	12	30	20	45	25	50	40	60	60	100	80	-	100	-	-	-	-	-	-	-	-	-
HTD8M	18	18	18	18	18	24	18	32	18	40	20	40	28	48	40	56	64	64	80	80	100	100	-	-
HTD14M	28	28	28	28	28	28	28	40	28	50	28	50	28	50	30	60	40	50	50	60	100	100	110	110
STD5M	12	20	12	30	20	45	25	50	40	60	60	100	80	-	100	-	-	-	-	-	-	-	-	-
STD8M	18	18	18	18	18	24	18	32	18	40	20	40	28	48	40	56	64	64	80	80	100	100	-	-

Minimum number of teeth when the profile is welded on tooth gap (fig. 2)  
 Minimum number of teeth when the profile is welded on tooth (fig. 1)

### Ordering

When ordering it is necessary to indicate: type of belt (width, profile, pitch, length), the belt length in number of teeth, the belt and profile drawing with the number and the pitch of the requested profiles

ELATECH® Conveying applications

# ELACLEATS

download in CAD or PDF format the most suitable cleat

ELATECH® offers a wide variety of custom-made and standard cleats specially designed for different applications in many industries. ELACLEATS is a web-based tool for quickly selecting among ELATECH® standard cleats by shape, size and features. 2D and 3D drawings can be easily downloaded for the selected cleats.

Elatech online cleat selection support at:  
[www.elatech.com](http://www.elatech.com)



**Always up to date**  
 ELACLEATS online version is always up to date with new types and sizes.

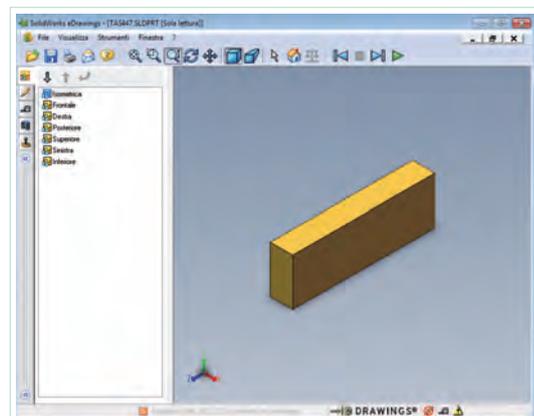
## RELIABLE SOLUTIONS!

**Fast and easy**  
 ELACLEATS offers an intelligent search for a quick selection of most suitable cleat with an easy to follow menu for fastest navigation.

## SAVE YOUR TIME!

**Comprehensive range**  
 ELACLEATS offers widest range of cleats to optimize your conveying application.

## IMPROVE EFFICIENCY!



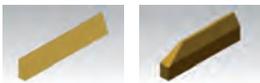
## Hundreds of cleats available for all applications!



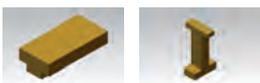
**ST** = Square Top: flat faces at right angles to each other



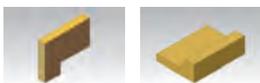
**RT** = Round Top: the upper part of the cleat has a rounded shape



**TR** = Triangular or Trapezoidal: flat faces, some of which are not at right angles to other faces; cross-sections can be triangular, trapezoidal, pentagonal, etc.



**TT** = "T" Shaped: a portion of the cleat (usually the upper one) is wider than the rest, so that a cross-section resembles the shape of a capital "T"



**AN** = Angular Shape: two portions of the cleat are set at an angle to each other



**GB** = Gusset Back: having a fin on one side that is not attached to the belt but rests on it and increases rigidity when the cleat is pushed in one direction



**CR** = Cradle Shape: "U" or "V" shaped so that an object can rest in the seat created by the sides of the cleat



**CY** = Cylindrical Shape: a cylinder with vertical or horizontal axis



**SP** = Special Shape: any other shape, usually a structure especially designed for a specific use