



Detachable Drive Belts

Permanent Solutions for Problem Classical and Wedge Drives

NUTLINK[®]

SUPERTLINK[®]



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Permanent Solutions in a Multitude of Applications:

BTL's range of Detachable V & Wedge belts are now commonplace in a multitude of diverse industries across the world, including:-

- Quarrying Equipment **Building Materials Handling** Food Processing **Paper Processing** Glass Manufacture **Wood Processing Equipment**
 Iron & Steel Processing **Textile Manufacture** Airport Baggage Handling **Agricultural Machinery** Marine Industry **Chemical Products**
Processing Automotive Manufacture **Electronic Components** Compressors **Heating & Ventilation Systems** Railway Industry

Permanent Solutions for Classical and Wedge Drives



Detachable Belts For Reliable Power Transmission

More than just an Emergency Belt

Detachable belts were introduced many years ago as an emergency solution for unexpected belt failures or for drives which were difficult to access. Over the last decade advances in polymers and product design have ensured that the BTL product is now very much more than just an emergency belt.

Whilst some detachable belts remain purely for temporary use, BTL belts are a proven permanent solution for demanding applications where traditional endless belts fail to perform effectively.

Permanent Benefits

The belts' unique design and material composition provide a number of benefits to end-users, equipment designers and maintenance departments. In addition to providing an instant emergency solution, they also offer first rate performance in demanding conditions, design simplification and ease of installation.

Classical or Wedge Options

The range features Nu-T-Link, for Classical drives, and Super-T-Link, specially designed for Wedge SP rated power transmission applications. Each provides comparable power ratings with added practical benefits.

Specialist Conveying

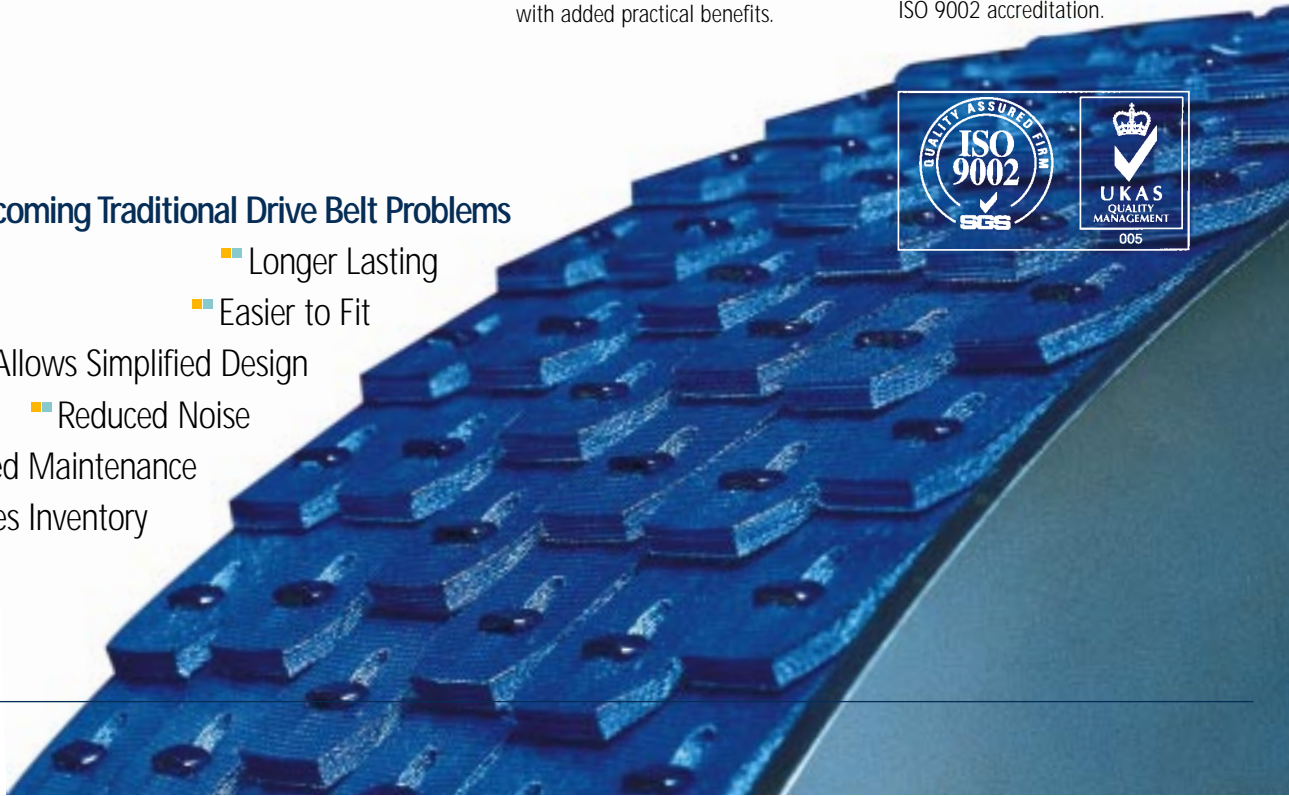
Both Nu-T-Link and Super-T-Link can be used as belting for conveying aggressive or abrasive materials. They can also be used for power transmission on conveying lines where conventional methods are unsuitable, such as demanding environments and powered curves. The non-studded Tablink & Powertwist brands are also available for specialist conveying applications.

Quality

All BTL's production is governed by stringent quality control procedures in order to guarantee first rate quality and traceability. BTL's production site has ISO 9002 accreditation.

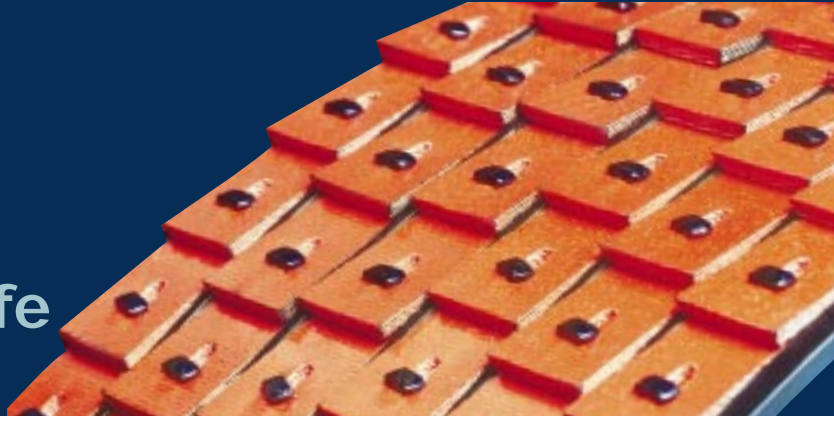
Overcoming Traditional Drive Belt Problems

- Longer Lasting
- Easier to Fit
- Allows Simplified Design
 - Reduced Noise
- Minimised Maintenance
- Minimised Spares Inventory

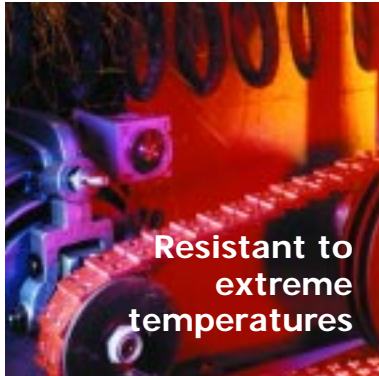


Longer Belt Life

2



Resistant to water, oil and industrial chemicals



Resistant to extreme temperatures



SUPER T LINK
NUT LINK



High Abrasion Resistance

A Permanent Choice to Save Time & Money

In order to understand why BTL's detachable belts are so widely used we must examine the practical benefits offered:-

Premium Durability in Harsh Conditions

BTL's detachable belts are manufactured from a multi-ply Polyester which is impregnated with

high performance Polyurethane. This unique material composition ensures a longer belt lifespan than most conventional endless belts and competing detachable belts, even in the most demanding conditions.

High Substance Resistance - the material composition ensures high resistance to potentially damaging substances such as water, steam, oil and most industrial chemicals.

High Abrasion Resistance - detachable belts are highly resistant to abrasive substances such as grit, sand,

gravel and other building materials. **Extreme Temperature Resistance** - the belts can operate at extreme temperatures (from - 40°C to 100°C) with minimum effects to performance. **Longer Storage Life** - the material composition is an important factor for the safe storage of spares. Some traditional V belts can degrade over time in storage to the point whereby they retain only a fraction of their performance and life expectancy. Stored correctly, detachable belts do not degrade significantly over long periods.

Designed to Last - in addition to material composition the belt design also increases the life of the belt. Unlike conventional endless belts, the detachable belt section does not distort in operation due to the ability of each link to slide over the next. This minimises heat build up and fatigue, common causes of failure on some endless belts. The lack of section distortion also increases power transmission efficiency.

Application Datafiles

Application: Fishing Boat

Problem: Exposure to wet and oily conditions was causing premature failure of conventional V belts and each time a belt failed the main drive shaft had to be dismantled.

Solution: Being highly resistant to water, oil and the corrosive effects of seawater, Nu-T-Link ensured that the frequency of belt failure fell dramatically. In addition there was no need to dismantle the drive shaft to fit new belts.

Application: Stone Conveyor

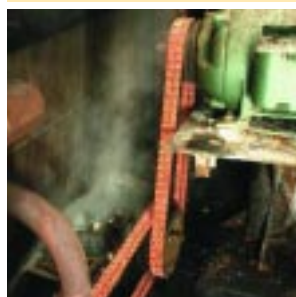
Problem: Exposure to an abrasive mix of aggregate and dust was causing wear and friction generated heat. Endless SPC section belts were regularly failing.

Solution: Fitting Super-T-Link provided greater resistance to the harsh operating conditions. The belt lifespan was increased by 5 times.

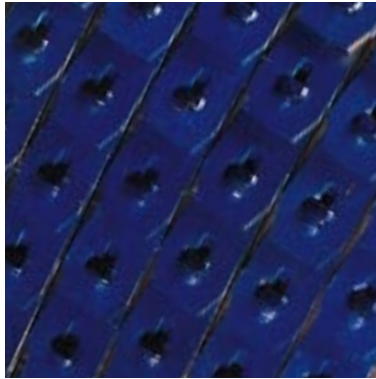
Application: Carpet Dye Processing

Problem: Conventional V belts were regularly failing due to a combination of exposure to 100 degree temperatures, steam and chemicals.

Solution: Fitting Nu-T-Link extended the belt lifespan by more than 10 times due to it's ability to resist extreme temperatures and demanding conditions.



Faster Fitting and Minimal Maintenance



Permanent Maintenance Benefits

Faster Fitting - the belt's link construction offers the benefit of rapid installation, particularly on enclosed drives or where access to the drive is restricted. **With detachable belts there is no need to dismantle the drive**, belts can be fitted simply by joining around the pulley shafts rotating the link stud and springing onto the pulleys at the required tension.

Low Maintenance - the belt's material composition ensures that there is no need to lubricate belts or engage in regular belt replacement.

Guaranteed Matched Belt Sets - on multi-belt drives minor belt length variations of conventional endless belts can cause an uneven distribution of workload which may give rise to premature belt failure. Detachable belts can be sized accurately, by counting the number of links and when correctly fitted at the required tension

detachable belts ensure that all belts have equal pull around the drive.

Minimal Retensioning - the design and material composition of BTL's belts ensures that, after an initial run in period, virtually zero retensioning is required. BTL belts have a greater flexibility than most conventional endless belts which allows them to elongate to the required levels and subsequently recover their original length.

Application Datafiles

Application: Brick Manufacture

Problem: Endless belts were failing regularly in the arduous conditions. However, the main problem was that each time 2-3 days of production were lost in dismantling the drive and re-assembling to fit endless belts.

Solution: Installing Nu-T-Link not only reduced the frequency of belt failure but reduced fitting time down to just 2 hours.

Application: Wood Processing

Problem: Endless wedge belts were failing every 2 months on debarking equipment. The resultant downtime was 10 hours due to the need to dismantle the equipment to gain open access to both pulleys.

Solution: Installing Super-T-Link considerably increased belt lifespan and also reduced fitting time to under 3 hours.

Application: Railway Industry - coach lighting system

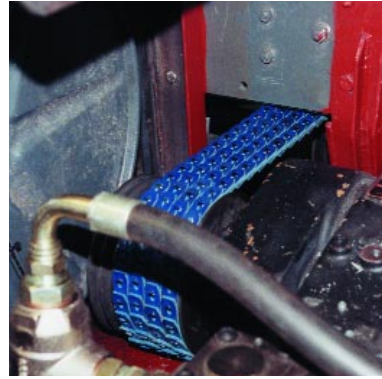
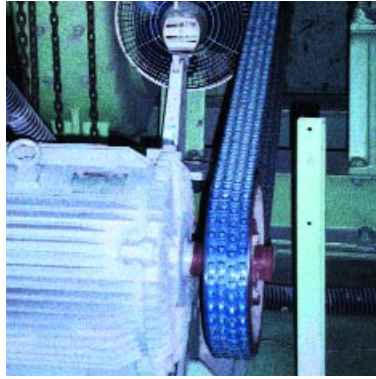
Problem: Failure of endless V belts resulted in coaches being withdrawn from service for a minimum of twenty four hours whilst they were sent to the workshop for repair.

Solution: Installing Nu-T-Link reduced the replacement time to just 1½ hours, in addition belt failure was less frequent due to Nu-T-Link's high resistance to the demanding operating conditions.



Simplified Design and Tensioning

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Permanent Design & Build Benefits

Detachable belts offer a series of benefits to the design engineer and equipment manufacturers:-

Simplified Design - the positioning of a drive is often dictated by the need for free access to permit maintenance and replacement of belts. Detachable belts allow the drive to be positioned in the optimum position within the overall machine design - enclosed drives do not present problems for fitting and maintenance.

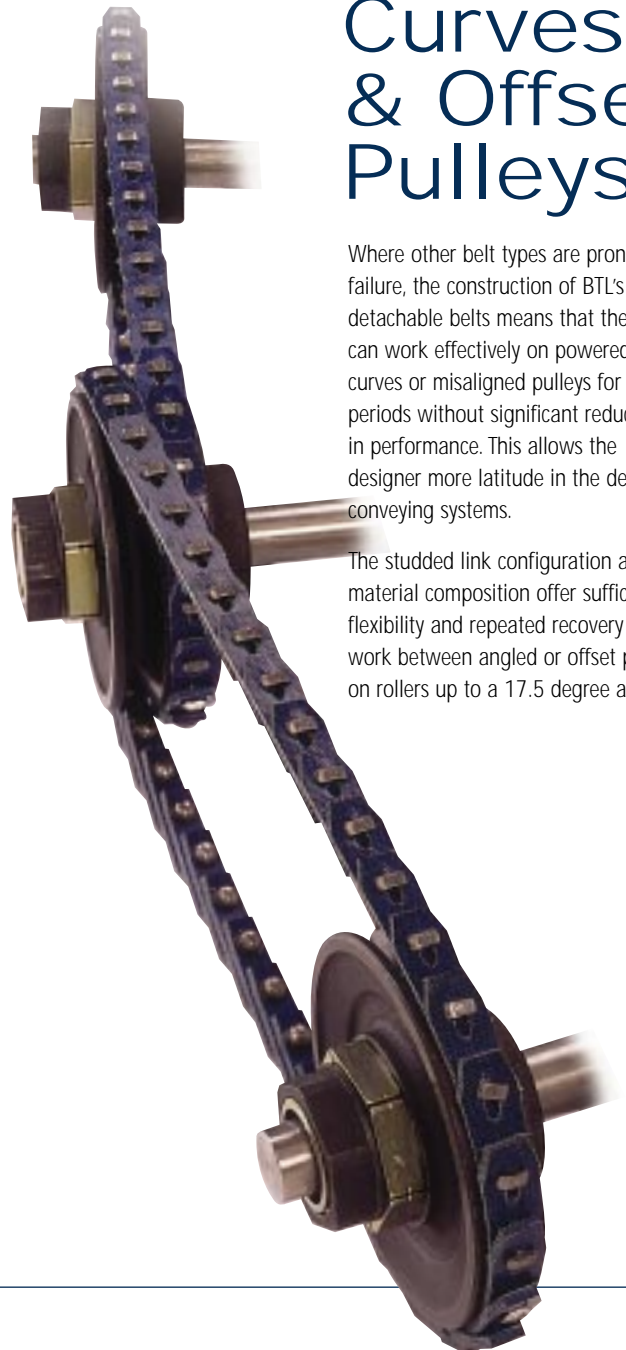
Simplified Tensioning - the method of belt pre-tension eliminates the need for mechanical centre distance adjustment thus removing the need to build in idler pulleys and sliderails. Because BTL's belts show little permanent stretch there is no need to build in tensioning devices.

Compact Drives - the flexibility of detachable belts allows the use of smaller pulleys and reduced centre distances thus enabling the design of more compact drive assemblies.

Curves & Offset Pulleys

Where other belt types are prone to failure, the construction of BTL's detachable belts means that the belt can work effectively on powered curves or misaligned pulleys for long periods without significant reductions in performance. This allows the designer more latitude in the design of conveying systems.

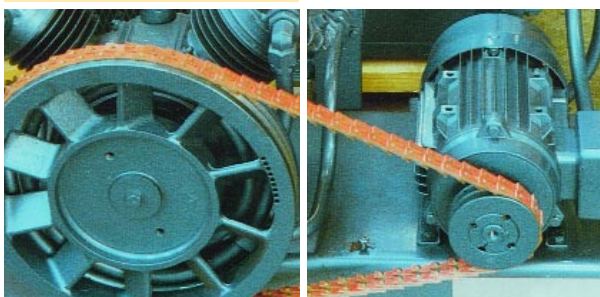
The studded link configuration and material composition offer sufficient flexibility and repeated recovery to work between angled or offset pulleys on rollers up to a 17.5 degree angle.



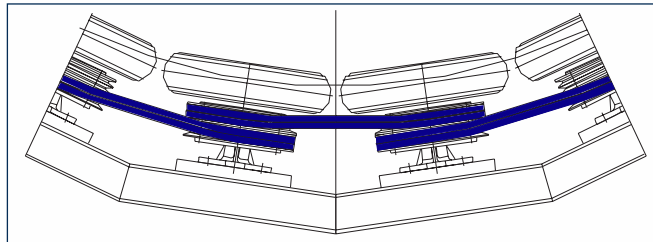
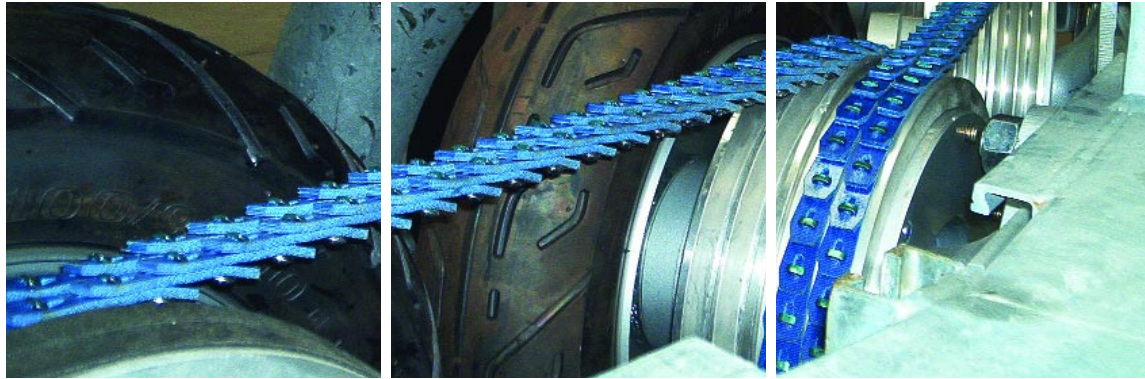
Application Datafiles

Application: Compressor

Simplified design, reduced manufacturing costs and operational efficiency were achieved by fitting Nu-T-Link. Because Nu-T-Link is tensioned prior to fitting, the need to provide belt tensioning devices or motor slide rails was removed.



Curves & Offset Pulleys



Application Datafiles

Application: Ski-Lift System

Case Study: A leading Ski-Lift OEM required a belt which could drive the transfer system around a curved terminus. Pulleys on the curve were offset at 17 degrees.

Problem: High performance rubber based wedge belts were failing prematurely due to a combination of exposure to adverse weather, extreme temperatures and having to operate on offset pulleys. In addition the use of rubber belts gave rise for the need to fit tensioning devices which added significantly to costs and design complexity.

Solution: Following extensive simulated trials, Super-T-Link was specified to replace the endless belts. It's ability to work on angled pulleys and a high resistance to the harsh weather conditions provided a significantly increased belt lifespan. In addition Super-T's low stretch qualities enabled the design team to remove costly tensioning devices from the equipment.

Application: Baggage Handling System - Frankfurt Airport

Case Study: The Frankfurt system is one of the world's most advanced and complex baggage handling systems. Originally chain was installed to power rollers around a series of curves. Each curve used 10 to 13 rollers to go round a 90 degree bend, angular displacement between rollers varying from 7 to 9 degrees. The operators needed a belt which could work effectively between the offset rollers and solve certain operational problems.

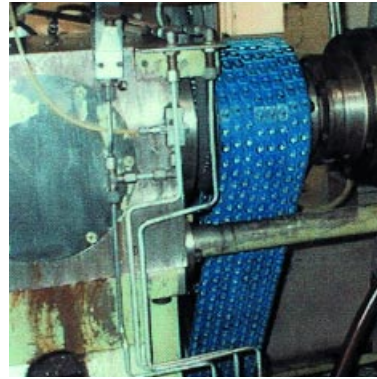
Problem: Regular chain failure due to an inability to cope with the stresses of running between angled pulleys. High levels of maintenance and repair, regular lubrication and time consuming replacement were also required. High noise levels were also a limiting factor.

Solution: After many months of rigorous performance testing Super-T-Link was specified as the ideal replacement, it provided comparable power transmission capability around the curves and in addition gave a 40% reduction in noise levels. Belt lifespan was enhanced and because Super-T-Link requires no lubrication, maintenance time was reduced to a minimum.



Up to 50% Reduction in Vibration/Noise

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Permanent Operational Benefits

50% Less Vibration - detachable belts do not have continuous tension cords like conventional endless belts and as a result the amount of transmitted vibration is significantly reduced. Independent tests have shown this to be as high as a 50% reduction. Minimising vibration is particularly important for high precision applications such as machine tools for surface finishing, grinding and shaping.

50% Less Noise - the design and material composition ensures up to a 50% reduction in noise against alternatives such as chain, a major consideration for air conditioning systems or other drives and conveying systems in public or labour intensive situations.

Shock Load Resistance - detachable belts perform well on high shock load drives.

Because of their high elastic extensibility and recovery they can absorb shock loads which makes them particularly effective on drives with regular stop/start and reverse cycles.



Application Datafiles

Application: Quarry Grading Conveyor

Problem: High levels of vibration coupled with exposure to abrasive dust was resulting in the premature failure of standard endless V belts.

Solution: The average belt lifespan was extended in excess of 10 times by installing Nu-T-Link, the separate link construction being vital in absorbing vibratory stresses.

Application: Airport Baggage Handling System

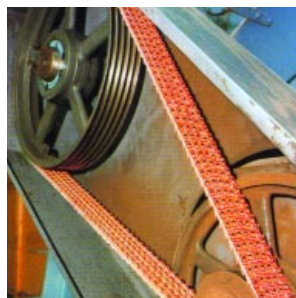
Problem: A chain driven conveyor system was producing unacceptable operational noise levels.

Solution: The chain was replaced with Super-T-Link, the result was that noise levels fell from 100 db's to 60 db's.

Application: Dry Cleaning Machine

Problem: The drive was subjected to frequent stop/start and reverse movements at variable speeds. The result was a regular need to retension and often replace conventional endless belts.

Solution: Nu-T-Link was installed, it's resistance to shock loading more than doubled the lifespan of the belts.



Minimised Spares Inventory



Simplify your Spare Stocks



Permanent Benefits for Stockholding

Reduced Stockholding - with detachable belts there is no need to maintain stocks of several different belt lengths to cover all likely replacement needs. Detachable belts can be made to the required length on site by adding or removing links to suit the drive. Just 5 boxes will cover 90% of drive requirements.

Satisfied Customers - with detachable belts distributors/resellers never need to send their customers away empty handed. They can minimise

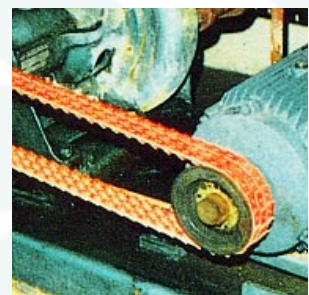
their drive belt stocks and still be able to satisfy most belt specifications by offering detachable belts. On many occasions end-users cannot wait for next day delivery.

Minimal Degradation - as outlined earlier detachable belts do not decay whilst in storage. This problem can often occur in certain storage conditions with other belt types. Providing detachable belts are stored correctly they show minimal degradation over long time periods.



Application Datafiles

Application: Hospital
Problem: In order to guarantee minimal downtime on numerous different belt driven hot water supply and refrigeration systems, a wide variety of different endless belts had to be in stock at any given time. Not only was this very costly but it also created confusion amongst engineers and stores.
Solution: Nu-T-Link solved the problem, the belts can be made to length on site in a matter of minutes. Stockholding was reduced to just two standard section reels.



Range Information

BTL's detachable belts are available in most standard industry profiles. Depending on which profile is required, the belts are supplied in boxes or on reels. Each package provides full fitting instructions and special fitting tool.



The table below shows section & pack size availability

NUTLINK								
Pack Size	Section							
	Z/10	A/13	B/17	C/22	S/25*	D/32	E/40*	F/50*
3m	✓							
5m		✓	✓					
20m	**	**	**	✓	✓	✓	✓	✓

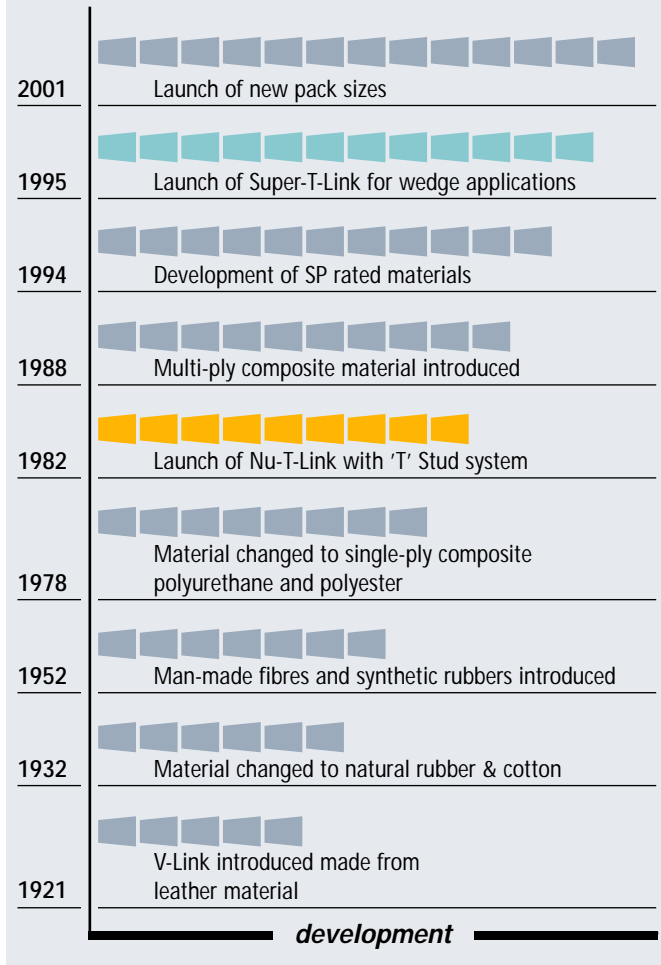
SUPERTLINK								
Pack Size	Section							
	SPA	SPB	SPC					
5m	✓	✓						
20m	**	**	✓					

TAB-LINK								
Pack Size	Section							
	Z/10	A/13	B/17	C/22*				
20m	✓	✓	✓	✓				

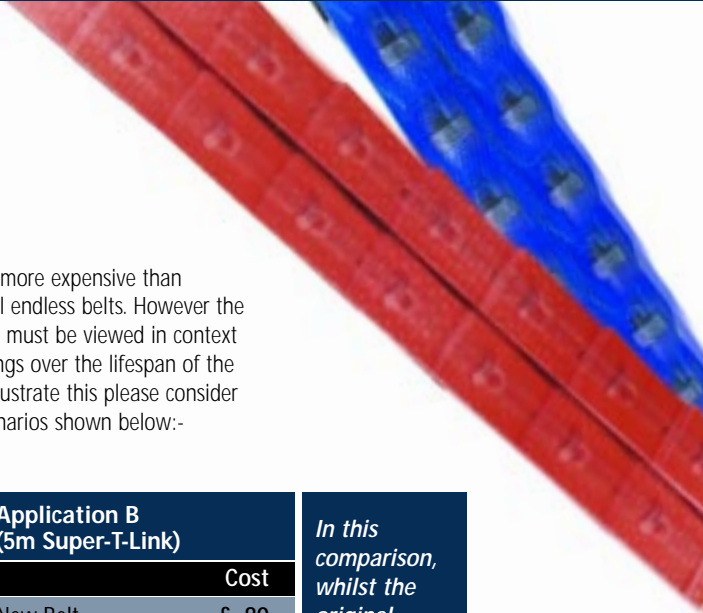
* indicates non-stock item made to order.
 ** available for non UK markets only.



From Emergency Belts to Permanent Solutions - charting the development of BTL detachable belts



Q&A Answers to some questions commonly asked about Detachable Belts



Q Are detachable belts for emergency use only?

A Absolutely not. Many years ago detachable belts were developed as a short term emergency solution or for inaccessible drives. However advances in material composition and product design have ensured that the product is now ideal for permanent usage. Whilst they remain vital for rapid belt fit in emergency situations, the main cost saving benefits are yielded where the belts are in permanent use over long periods.

Q Can I use detachable belts in existing pulleys?

A Yes, the range covers most standard V and wedge sections, these can be used to replace similar sectioned endless belts with zero modifications to the pulleys. If required BTL's belts can be used on smaller pulleys than comparable endless belts due to greater flexibility.

Q Do detachable belts have the same power transmission capability as endless belts?

A Generally yes. There are many different types of endless belt available with differing transmission capabilities thus it is difficult to make broad assumptions. Generally, both Nu-T-Link and Super-T-Link provide comparable power ratings to typical Classical and Wedge belts. Both do however, offer other performance advantages in demanding environments.

(See following page for rating data)

Q Are detachable belts more expensive than other drive belts?

A Generally yes. Due to high quality raw materials and the technology employed in making the base material, detachable belts are

generally more expensive than traditional endless belts. However the extra cost must be viewed in context with savings over the lifespan of the belt. To illustrate this please consider the 2 scenarios shown below:-

	Application A (5m Endless Wedge Belt)		Application B (5m Super-T-Link)	
		Cost		Cost
Month 1	New Belt	£ 20	New Belt	£ 80
	Fitting Time	£ 16	Fitting Time	£ 10
	Downtime	£ 15	Downtime	£ 10
Month 2	New Belt	£ 20		£ 0
	Fitting Time	£ 16		
	Downtime	£ 15		
Month 3	New Belt	£ 20		£ 0
	Fitting Time	£ 16		
	Downtime	£ 15		
Month 4	New Belt	£ 20		£ 0
	Fitting Time	£ 16		
	Downtime	£ 15		
Month 5	New Belt	£ 20		£ 0
	Fitting Time	£ 16		
	Downtime	£ 15		
Month 6	New Belt	£ 20		£ 0
	Fitting Time	£ 16		
	Downtime	£ 15		
Total		£ 306		£ 100

In this comparison, whilst the original Super-T-Link belt purchase was considerably higher, over a 6 month period Application A has incurred £306 of belt associated costs, whilst application B incurred costs of only £100.

Q Do detachable belts stretch? To what extent?

A A common myth surrounding detachable belts is that they show high levels of stretch. Many years ago the belts were made from a rubber and cotton combination and as a result excessive stretch did occur. However detailed product and polymer development over the last 2 decades means that the BTL belts are now made from a completely different material combination. Providing the

belt has been fitted correctly, at the right pre-tension and working within it's load parameters, the belts should show virtually zero stretch over long periods of time.

Q How often would I expect to have to re-tension?

A All belts do need some re-tensioning during their lifespan. As all drives differ it is difficult to quantify the frequency of

re-tensioning. After an initial run-in period BTL's detachable belts require minimum re-tensioning over long periods of time. Virtually all instances of BTL belts requiring regular tensioning have come about through incorrect installation or overloading.

Technical Data

The information given below provides some information regarding Nu-T-Link & Super-T-Link power ratings and offers some information on how to determine the belt type required for a particular drive.

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Drive Calculation

To calculate the belt requirement for individual drives, first find the design power by multiplying the nominal power by the correct service factor (table 1) and arc of contact factor (table 2) and then divide by the power available per belt (table 3).

Check out the following drive from details given:

Example: Milling Machine
5.5kW motor
1440 r.p.m.
Star Delta Start
Motor Pulley 125mm (5") dia
Drive Pulley 250mm (10") dia
Centres 750mm
Runs for 16 hours per day
2 "SPB" Section belts fitted

- Find design kW**
From Table 1 we select 1.3 i.e. Machine tool
Star Delta Start
Design kW = 5.5 x 1.3 = 7.15kW

- Find arc of contact**
 $180^\circ - \frac{60(250 - 125)}{750} = 170^\circ$
From Table 2 $170 = 1.02$

- Find total design kW**
Design kW x A/c factor
= 7.15 x 1.02 = 7.293kW

- Check out drive**
kW per belt "B" Section 125mm dia Pulley is 3.84kW
No. of belts required
= $\frac{\text{Total Design kW}}{\text{kW per belt}} = \frac{7.293}{3.84}$
= 1.9 belts

- 2 Nu-T-Link B/17 belts required

Table 1 - Service Factor

DUTY	TYPE OF DRIVE	TYPES OF PRIME MOVER					
		Under 10			Over 10		
		Under 10	10 to 16	Over 16	Under 10	10 to 16	Over 16
Special Conditions	Note: For Speed up, Vertical and Reversing Drives, Long Centres, extremely Short Centres, multiply the Service Factor by 1.2. Starting Torques of 150% to 200% should be treated as very heavy loads and the last column used. On contaminated drives multiply the Service Factor by 1.1 and on severely contaminated drives multiply the Service Factor by 1.2.	A.C. Motors - Star Delta Start - Normal Torque Squirrel Cage Motors - Split Phase Motors - D.C. Shunt Wound Steam - Gas Engines Over 600 R.P.M.			A.C. Motors - Direct On Line Start - High Torque High Slip Repulsion Induction Motors D.C. Motors - Series and Compound Wound Steam-Gas-Engines under 600 R.P.M. Lineshafts-Clutches-Brakes.		
	Hours per day duty						
			Under 10	10 to 16	Over 16	Under 10	10 to 16
Light Duty	Normal Industrial Drives Fans - Pumps - Compressors up to 4kW	1.0	1.1	1.2	1.1	1.2	1.3
Medium Duty	Bakery Machinery Fans - Pumps - Compressors up to 15kW Line Shafts - Printing Machinery - Generators - Machine tools - Punches - Presses - Shears	1.1	1.2	1.3	1.2	1.3	1.4
Heavy Duty	Textile Machinery - Saw Mills - Woodworking Machinery - Brick Machinery - Exciters - Piston Compressors - Paper Mill Machinery - Brick and Pipe Machinery Positive Blowers	1.2	1.3	1.4	1.4	1.5	1.6

Table 2 - Arc of Contact Correction Factors

Arc of contact	180°	175°	170°	165°	160°	155°	150°	145°	140°	135°	130°	125°	120°
Connection factor for speed reduction drives	1.00	1.01	1.02	1.04	1.05	1.07	1.08	1.11	1.12	1.14	1.16	1.18	1.20

$$\text{Arc of Contact} = 180^\circ - \frac{60 \times (\text{dia of Large Pulley} - \text{dia of Small Pulley})}{\text{Centre Distance}}$$

$$\text{Belt Speed M./sec.} = \frac{\text{R.P.M.} \times \text{Pulley diameter in mm}}{19100}$$

Table 3 - kW Ratings 1kW = 1.34 H.P.

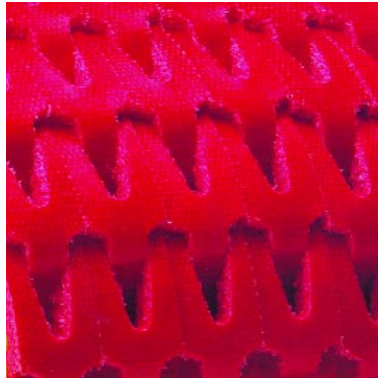
Rev/min of faster shaft	SUPERTLINK Rated Power (kW) Per Belt For Small Pulley Pitch Dia (mm)									Rev/min of faster shaft	NUTLINK Rated Power (kW) Per Belt For Small Pulley Pitch Dia (mm)															
	SPA.			SPB.			SPC.				Z/10		A/13			B/17			C/22-S/25			D/32				
	90	112	150	140	180	250	224	280	355		50	71	90	63	90	112	112	125	180	180	200	250	330	355	410	
100	0.26	0.41	0.65	0.73	1.10	1.74	1.99	2.99	4.31	100	0.10	0.13	0.16	0.12	0.24	0.31	0.37	0.97	1.03	1.31	1.53	2.18	3.60	4.47	6.79	
200	0.47	0.75	1.21	1.33	2.05	3.28	3.59	5.49	8.00	200	0.11	0.15	0.18	0.14	0.30	0.37	0.52	1.22	1.61	1.83	2.66	3.52	7.00	8.49	10.85	
300	0.66	1.06	1.74	1.89	2.93	4.70	5.04	7.81	11.44	300	0.13	0.17	0.21	0.16	0.43	0.47	0.73	1.47	2.19	2.44	3.89	5.16	9.89	11.57	14.87	
400	0.84	1.36	2.24	2.42	3.77	6.07	6.40	9.99	14.70	400	0.16	0.20	0.30	0.19	0.58	0.63	0.98	1.72	2.77	3.18	4.40	6.49	13.30	15.61	18.93	
500	1.01	1.65	2.73	2.92	4.57	7.39	7.67	12.06	17.80	500	0.20	0.22	0.38	0.21	0.76	1.01	1.30	1.97	3.35	3.92	5.63	8.22	15.25	17.72	21.91	
600	1.16	1.92	3.21	3.40	5.35	8.67	8.87	14.04	20.75	600	0.23	0.25	0.50	0.24	0.99	1.40	1.62	2.22	3.93	4.66	6.41	9.41	16.35	19.06	23.69	
700	1.32	2.19	3.67	3.86	6.11	9.92	10.00	15.92	23.56	700	0.25	0.32	0.58	0.31	1.08	1.67	1.87	2.35	4.19	5.00	6.90	9.93	17.86	20.93	25.41	
720	1.35	2.24	3.76	3.95	6.26	10.16	10.22	16.28	24.10	720	0.28	0.39	0.66	0.37	1.15	1.83	2.03	2.48	4.41	5.15	6.97	10.38	18.41	21.32	26.38	
800	1.46	2.45	4.12	4.31	6.84	11.12	11.08	17.71	26.22	800	0.30	0.46	0.74	0.42	1.18	1.90	2.13	2.71	4.66	5.32	7.35	11.14	19.33	22.80	27.66	
900	1.60	2.70	4.56	4.75	7.56	12.29	12.10	19.41	28.73	900	0.32	0.53	0.80	0.47	1.25	1.97	2.24	2.94	4.97	5.73	7.73	11.91	20.94	24.83	30.16	
960	1.69	2.85	4.82	5.00	7.98	12.97	12.68	20.38	30.16	960	0.33	0.60	0.88	0.52	1.32	2.05	2.34	3.11	5.28	5.95	8.21	12.31	21.61	25.90	31.49	
1000	1.74	2.95	4.99	5.17	8.25	13.42	13.06	21.02	31.08	1000	0.34	0.62	0.98	0.57	1.38	2.12	2.45	3.27	5.51	6.18	8.51	12.72	22.01	26.49	31.72	
1100	1.87	3.19	5.41	5.58	8.93	14.52	13.96	22.53	32.14	1100	0.35	0.69	1.09	0.61	1.45	2.22	2.57	3.33	5.75	6.41	8.82	13.82	22.97	26.87	32.00	
1200	2.00	3.43	5.83	5.97	9.58	15.57	14.81	23.95	33.17	1200	0.36	0.79	1.20	0.66	1.52	2.34	2.65	3.50	6.11	6.73	9.28	14.58	23.50	27.25	32.07	
1300	2.12	3.66	6.23	6.36	10.22	16.59	15.59	25.27	34.16	1300	0.37	0.86	1.31	0.70	1.58	2.44	2.74	3.64	6.57	7.09	9.66	15.00		27.66		
1400	2.24	3.88	6.63	6.73	10.84	17.57	16.31	25.75	34.02	1400	0.38	0.93	1.48	0.75	1.66	2.58	2.80	3.77	6.87	7.31	9.87	15.36				
1440	2.29	3.97	6.78	6.88	11.08	17.68	16.59	26.22	33.83	1440	0.39	1.01	1.51	0.79	1.73	2.72	2.87	3.84	7.06	7.41	9.99	15.50				
1500	2.36	4.10	7.01	7.09	11.44	18.51	16.98	26.68	33.61	1500	0.40	1.08	1.55	0.84	1.81	2.86	2.94	3.92	7.27	7.51	10.09	15.63				
1600	2.47	4.32	7.39	7.44	12.02	18.85	17.58	27.12	33.36	1600	0.44	1.11	1.61	0.87	1.91	2.99	3.04	4.05	7.59	7.62	10.24	15.70				
1700	2.58	4.53	7.76	7.78	12.58	19.18	18.11	27.56		1700	0.48	1.19	1.62	0.90	2.01	3.12	3.14	4.19	7.88		10.34	15.70				
1800	2.69	4.73	8.12	8.11	13.12	19.50	18.57	27.48		1800	0.55	1.25	1.72	0.93	2.09	3.24	3.26	4.40	8.11			15.70				
1900	2.79	4.93	8.48	8.43	13.64	19.80	18.97	27.36		1900	0.62	1.32	1.78	0.94	2.17	3.37	3.38	4.54	8.30			15.70				
2000	2.89	5.13	8.82	8.73	14.14	19.74	19.29	27.21		2000	0.66	1.38	1.80	0.95	2.22	3.46	3.48	4.68	8.44			15.70				
2100	2.99	5.32	9.16	9.02	14.62	19.65				2200	0.72	1.44	1.86	0.97	2.32	3.62	3.72	4.85	8.65			15.70				
2200	3.09	5.51	9.48	9.31	14.90	19.53				2400	0.78	1.51	1.91	0.99	2.44	3.72	3.85	4.90	8.68							
2300	3.18	5.69	9.80	9.57	15.17	19.38				2600	0.82	1.57	1.95	1.01	2.55	3.81	3.93	4.99	8.70							
2400	3.26	5.87	10.11	9.83	15.43					2800	0.88	1.63	1.99	1.03	2.63	3.89	3.96	5.01	8.72							
2500	3.35	6.04	10.41	10.08	15.60					2880	0.89	1.65	1.99	1.04	2.64	3.93	3.97	5.01	8.73							
2600	3.43	6.21	10.48	10.31	15.77					3000	0.92	1.69	2.00	1.06	2.67	4.02	4.00	5.03	8.73							
2700	3.51	6.37	10.69	10.53	15.90					3200	0.94	1.73	2.03	1.08	2.71	4.07	4.01		8.73							
2800	3.59	6.53	10.89	10.73	15.87					3500	0.98	1.79	2.08	1.13	2.80	4.08										
2880	3.64	6.65	11.03	10.89	15.82					4000	1.04	1.82	2.11	1.18	2.91	4.09										
2900	3.66	6.68	11.25	10.93	15.75					4200	1.06	1.82	2.11	1.20	2.92	4.09										
3000	3.73	6.83	11.38	11.10	15.66					4500	1.08		2.11	1.23		4.09										
3100	3.79	6.97	11.51							4800	1.10		2.11	1.23		4.09										
3200	3.86	7.11	11.49							5100	1.13		2.11			4.09										
3300	3.92	7.24	11.45							5700	1.14		2.11													
3400	3.98	7.37	11.40							6300			2.11													
3500	4.03	7.41	11.26																							
3600	4.08	7.44	11.08																							
3700	4.13	7.46	10.91																							
3800	4.17	7.48	10.65																							
3900	4.21	7.50																								
4000	4.25	7.52																								

FOR HIGHER BELT SPEED DRIVES PLEASE CONTACT US:



Technology in Motion

The BTL portfolio contains a range of other products for problem solving in power transmission and motion control applications.



Powerwist Plus V-BELT

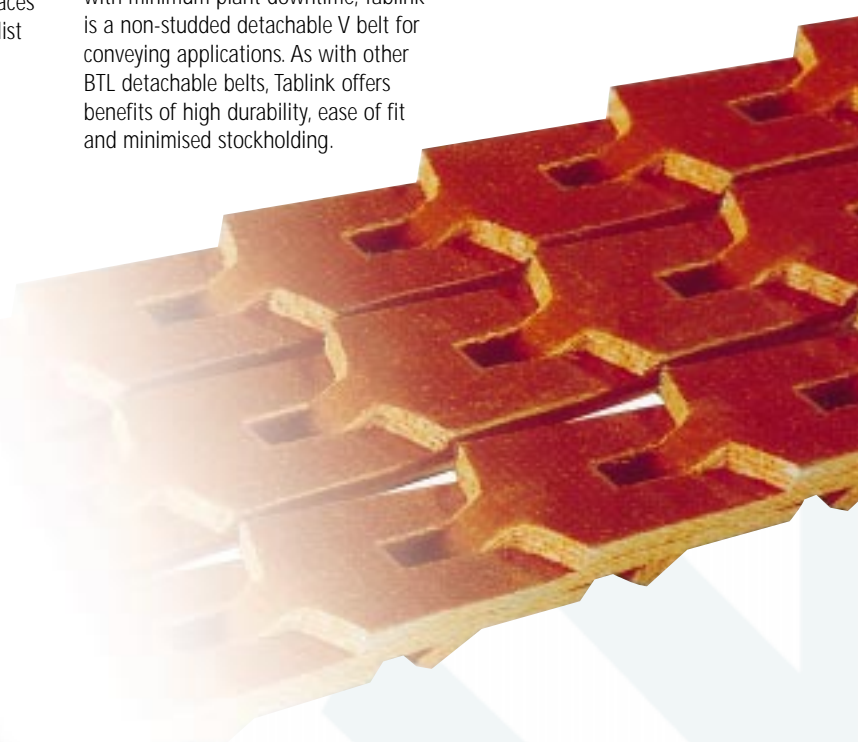
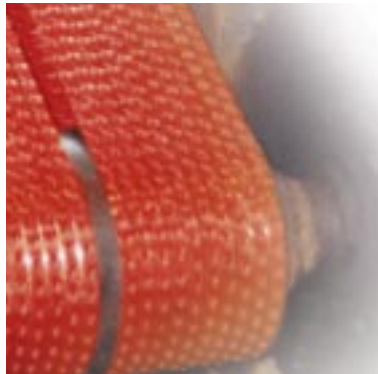
Powerwist is a range of non-studded detachable V and round belts which complements the Nu-T-Link, Super-T-Link and Tablink ranges. Designed for power transmission and conveying applications, Powerwist also provides

extended lifespan, rapid installation, reduced stockholding and design simplification.

Powerwist can also be supplied with high grip surfaces, cushioned surfaces or with a teflon top to suit specialist applications.

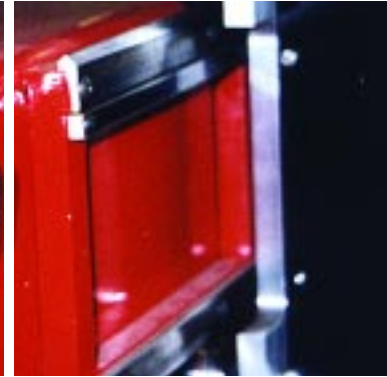
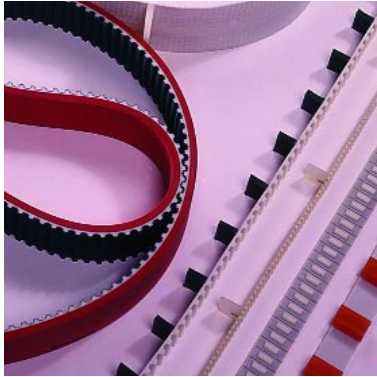
TAB-LINK

Designed for maximum performance with minimum plant downtime, Tablink is a non-studded detachable V belt for conveying applications. As with other BTL detachable belts, Tablink offers benefits of high durability, ease of fit and minimised stockholding.



Technology in Motion

12



Polyurethane Timing Belts

BTL's range of polyurethane timing belts provide precision and control for a wide range of synchronised conveying applications. The range includes:-

- **Open-Ended belts**
- **Truly-Endless belts**
- **Flighted belts**
- **Backed belts**
- **Joined belts**

Each available in most standard tooth profiles and belt widths.

Customised Design

Utilising in-house specialist operations, such as adding flights, adding special backings, grinding, joining and punching, BTL can offer tailor-made solutions for niche applications.

Extruded Belting

BTL's range of extruded belting is widely used in a range of conveying and power transmission applications. The range includes a variety of different profiles and material types.

In addition to a stock range, BTL provide a customised manufacture service. Working closely with equipment designers or process engineers to produce a tailor-made extruded belt for precise applications. Our in-house extrusion facility carries out a number of value adding operations.

Trantorque GT Keyless Bushings

Ideal for mounting timing pulleys.

The unique Trantorque GT is expertly designed to provide repeated synchronisation at high speeds. Offering reduced assembly and maintenance costs, it allows components to be securely and accurately mounted onto a shaft in seconds without the need for a keyway or multiscrew fitting. Trantorque provides a wealth of benefits to both equipment designers and end - users.

- Eliminates fretting around keyways & backlash
- Maintains repeated positioning accuracy
- Easy to install - single nut tightening
- Positioning can be adjusted in seconds.
- Increased lifespan
- Available in non-traversing, stainless steel and short series models.





Technology in Motion

BTL is part of Fenner Drives, a major worldwide power transmission and motion control components manufacturer. With over 400 employees across four sites, Fenner Drives has extensive engineering, development and testing facilities providing unsurpassed technical support and service to global power transmission, conveying and materials handling markets.

For further information or advice on any of our products or services please do not hesitate to contact us using the details below:-

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