

Elatech® Polyurethane Belts

Products Overview



Elatech®
Technology in Motion.





It is in a small valley surrounded by green, just a few steps from Bergamo, but far from the crowded and chaotic modern world, where an idea comes to life. Thanks to ingenuity, knowledge and hard work of the local people, in 2003 Elatech was born.

Innovation, training and investments in this territory forged the identity of a family business, nowadays the most representative of the industry worldwide.

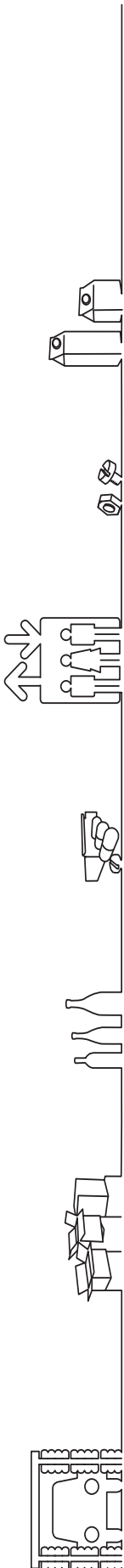
The Group

SCAGLIA GROUP of today was born in 1838, when we started to manufacture wooden bobbins for the textile industry. From this distant beginning, we have grown into a diverse group of companies providing a wide range of products and solutions.

We continue to support the textile industry through **SCAGLIA S.r.l.** now using modern materials including polymers and light alloys. Power transmission components and motion control solutions come from **SIT S.p.A.** and **SIT Automation**, while **MELUCCI S.r.l.** deals with linear motion. **ELATECH S.r.l.** is responsible for the design and manufacture of polyurethane belts.

In 2004 the materials handling and industrial manipulator interests were brought together under the **INDEVA** brand.

Across the Group, today still owned by the Scaglia family, our focus is on **continuous innovation and development** using leading-edge technology in materials research, mechanics, pneumatics and electronics. With a team of **1000 employees**, a broad network of subsidiaries and distributors in Europe, America, Asia and India we support our customers providing **first class support and service all around the world**.





THE COMPANY

ELATECH® is a Company fully dedicated to the research, development and manufacture of polyurethane belts for industrial applications.

The unique manufacturing processes, made possible by the newest generation technologies, modern and efficient test and control equipment and a unique team of qualified technicians and engineers, allow **ELATECH®** to offer superior products and highly flexible service.

ELATECH® is a ideal partner to find solutions for simple or complex applications in linear motion, precise and synchronized transportation, lifting and power transmission.

OUR MISSION

Constantly growing, together with our customers, in product and process innovation to develop the best polyurethane belt for every industrial application

RESEARCH & DEVELOPMENT

We strongly believe innovation is the key to success for our Customers.

We are totally committed to quality and close cooperation with our Customers to solve in the most advanced and economic way all the problems of design engineers. Our qualified technicians and our advanced test laboratory with the most modern resources allow us to offer the most effective solutions in all conveying, lifting or power transmission applications.

TOTAL QUALITY

In **ELATECH®** the term "quality" is not only limited to the product. We offer professional and competent consulting service with fast and reliable deliveries. The certification of our quality system confirms the quality consciousness of our Company and of all our employees. Our management system is certified according to **ISO 9001**.

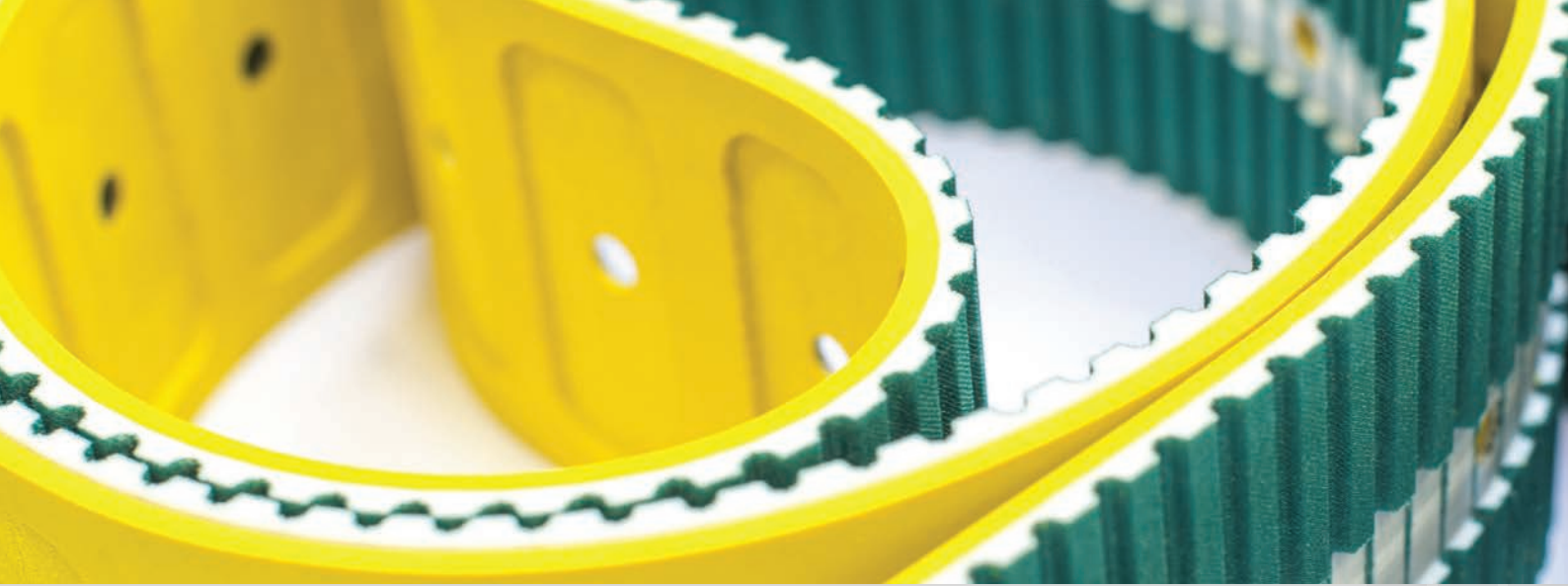
GLOBAL PRESENCE

With 6 sister Companies on 3 continents and a wide range of qualified distributors, **ELATECH®** guarantees a superior technical and delivery service worldwide.



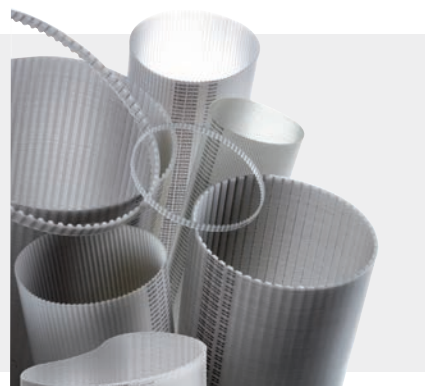


A white, ribbed timing belt is shown in a coiled shape. The belt has a series of raised, rectangular ribs along its length. Printed in black text on the side of the belt is 'ELATECH F025T5A01400 Ela-flex SD'. There is also a small logo to the left of the text and some smaller text 'Copyright' to the right.



ELATECH® iSync®

Made from a special polyurethane compound and featuring high-strength steel cords, **ELATECH® iSync®** belts are the result of a unique, highly sophisticated technology that makes them capable of transmitting 30% more than conventional T and AT profiles.



Special

Thanks to their physical and mechanical properties and a wide range of materials that can be brought to the surface, **ELATECH®** belts meet any synchronized conveying need.

Linings:

Fabric
Foam
PU
PVC
Rubber
Silicone



Typical application fields



Logistic



Automotive



Industrial Lift



Home Lift



Garage Doors



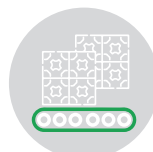
Fitness



Curtains



Food Processing



Ceramic



Glass



Paper



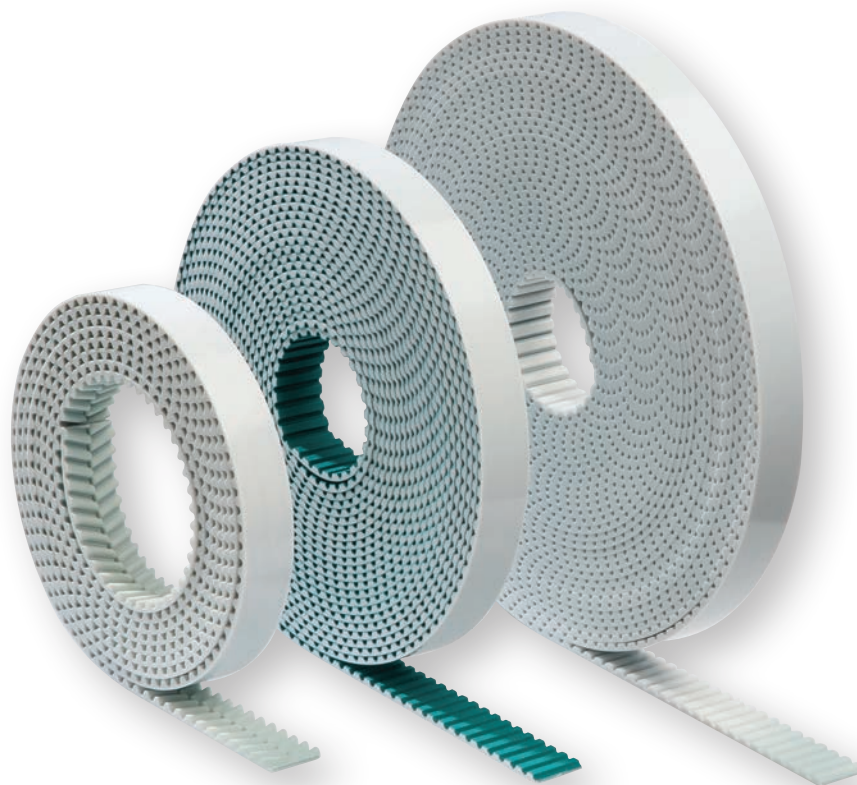
Wood



Textile

and more...

Elatech[®] M & V



ELATECH[®] production includes the widest range of high-performance profiles in different pitches, allowing to select the best technical solution in every drive application.

ELATECH[®] M - Open End, comply with every need of the design engineer in linear motion, power transmission, lifting and conveying applications where precise synchronisation is needed.

Our timing belts are manufactured with the body in thermoplastic polyurethane with excellent wear resistance and with high tensile strength steel cords. A special polyamide fabric on the tooth (on request) reduces the coefficient of friction, improves the tooth engagement and reduces noise. Additionally, for special applications our engineering department studies and delivers innovative and unique solutions to even the most complex requirements.

In order to maximize the application of **ELATECH[®]** timing belts, construction with special cords is available on request:

STANDARD CORD



HFE CORD



HPL CORD





HPL high performance cords: the cord cross section is increased compared with standard. This results in a lower belt elongation and more precise positioning accuracy.

HFE high flexibility cords: the cord cross section is spread on a higher number of single filaments. This results in a lower bending stress and therefore in a higher resistance at reverse bending of the cords. They allow using pulleys and idlers up to 30% smaller in diameter compared to standard.

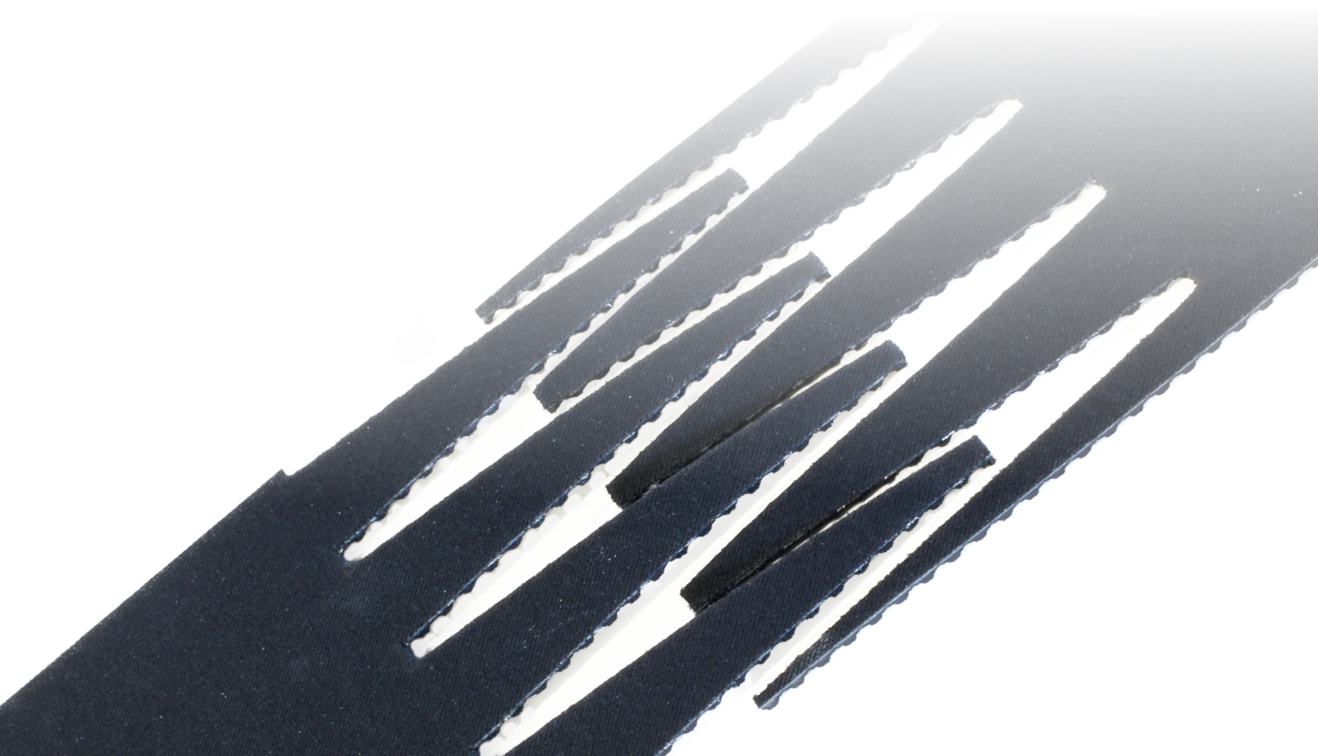
STAINLESS STEEL (INOX) cords are suitable for application in aggressive environments. They have lower tensile strength than standard cords.

ARAMID: increases belt flexibility and decreases belt weight.

In order to maximize the application of **ELATECH®** timing belts, our products can be delivered with:

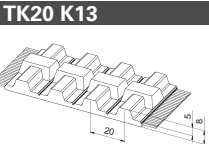
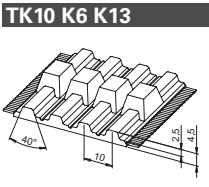
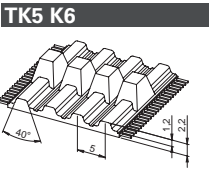
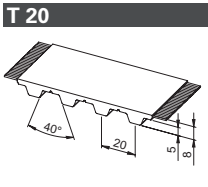
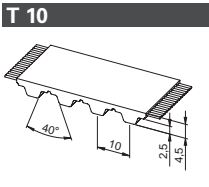
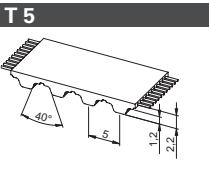
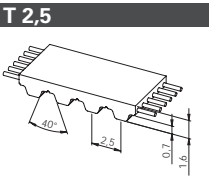
- Antistatic properties
- Special colour
- Double sided execution
- Total protection execution
- High temperature resistant PU
- FDA-compliant PU and cords

ELATECH® V - Welded, they are joined belts manufactured from open-end **ELATECH®** belts. Thanks to the specific manufacturing process, any length may be obtained tooth by tooth. Free combinations with special backing materials and welded profiles, make **ELATECH® V** belts ideal in synchronized conveying and highly specialised applications

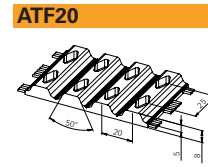
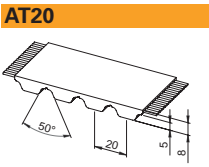
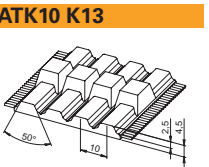
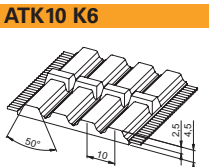
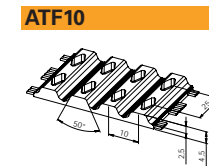
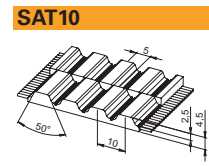
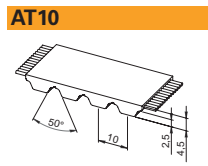
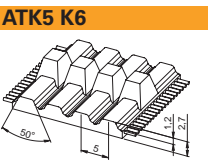
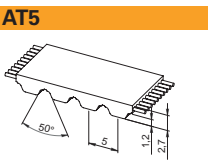
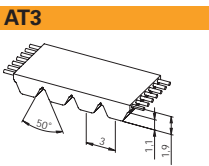


ELATECH OPEN END M & V - FAMILY RANGE OVERVIEW

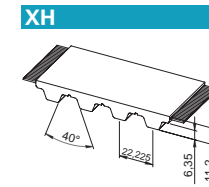
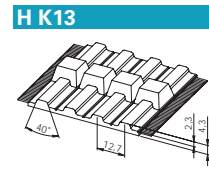
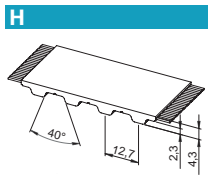
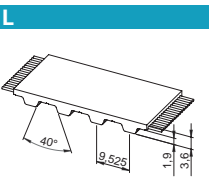
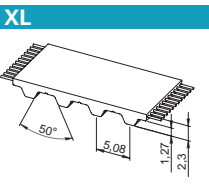
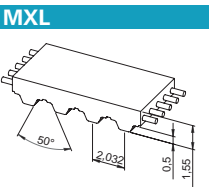
TRAPEZOIDAL
T - METRIC PROFILE



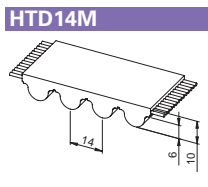
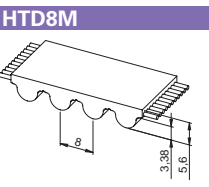
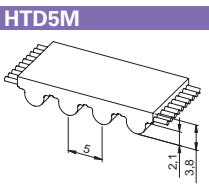
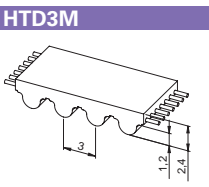
TRAPEZOIDAL
AT - METRIC PROFILE



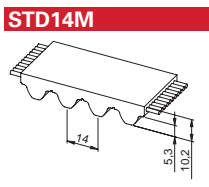
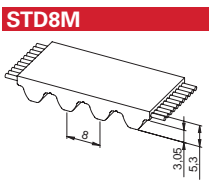
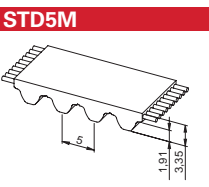
TRAPEZOIDAL
IMPERIAL PROFILE



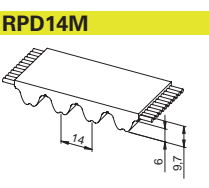
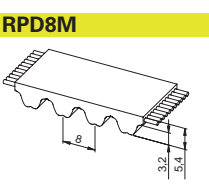
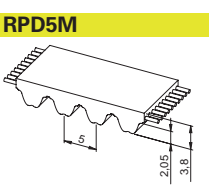
HIGH TORQUE
DRIVE PROFILE



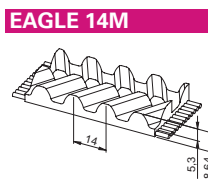
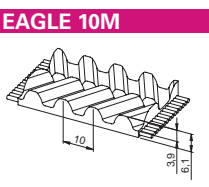
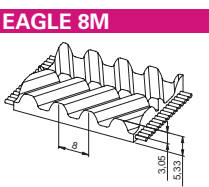
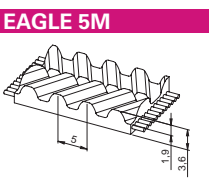
SUPERTORQUE
DRIVE PROFILE



PARABOLIC
PROFILE



HELICAL OFFSET
TOOTH PROFILE



- T

AT

IMPERIAL
- HTD

STD

RPD
- EAGLE

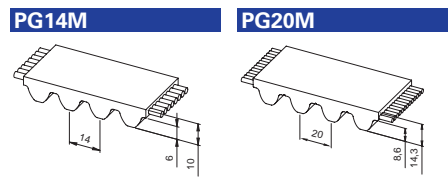
PG

FLAT
- TOTAL PROTECTION

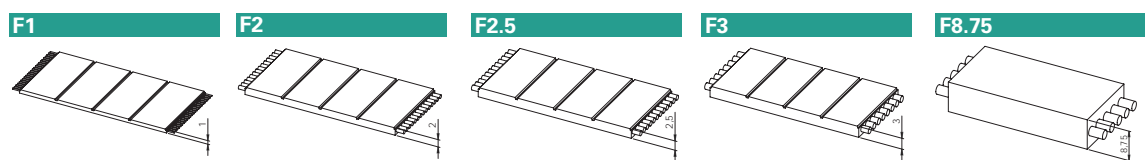
TT5

SPECIAL

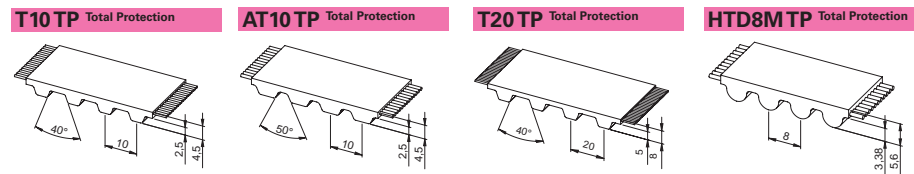
PG ROUNDED
PROFILE



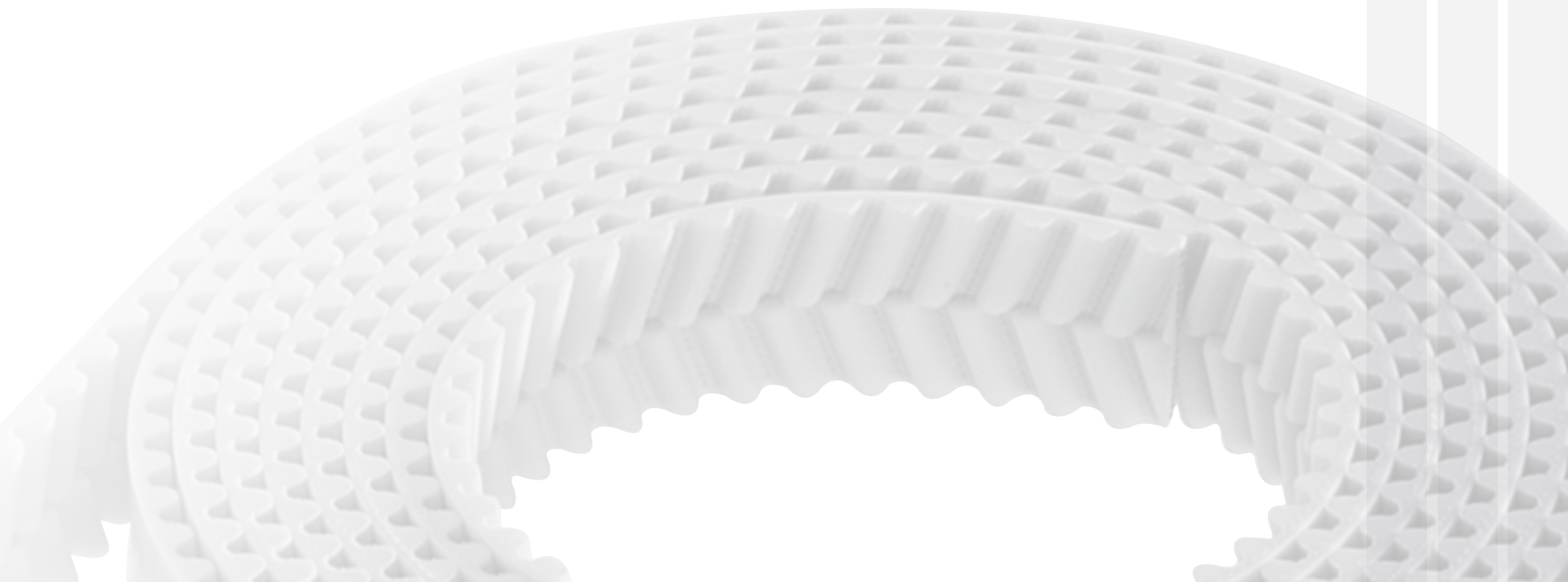
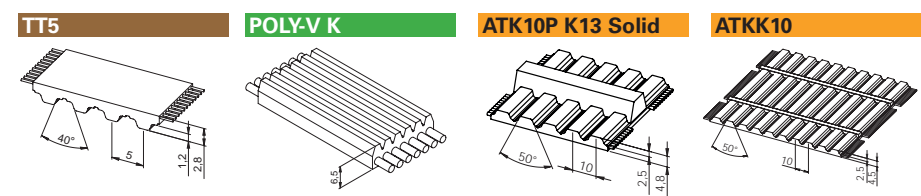
FLAT TOOTH
PROFILE



TOTAL PROTECTION
TOOTH PROFILE



SPECIAL
PROFILE



Elatech[®] Syncro Max[®]



Extra-wide Polyurethane Belts

ELATECH[®] SYNCRO MAX[®] Extra-wide Polyurethane Belts extend the advantages of synchronous timing belts to wider surfaces and to the typical applications of flat and modular conveyor belts.

T 10	Width (mm)	H	Width (in)
	250		10
	300		12
	350		14
	400		16
	450		18
	500 - 510		20



Product overview

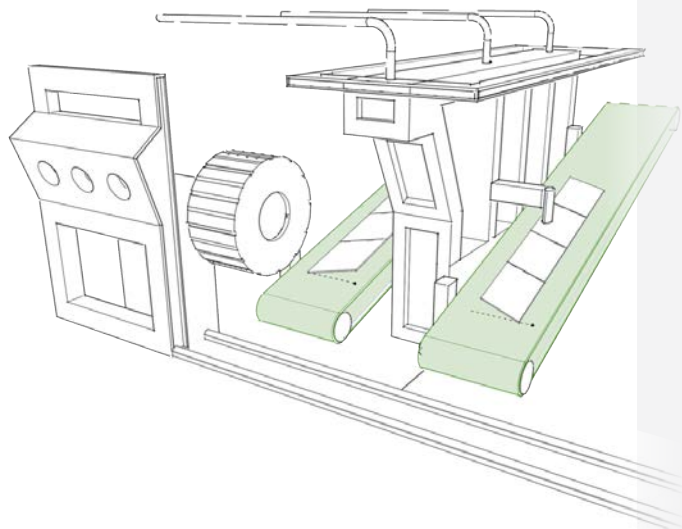
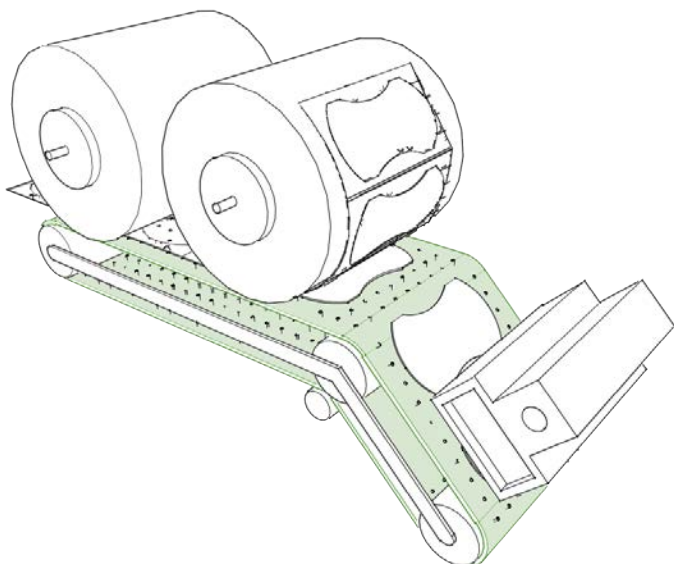
- Natural colour PU compound material 92 Sh A
- High durability
- Cut resistant
- Grease, chemicals and water resistant
- Non-marking
- Kevlar (Aramid) parallel cord reinforcement
- No cords exposure on belt edges
- Even cord tension
- Available in open end and welded execution
- Standard roll length 50 m

Advantages

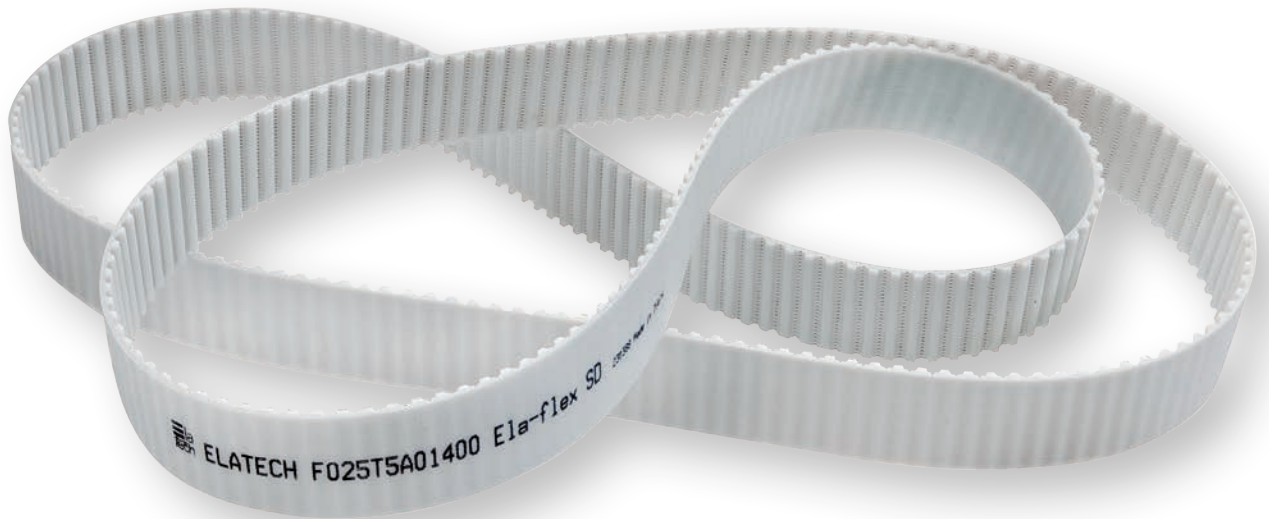
- Synchronous conveying = no slippage, better tracking, higher indexing precision
- Smaller drive pulley requirements, lower belt tension and lower shaft loads = power saving

Typical application

- Conveying, packaging, production of baby diapers / feminine hygiene items, tires production.



ELA-flex SD[®]



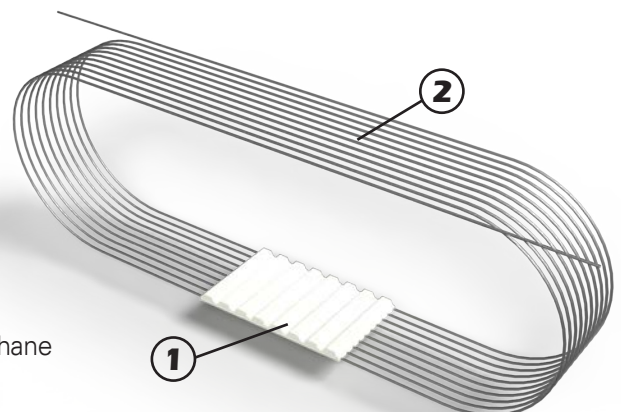
ELA-flex SD[®] timing belts are manufactured with truly endless high tensile steel tension cords and high wear resistant polyurethane body.

Having no splices or welding, the belts have no weak cross section. They are therefore ideal for power transmission applications and high load conveying transmissions.

The unique hi-tech manufacturing process designed by our technicians allows the production of every belt length, tooth by tooth from a **minimum of 800 mm** to a **maximum of 24000 mm**, thus providing the highest flexibility for any application.

Available options:

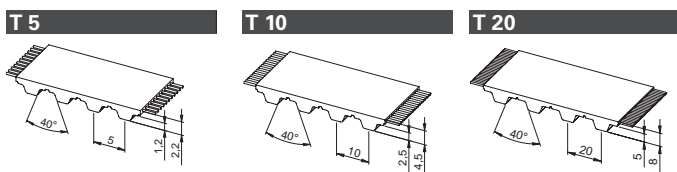
- Dual toothing execution over 1500 mm
- PAZ fabric included over 900 mm for many profiles
- Special cords and/or PU compound



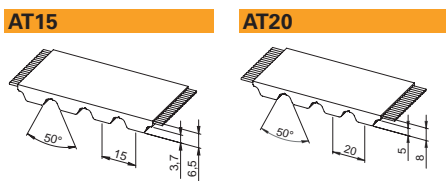
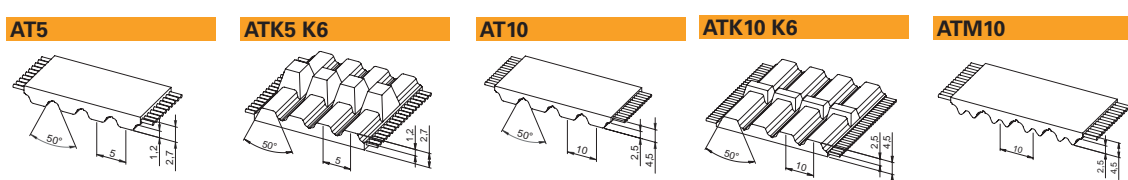
1. Body made with thermoplastic polyurethane
2. Truly endless traction element

T
 AT
 IMPERIAL
 HTD
 STD
 RPD
 EAGLE
 FLAT

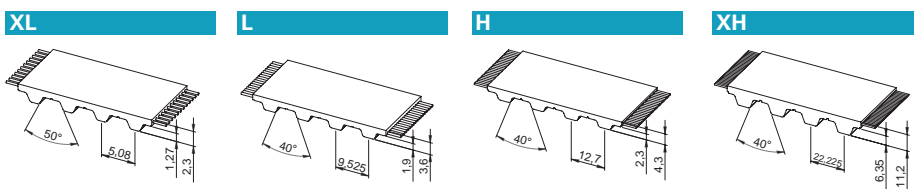
TRAPEZOIDAL
METRIC PROFILE



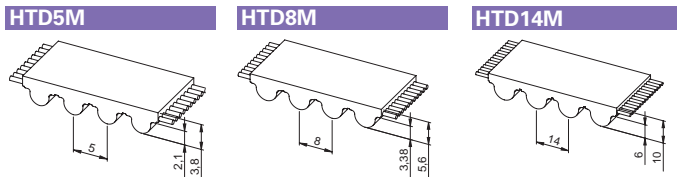
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METRIC PROFILE



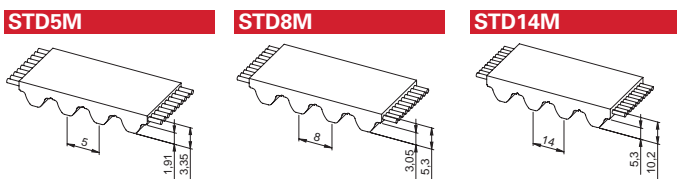
TRAPEZOIDAL
IMPERIAL PROFILE



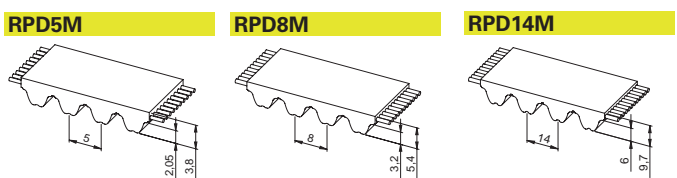
HIGH TORQUE
DRIVE PROFILE



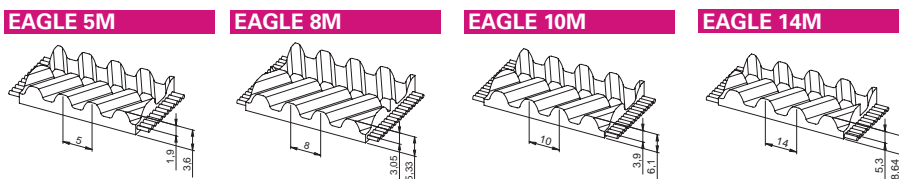
SUPER TORQUE
DRIVE PROFILE



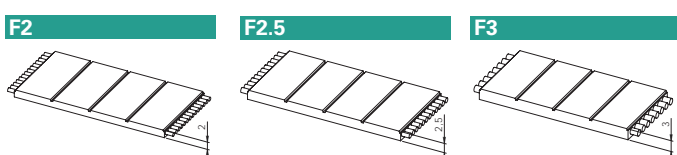
PARABOLIC
PROFILE



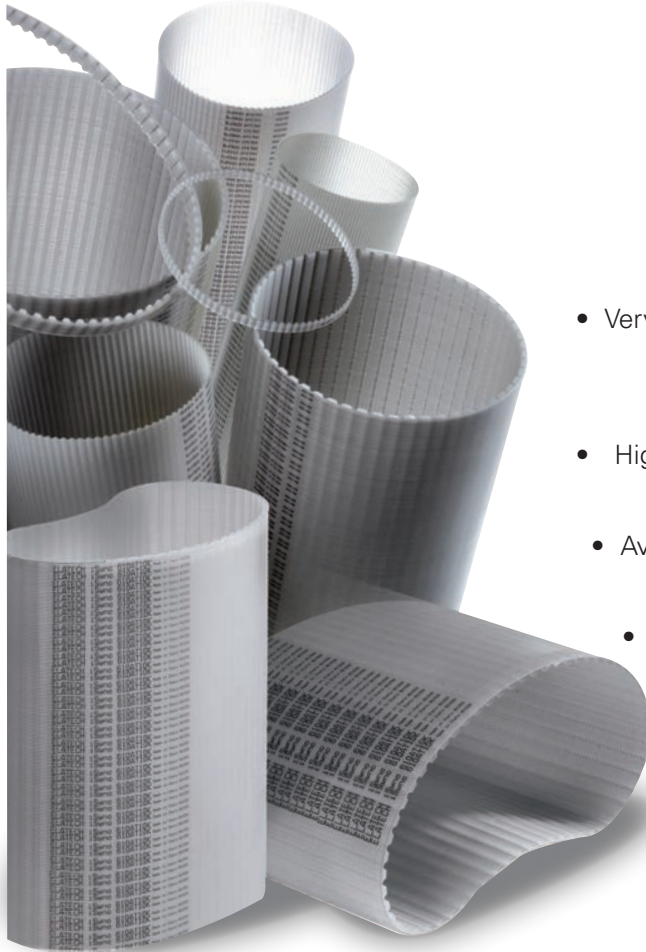
HELICAL OFFSET
TOOTH PROFILE



FLAT TOOTH
PROFILE



iSync[®] Belts

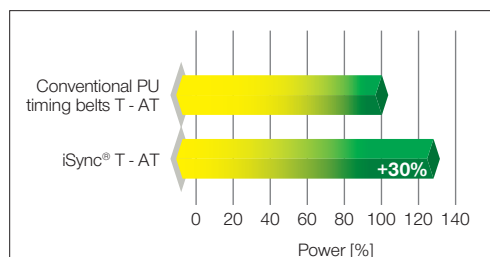


Features

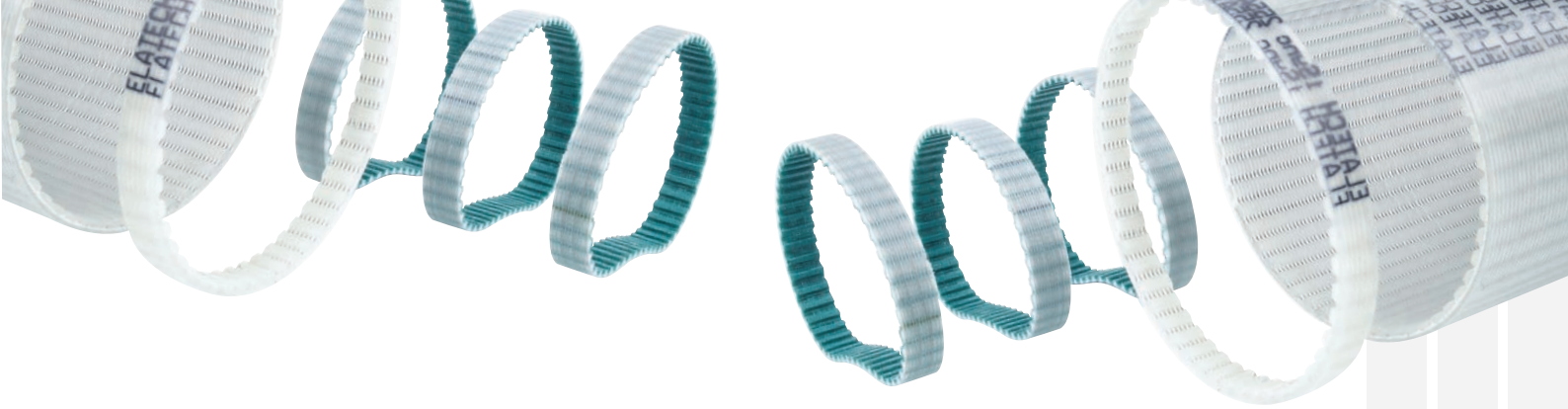
- High power transmission capabilities
 - Maintenance free
 - Superior length stability
- Very high chemical resistance and particularly to oils, greases and gasoline
 - Superior abrasion resistance
- High quality polyurethane designed specifically for timing belt applications
 - Available with either steel or Kevlar[®] reinforcement
 - Application temperature -30 °C / +125 °C
 - Available with food contact compliant execution*

*(on request)

ELATECH[®] iSync[®] belts are innovative truly endless high performance power transmission belts with thermo-plastic resin body and steel (standard) or aramid fiber (on demand) traction cords. The high modulus cords used in the production of our belts ensure great length stability and low bearing load. The special manufacturing method and the materials used make **ELATECH[®] iSync[®]** belts extremely precise and therefore suitable for all applications where high performances are needed.



ELATECH[®] iSync[®] belts transmit up to 30% more power than conventional belts in the same space, or the same amount of power with a more compact drive.



Available profile range

ELATECH® iSync® belts are available in standard configuration in the following profile range:

- **T2,5, T5, T10, AT5, AT10, L, XL**
- **DT5, DT10 (Dual Toothting)**

The following profiles and executions are manufactured on request:

- **MXL, HTD5M**

Applications

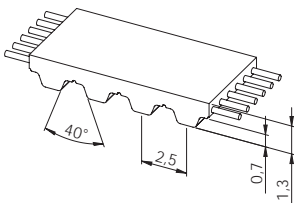
Power transmission drives

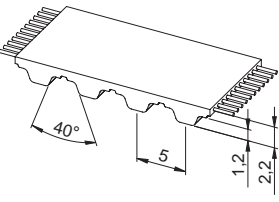
- where high precision is needed
- where cleanliness is critical
- in difficult environment (presence of chemicals)

Heavy - duty conveying drives

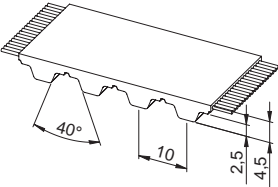
- with special backing
- with cleats

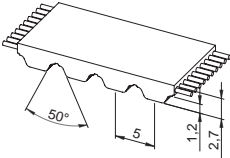
Standard iSync® sleeve belt sizes - Single toothting

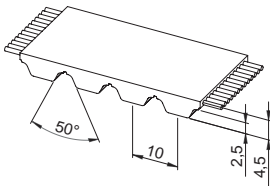
T2,5	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)
	48	120	80	200	114	285	152	380	260	650
	58	145	84	210	116	290	168	420	312	780
	64	160	92	230	122	305	192	480	366	915
	71	177,5	98	245	127	317,5	200	500	380	950
	72	180	106	265	132	330	216	540	590	1475
	74	185	111	277,5	137	342,5	240	600	-	-

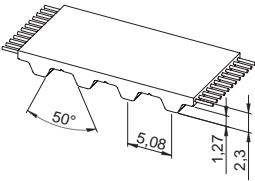
T5	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)
	33	165	64	320	91	455	130	650	200	1000
	36	180	65	325	92	460	132	660	215	1075
	37	185	66	330	95	475	135	675	220	1100
	40	200	68	340	96	480	138	690	223	1115
	42	210	70	350	100	500	140	700	228	1140
	43	215	71	355	102	510	144	720	240	1200
	44	220	72	360	105	525	145	725	243	1215
	45	225	73	365	109	545	150	750	253	1265
	49	245	75	375	110	550	156	780	255	1275
	50	250	78	390	112	560	160	800	256	1280
	51	255	80	400	115	575	163	815	263	1315
	52	260	82	410	118	590	166	830	270	1350
	54	270	84	420	120	600	168	840	271	1355
	55	275	85	425	122	610	170	850	276	1380
	56	280	86	430	124	620	172	860	288	1440
	59	295	88	440	125	625	180	900	391	1955
	60	300	89	445	126	630	188	940	-	-
	61	305	90	450	128	640	198	990	-	-

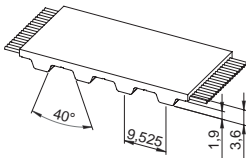
iSync[®] Belts

T10	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)
	26	260	66	660	95	950	135	1350
	32	320	68	680	96	960	139	1390
	35	350	69	690	97	970	140	1400
	37	370	70	700	98	980	142	1420
	40	400	72	720	100	1000	144	1440
	41	410	73	730	101	1010	145	1450
	44	440	75	750	105	1050	146	1460
	45	450	76	760	108	1080	150	1500
	48	480	78	780	110	1100	156	1560
	50	500	80	800	111	1110	160	1600
	51	510	81	810	114	1140	161	1610
	53	530	84	840	115	1150	170	1700
	55	550	85	850	120	1200	175	1750
	56	560	88	880	121	1210	178	1780
	60	600	89	890	124	1240	180	1800
	61	610	90	900	125	1250	188	1880
	63	630	91	910	130	1300	196	1960
	65	650	92	920	132	1320	225	2250

AT5	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)
	45	225	84	420	132	660	195	975
	51	255	90	450	142	710	210	1050
	56	280	91	455	144	720	225	1125
	60	300	100	500	150	750	257	1285
	68	340	109	545	156	780	300	1500
	75	375	120	600	165	825	-	-
	78	390	122	610	172	860	-	-

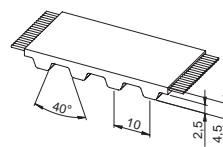
AT10	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)
	50	500	81	810	110	1100	140	1400
	53	530	84	840	115	1150	142	1420
	56	560	88	880	120	1200	148	1480
	58	580	89	890	121	1210	150	1500
	60	600	92	920	123	1230	160	1600
	61	610	96	960	125	1250	170	1700
	66	660	98	980	128	1280	172	1720
	70	700	100	1000	130	1300	180	1800
	73	730	101	1010	132	1320	186	1860
	78	780	105	1050	135	1350	194	1940
	80	800	108	1080	136	1360	-	-

XL	Number of teeth z	Length (inch)	Number of teeth z	Length (inch)	Number of teeth z	Length (inch)	Number of teeth z	Length (inch)
	30	6	60	12	90	18	115	23
	35	7	65	13	95	19	120	24
	40	8	70	14	100	20	-	-
	45	9	75	15	100	20	-	-
	50	10	80	16	105	21	-	-
	55	11	85	17	110	22	-	-

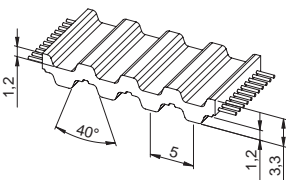
L	Number of teeth z	Length (inch)	Number of teeth z	Length (inch)	Number of teeth z	Length (inch)	Number of teeth z	Length (inch)
	33	12,38	54	20,25	72	27,00	98	36,70
	40	15,00	56	21,00	76	28,50	104	39,00
	44	16,50	60	22,50	80	30,00	112	42,00
	46	17,30	64	24,00	86	32,25	136	51,00
	50	18,75	68	25,50	92	34,50	144	54,00

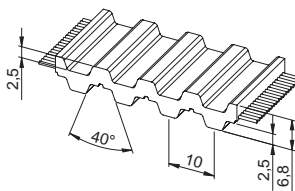
Special iSync® sleeve belt sizes - Vacuum (No tooth Gap)

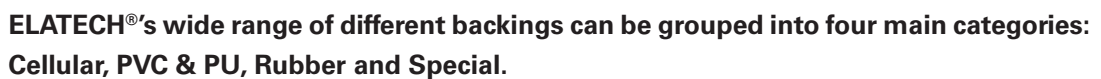


VACUUM - T10	Number of teeth z	Length (mm)
	60	600
	63	630
	72	720
	80	800
	92	920

Standard iSync® sleeve belt sizes - Dual toothing

DT5	Number of teeth z	Length (mm)
	82	410
	92	460
	118	590
	124	620
	125	625
	150	750
	160	800
	163	815
	168	840
	172	860
	188	940
	220	1100

DT10	Number of teeth z	Length (mm)	Number of teeth z	Length (mm)
	26	260	110	1100
	53	530	121	1210
	63	630	124	1240
	66	660	125	1250
	72	720	132	1320
	81	810	135	1350
	84	840	142	1420
	92	920	161	1610
	98	980	188	1880



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 manufacturing systems and techniques including **ELATECH®'s EMF** mechanical fastening system and the application of stainless steel or zinc-coated false teeth as well as different flights and cleats, provides the best and the most reliable solution for specific applications in the most diversified fields of industry.

Water jet cutting facility and other state-of-the art machinery and techniques enable extremely precise machining and finishing operations within the strictest tolerance requirements, resulting in the absolute top quality, reliability and perfection that make **ELATECH®** Polyurethane belts renowned all over the world.



Special Belts

ELATECH®'s EMF mechanical fastening system is the best and the most cost-effective solution for mounting and replacing timing belts in complex industrial machines or conveying lines. Thanks to its simple and fast assembly procedure, EMF provides considerable time saving and a safe and reliable alternative to traditionally welded belts. Available on all pitches in standard or special configuration, EMF maintains the same minimum pulley requirements as welded belts and can operate both with direct and back bend idlers. It is suitable for belts with special backings, as well as for belts with profiles.

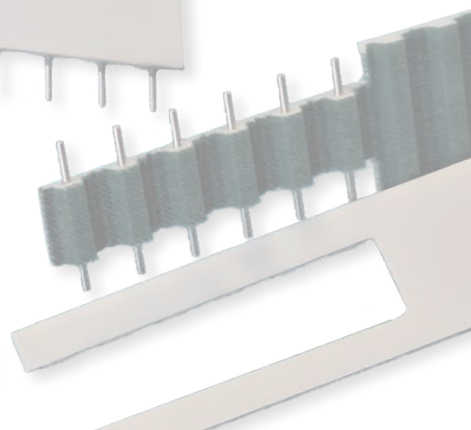
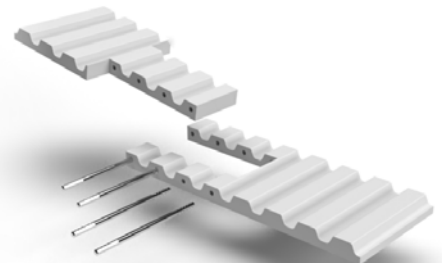


No tools needed



ELATECH®'s SAFELOCK mechanical fastening system is the alternative version of standard Elatech® EMF. This patented new version compared with standard EMF has improved characteristics such as:

- Better adhesion with long finger splice
- Milled edges to avoid accidental pin leakage
- Made in stainless steel suitable for food contact



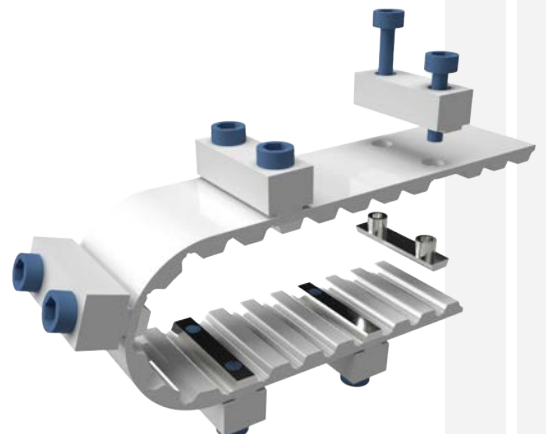


EFT False Tooth System is ELATECH®'s mechanical profile application specially designed for fastening cleats that cannot be welded onto polyurethane timing belts. Stainless steel teeth are available, either with total tooth or with embedded tooth design. In total tooth design each **EFT** replaces the whole tooth of the belt, while the embedded design prevents any metal-to-metal contact, ensuring more silent operation.

EFTs are available for AT10, AT20, H and XH pitches on every type of belts (open ended, welded or truly endless) with any type of cords as well as with PAZ, PAR or tracking guides.

EFTs provide many advantages, such as:

- They allow the application of profiles made of different materials, from plastic to wood and metal
- They can hold safely heavy and big profiles
- They offer great flexibility, allowing the quick replacement of different types of profiles on the same belt
- They provide a cost-effective solution because they allow the replacement of single damaged or worn profiles without the need to buy a complete new belt
- They comply with FDA requirements, therefore they can be used in food and pharmaceutical applications

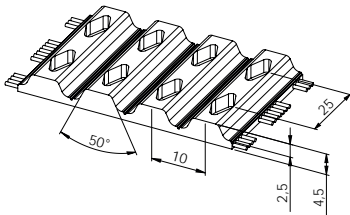
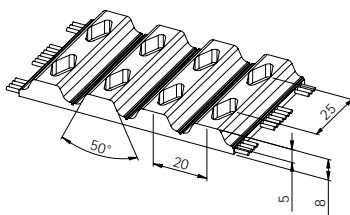


Elatech[®] ATF

Elatech[®] ATF timing belts, made with resistant polyurethane (Standard: 92 Shore A) and high strength steel or stainless-steel tension members, are available as open ended or welded endless belts. This belt type is suitable for a rapid and easy setup of profiles with simple hand tools.


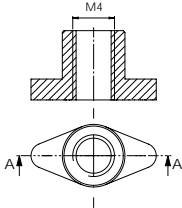

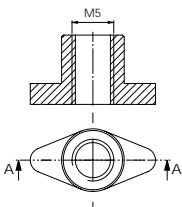
A multitude of profiles can be attached, converted, interchanged, or reconfigured. **ATF** technology combines flexibility, strength, accuracy and offers high precision profile positioning. Mounting holes (cavities) for the inserts are extruded into every tooth of the base timing belt, **ATF** timing belts are universally suitable for various positioning and conveying applications.

Product Range

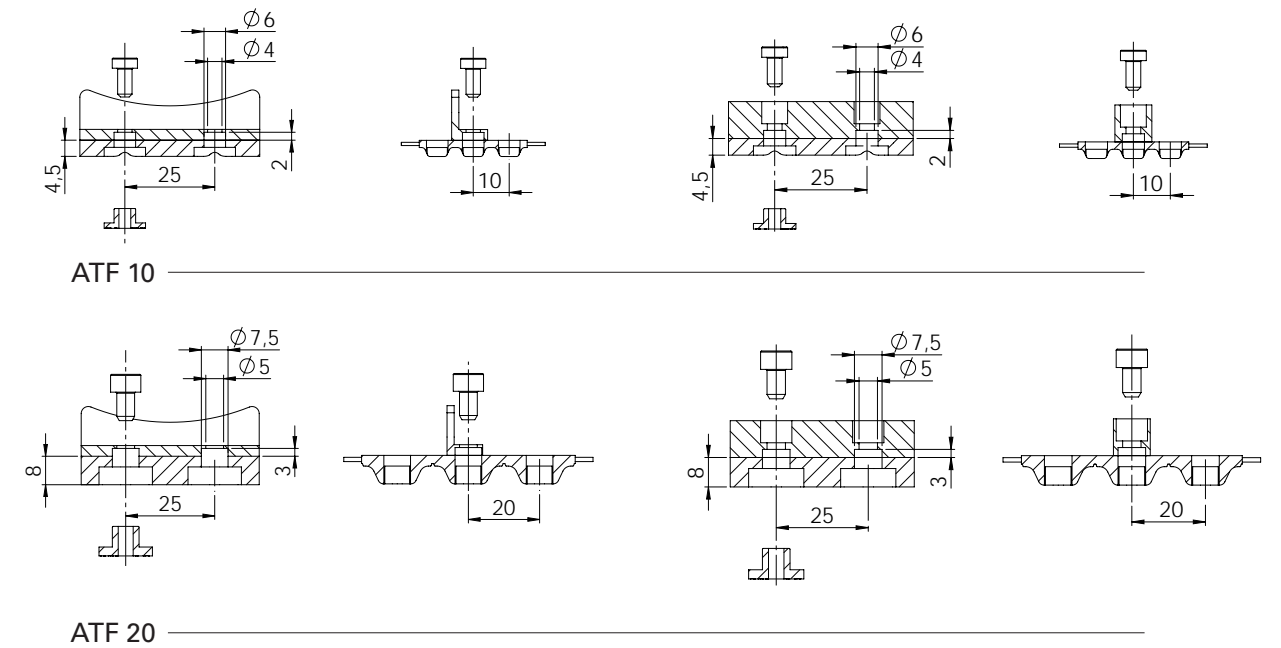
ATF Profile			No. of inserts per tooth
	ATF 10	ATF 20	
Pitch (mm)	10	20	
Available Belt Width (mm)	25	not available	1
	50	50	2
	75	75	3
	100	100	4



Insert Types

Insert Profile	Dimensions	Thread size	Material	Applications
 <p>ATF 10</p>		M4	Stainless Steel	- Small loads - Low dynamic loads
 <p>ATF 20</p>		M5	Stainless Steel	- Medium and large loads - High dynamic loads

Example of cleat configurations



ATF Advantages:

- Variable cleat pitch
- Different cleat materials can be used
- Standard timing belt pulleys can be used
- High shear strength
- Quick and easy cleat change
- Cleats spacing is extremely precise
- No cleat welding beads
- Reduced downtime







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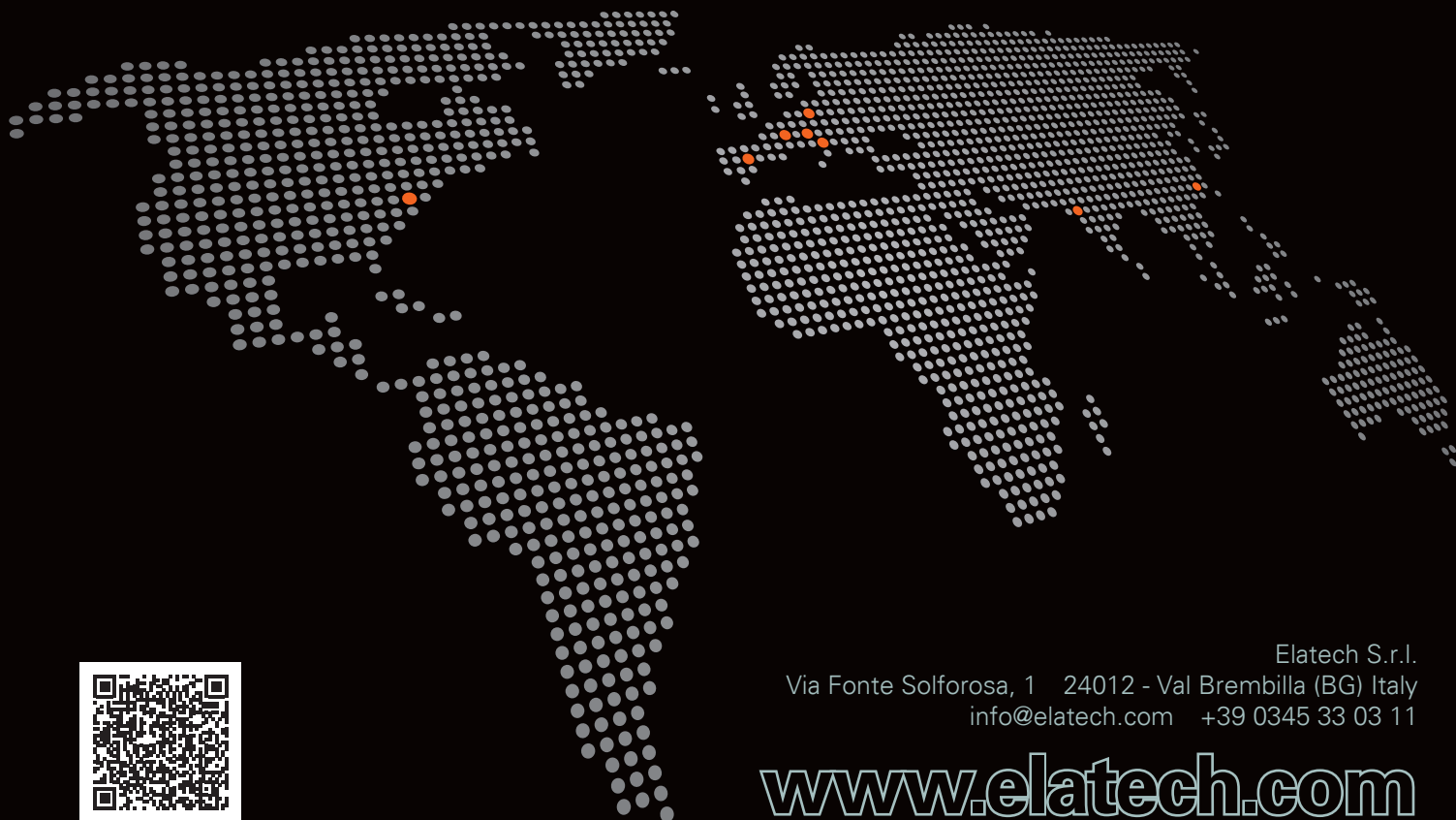
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