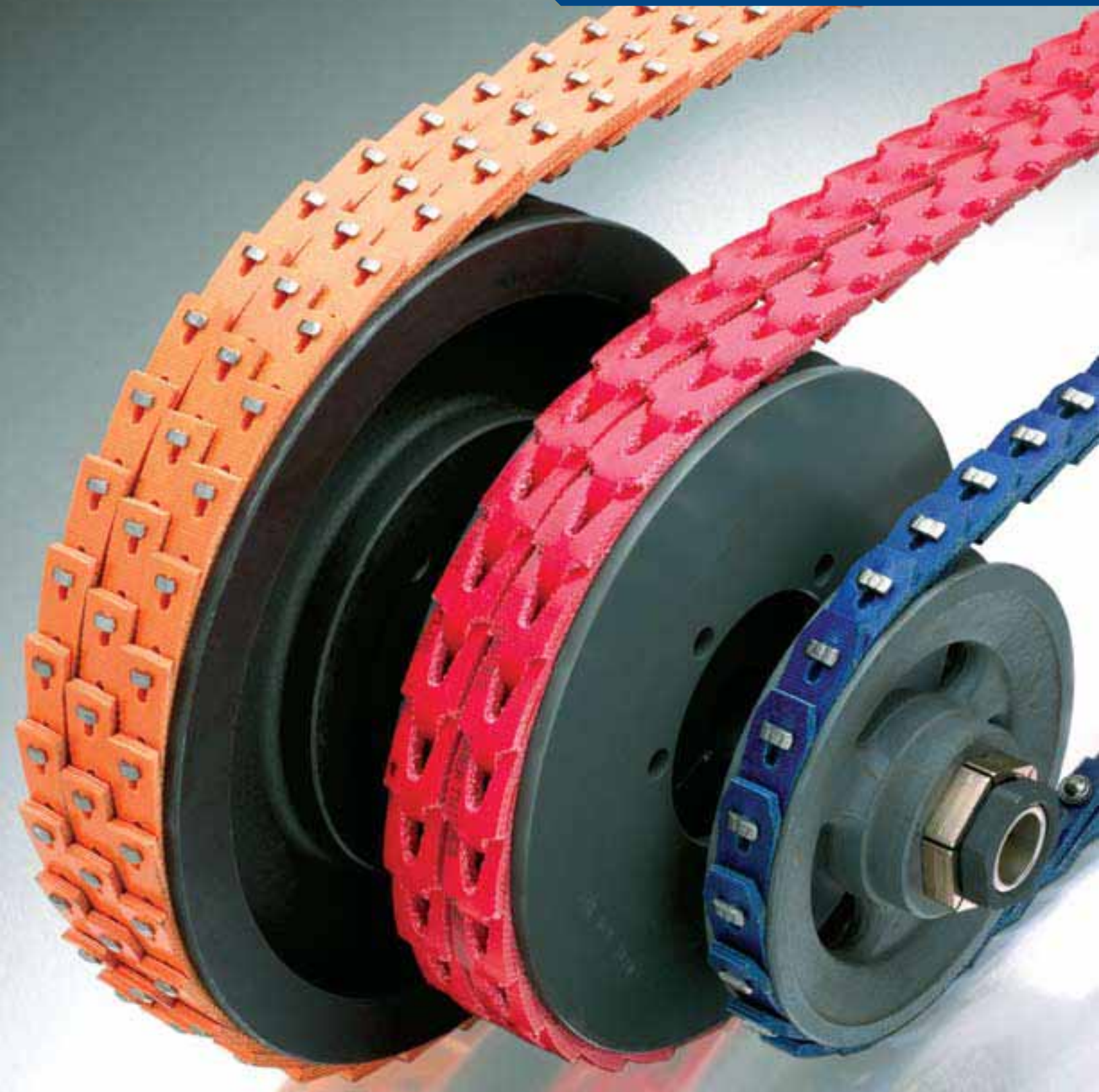
OCT
2009

Fenner Drives®



High Performance Composite V-Belts

NU-T-LINK® V-BELTS

PowerTwist Plus® V-BELTS

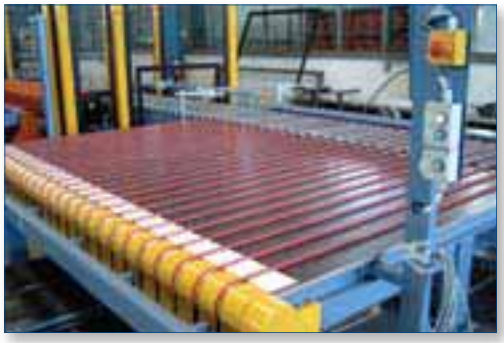
SUPER-T-LINK® SPWEDGE BELTS

Designed to Outperform

Our High Performance Composite (HPC) V-Belts are uniquely designed and incorporate custom composite materials which provide a number of time- and cost-saving benefits to maintenance engineers and equipment designers:

- Industry standard power ratings
- Longer belt life
- Easier, faster installation
- Reduced V-belt stock
- Minimised maintenance time
- Simplified drive design
- Reduced drive vibration





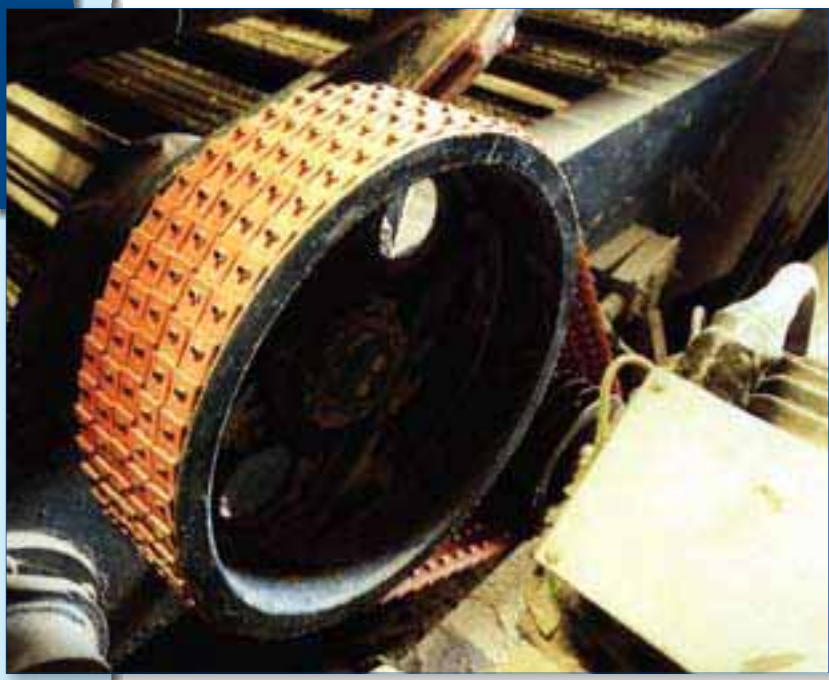


Table of Contents

The Benefits of HPC V-Belts. 4
with Application Examples!

PowerTwist Plus Antistatic 8

PowerTwist for Conveying Systems . . . 9

PowerTwist Specialty Belts. 10

Part Numbers 15

High Performance Composite V-Belts from Fenner Drives



Your Alternative Choice...

Made from custom polyurethane elastomers reinforced with multiple plies of polyester fabric, Fenner Drives' HPC V-Belts offer problem-solving alternatives to conventional endless wrapped rubber V-belts of classical and metric SP wedge cross sections.

Our product range is comprised of PowerTwist Plus and NuTLink V-Belts for classical section drives and SuperTLink V-Belts for applications using metric wedge SP rated belts.

While simple in concept, Fenner Drives' composite V-belts deliver outstanding performance, solving many of the field problems traditionally associated with conventional rubber V-belts.



PowerTwist Plus V-BELTS

- The everyday industrial workhorse
- Perfectly suited to Z/10, 3L, A/13, B/17 and C/22 drives
- The upgrade for traditional rubber V-belts



NUTLINK V-BELTS

- When your drive needs more "muscle"
- Ideal for heavier, shock loaded applications and reciprocating engine powered drives
- Improved performance replacement for classical V-belts up to C/22 cross section



SUPERTLINK SP WEDGE BELTS

- Heavy duty construction
- Engineered specifically to replace metric SP wedge belts of SPZ, SPA and SPB cross section



Drop-In Replacements

Rest assured, when fitting PowerTwist Plus, NuTLink or SuperTLink V-Belts, it's only the belt that changes. Each type offers standard industry power ratings and will run in standard pulley grooves. There's no need to change associated components!

The Right Belt... Now, Guaranteed!

Having the right belt on hand saves you TIME & MONEY. With Fenner Drives' HPC V-Belts, you will always have the right V-belt on hand. It comes in the same standard cross sections as rubber V-belts, and you can make a belt any length you need by hand in seconds.

PowerTwist Plus, NuTLink and SuperTLink V-Belts are permanent replacements. There is no need to run back to the job and replace it with a rubber V-belt. Simply fit it and move on to your next job.



Longer Belt Life in Harsh Operating Conditions



HPC V-Belts are manufactured from high performance polyurethane/ polyester composite materials which ensure excellent durability even in the most demanding conditions. HPC V-Belts from Fenner Drives will outperform conventional rubber V-belts in handling hostile environments, including exposure to oil, grease, water and most common industrial and agricultural chemicals and solvents. They are also more resistant to abrasion and will operate, with no loss in performance, at a more extreme temperature range — from -40°C to 116°C (-40°F to 240°F).

APPLICATION

Stone Conveyor Drive

Problem Heavy shock loads plus exposure to abrasive aggregate and dust were causing excessive wear and premature failure of rubber SPB metric V-belts.

Solution Fitting high performance SuperTLink SP Wedge Belts provided greater resistance to the harsh operating conditions. Belt life was increased five times with the link belt design absorbing vibratory stresses.



Reduced V-Belt Stock… Any Belt, Any Time



With PowerTwist Plus, NuTLink and SuperTLink, there's no need to maintain inventory of numerous different endless rubber belts to cover all your drives. Carry a pack each of A/13 and B/17 in stock and you're almost 100% covered with a significant reduction in working capital tied up in spares.

APPLICATION

HVAC Drives



Problem A naval base has over 200 air conditioning units using more than 130 different belt lengths. At any one time there were over 1,700 spare belts on site. This stock was costly, difficult to manage and correct replacement belts always difficult to locate.

Solution On converting to PowerTwist Plus V-Belts, the maintenance team now carries boxes of the red belt 24/7. Drives are now serviced quickly without wasting time returning to the belt crib to pick up specific belt sizes. Stock was reduced to just a few boxes of 3L, A/13 and B/17 sections.

Easier & Faster Installation

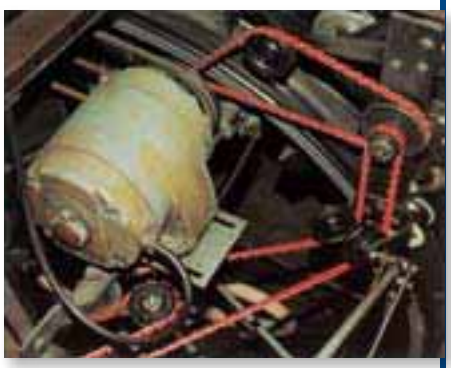


Unique "quick connect" belt designs provide for easier and faster belt installation, even on captured or restricted access drives — no tools required. Belts are easily made up to the required length, by hand, in seconds and can be rolled onto a drive just like a bicycle chain. No need to dismantle drive components or change existing pulleys as HPC V-Belts run in industry standard pulley grooves.

APPLICATION

Bowling Centre Pinsetter

Problem Replacing endless V-belts on a pinsetter is a maintenance nightmare with its many "stacked," hard to reach drives.



Solution Making to length and installing quick connect PowerTwist Plus V-Belts can be accomplished with nothing more than a flick of the wrist.

For more applications and technical information, visit www.fennerdrives.com

Minimised Maintenance Time

Like all power transmission belts, Fenner Drives' HPC V-Belts may require retensioning after an initial "run in" period. But unlike conventional V-belts, with PowerTwist Plus, NuTLink and SuperTLink, retensioning is simple; just roll the belt off, take out a link and roll it back on — no need to move any drive components. No time — no trouble.



APPLICATION

Brick Manufacture

Problem Fitting replacement endless V-belts on this high heat drive entailed totally stripping down equipment, removing pulleys and then reassembling. This process would take 2 – 3 days.



Solution Installing NuTLink V-Belts reduced downtime to just two hours with the added bonus of longer belt life.

Simplified Drive Design



The unique link design of Classical and SP rated HPC V-Belts allows designers considerable freedom in their choice of optimum drive configuration with savings in component costs and assembly times. As HPC V-Belts are effectively self-tensioning on installation and exhibit low operational stretch, there's no need to incorporate belt tensioners and sliding motor bases into drive designs. Plus, drives can be optimally mounted on/in equipment to ensure quick and easy field maintenance.

APPLICATION

Airport Baggage Handling

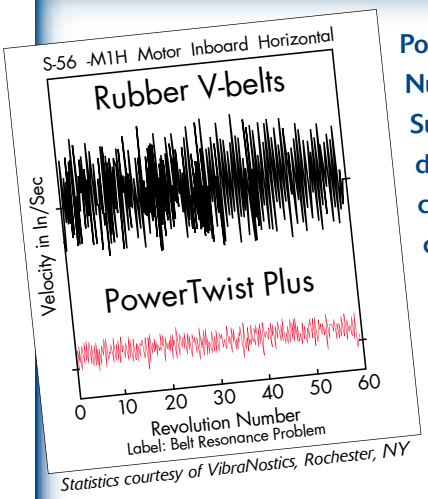
Problem Chain was originally specified to drive rollers in a complex curve/loop configuration. Each roller was offset at an 8° angle. The stresses on the chain of running between angled sprockets caused frequent premature chain failure.





Solution Roller drives were converted to run SuperTLink SP Wedge Belts. Not only did SuperTLink handle the drive misalignment with ease, system noise was reduced by 40% compared to the earlier chain-driven set up.

Reduced Drive Vibration & System Noise



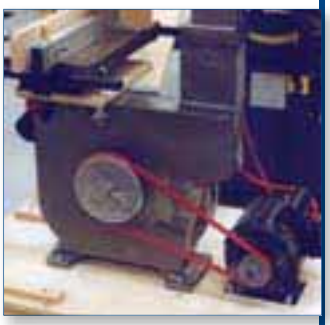
Statistics courtesy of VibraNostics, Rochester, NY

PowerTwist Plus, NuTLink and SuperTLink do not have the continuous tension cords found in conventional V-belts. As a result, transmitted vibration in the drive system can be reduced by 50% or more. Consequently, system noise is reduced and, as a bonus, bearing life extended.

APPLICATION

Woodworking Equipment

Problem The continuous tension cords in conventional V-belts were allowing vibrations to be transmitted from the table saw motor to the cutting blade. This caused "blade chatter" leading to imperfect rough cuts.



Solution Fitting PowerTwist Plus V-Belts dampened transmitted vibrations and reduced system noise significantly. V-Belt-driven woodworking equipment will benefit from upgrading to the red belt – perfect cuts and finishes every time!

Solving Big Problems on Big Drives

With industry standard power ratings in belt sections up to C/22, NuTLink and SuperTLink are heavy duty workhorses. These belts are perfectly suited for those big shock loaded applications with multi-belt drives.



APPLICATION

Stone Saw

Problem When it was time to replace the rubber belts on this stone saw, belt installation was measured in days and the worn pulley grooves made it almost impossible to get even power transmission across the belts.

Solution By using SuperTLink SP Wedge Belts to replace the rubber belts, installation time was cut to a couple of hours. The ability to make the belts to any length allowed each belt to be custom sized to compensate for the worn pulleys. As an added bonus, the link design effectively absorbed shock loads in this powerful system.



PowerTwist Plus® V-BELTS Antistatic V-Belts

New from Fenner Drives

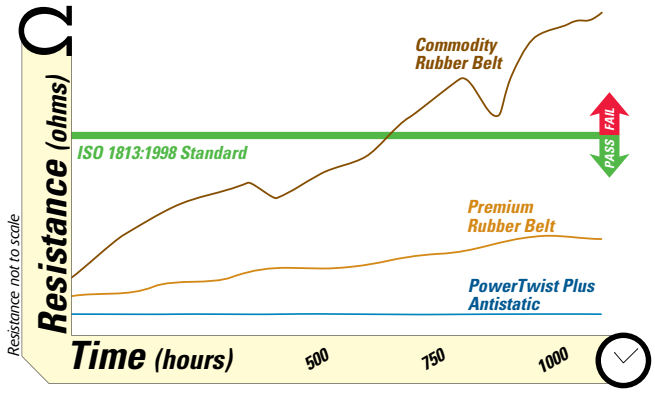
Take the Shock out of Electrostatic Build Up

Have an application where static electricity is getting you all charged up?

PowerTwist Plus Antistatic is the answer… with all the benefits of standard PowerTwist Plus and the best antistatic properties of any V-belt on the market, easily passing the ISO 1813:1998 standard. While the standard allows the resistance of the drive belt to be as high as 3.6 mega ohms (3,600,000 ohms), PowerTwist Plus Antistatic typically registers well below 50 ohms, while even the best so called antistatic rubber belts usually measure between a shocking 10,000 – 200,000 ohms. And unlike antistatic rubber V-belts whose antistatic properties may be adversely affected by humidity levels, environmental conditions and wear, PowerTwist Plus Antistatic's proprietary construction allows the belt's antistatic properties to perform in the harshest conditions.



Fenner Drives' ISO 1813:1998 test methods have been validated by TÜV SÜD America Inc.



Accelerated Life Test Comparison

Use PowerTwist Plus Antistatic and gain all of these great benefits:

- 100% ISO 1813:1998 inspected and certified by Fenner Drives
- Ultralow resistance antistatic V-belt
- Antistatic properties unaffected by humidity levels
- Electric Blue color for easy identification
- Drop-in replacement for classical section V-belts
- Industry standard power ratings
- Reduced drive vibration
- Longer belt life
- Easier, faster, tool free installation
- Reduced V-belt stock
- Minimised maintenance time

APPLICATION

Fuel Transfer Pumps



Problem *Fuel transfer pumps are often located in remote locations and exposed to harsh environmental conditions causing traditional rubber V-belts to fail prematurely.*

Solution *With the advent of PowerTwist Plus Antistatic, fuel pump service technicians were able to tap into all the benefits of a Fenner Drives HPC V-Belt while providing a safe and reliable solution. Belt life on the pumps was increased and service technicians always have the correct belt on hand in these remote locations.*

PowerTwist® V-BELTS for Conveying Systems

A Bright Red Bright Idea

Are you having any of these problems typically associated with conveyor operation?

- Tearing down half the conveyor to replace endless round or V-belts?
- Keeping chain conveyors well oiled or greased?
- Finding scuff marks on conveyed components?
- Experiencing belt cracking with endless rubber or urethane belts?
- Having to buy in volume when you only need one belt?
- Excessive spare belt stock?





Then it's time you took advantage of the added value benefits of PowerTwist.®

- Quick Installation: Belts are easily made to the required length and installed in minutes without dismantling drive system components.
- Low Maintenance: High tensile strength: low stretch. PowerTwist also requires no lubrication while in operation.
- Longer Life: Outlasts conventional rubber belts in tough conditions. Unaffected by extremes of temperature, water, oils, grease, and common industrial solvents.
- Reduce V-belt Stock: PowerTwist is made to length on site, eliminating the need to purchase and hold numerous different spare endless belt lengths.
- Broad Product Range: Whether your application requires reduced contact surface, high grip, abrasion resistance, non-marking, high-temperature, oil and chemical resistance, you name it – there's a PowerTwist Specialty Belt to meet your need.





Product Range for Conveying Applications

PowerTwist Plus

PowerTwist SuperGrip Top PU .... pg 10

PowerTwist SuperGrip Top PVC 10

PowerTwist Friction Top 11

PowerTwist Bridge Top 11

PowerTwist Cushion Top 12

PowerTwist Roller Drive 12

PowerTwist Double-V 13

PowerTwist Ground Round 13

Specialty Belts

Fenner Drives continues innovating new products to meet your ever-changing application needs and complement the use of PowerTwist Plus V-Belts. All PowerTwist Specialty Belts have the same detachable link design and easy installation as the original PowerTwist Plus, along with unique, value-added features that make them superior to alternative belting options.

PowerTwist® SuperGrip Top PU



Known for its tremendous durability, PowerTwist SuperGrip Top PU stands up to the rigors of conveying in the most abrasive environments. It will easily move concrete blocks, bricks and tiles of all types. This 70A polyurethane SuperGrip Top is the toughest in our product line. And while this PU SuperGrip Top is harder and less flexible than our PVC offering it is a relatively soft polyurethane compound that provides superior traction and belt life in tough applications.

APPLICATION

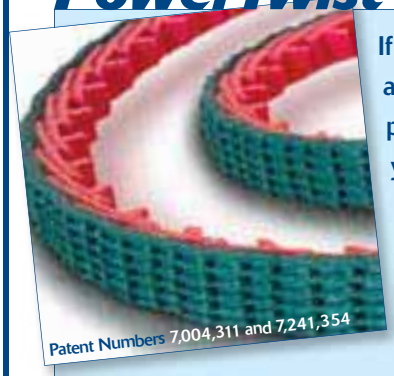
Conveying — Tile Rotation

Problem *The abrasive nature of tiles and the ever present dust during manufacturing is a challenging environment. Smooth belts on this tile rotating conveyor didn't provide sufficient grip and inferior grade grip tops wore out far too quickly.*



Solution *Switching to PowerTwist SuperGrip Top PU provided the perfect solution. The SuperGrip Top design delivered excellent traction in the dusty environment and the PU construction lasted more than five times longer than the previous grip tops.*

PowerTwist® SuperGrip Top PVC



If ultra high grip and/or an extremely pliable top are what your application demands, PowerTwist SuperGrip Top PVC is your solution. Since the PVC SuperGrip Top tends to wear faster than our PU option, use it in applications where abrasion resistance isn't a paramount issue. It is ideally suited for conveying in slippery environments, up steep inclines or moving easily damaged products.

APPLICATION

Diverter Arm

Problem *As soon as the original rubber V-belts on this diverter arm became slightly worn, they started slipping against the boxes being conveyed. The belts were also a challenge to replace.*



Solution *Both problems are solved with PowerTwist SuperGrip Top PVC. The features of PowerTwist made replacing the belts a snap. The tremendous grip provided more than enough traction to keep the boxes moving long after rubber V-belts would have given up.*

Specialty Belts

PowerTwist® Friction Top™

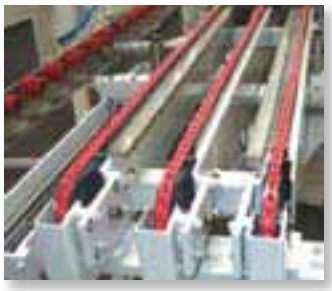


With a top layer of 85A polyurethane engineered into each link, PowerTwist Friction Top offers a higher coefficient of friction in conveying applications than standard PowerTwist Plus. This extremely durable polyurethane surface is fused with the rest of the belt and will never delaminate. Perfect for applications where more grip is needed but a SuperGrip Top Belt is unsuitable.

APPLICATION

Material Handling

Problem *An international manufacturer of material handling systems wanted to produce premium equipment that was designed to have absolute minimal downtime and fast maintenance procedures when and if needed. Rubber and welded urethane belts just didn't meet these needs as the main conveying belts in their systems.*



Solution *PowerTwist Friction Top provided the grip needed for their varied applications. By designing with PowerTwist Friction Top from the start, they were able to produce systems that rarely require maintenance to the belts, but can be done in minutes if the need does arise.*

PowerTwist® Bridge Top™



When you have the need to convey hot products, PowerTwist Bridge Top can handle the heat. Supplied with PTFE inserts, which act as a high temperature barrier between the product and the underlying belt, PowerTwist Bridge Top effectively operates at contact temperatures up to 232°C (450°F). The non-marking PTFE inserts have excellent release properties and are extremely chemically inert.

APPLICATION

Automotive Glass

Problem *During the forming process, hot glass at this automotive glass manufacturer quickly destroyed virtually any belt that came in contact with it. Not only was constant belt replacement an issue, but the belts also had a tendency to mark the glass, causing extra rework or scrap.*



Solution *By replacing their current belts with PowerTwist Bridge Top, the manufacturer was able to reap the high performance benefits of PTFE. The PTFE inserts easily stood up to the hot glass temperature long after other belts had failed. Marking issues were eliminated. Productivity increased and scrap decreased.*

Specialty Belts

PowerTwist® Cushion Top®



Whether you are directly conveying goods, driving rollers, or have another unique need, consider PowerTwist Cushion Top when your application requires an ultra smooth or flexible top surface. PowerTwist Cushion Top consists of a polyurethane "bubble" integrally bonded to PowerTwist creating a distinctive combination of properties ideal for a number of special applications.

APPLICATION

Unit Handling

Problem *An engineering firm needed to design a drive system for a custom conveyor that could be modular in design and provide smooth, "chatter-free" operation. Endless rubber V-belts weren't readily available in the range of sizes needed and extruded urethane belts couldn't transmit the power.*



Solution *The engineering firm ultimately chose PowerTwist Cushion Top because it can be made to any length accommodating any size conveyor, has a smooth/flexible top surface that conforms to machine variations and more than adequate strength for transmitting the needed power.*

PowerTwist® Roller Drive™



Quickly and permanently replace belts on live roller conveyors. PowerTwist Roller Drive is a drop-in replacement for B/17 section V-belts on any live roller conveyor or 9/16" round profile belts on Rapistan® Conveyor Systems. Easily installed without the need to dismantle the conveyor, just thread it through your system. Proven to outlast and out perform rubber belts, especially on curves. Simply the ultimate solution to those troublesome live roller conveyors.

APPLICATION

Distribution Center

Problem *A national retailer distribution center was experiencing unacceptable down time due to premature failure of rubber belts on live roller conveyors. This was compounded by the length of time it took to replace the rubber belts.*



Solution *Installation time of PowerTwist Roller Drive in this application was measured in minutes, rather than hours. Once installed, PowerTwist Roller Drive lasted three times longer than a rubber belt on their most problematic conveyor.*

Specialty Belts

PowerTwist® Double-V



With a V profile on both sides, PowerTwist Double-V is designed to replace double V rubber belts in serpentine drives, where power needs to be transmitted by both sides of the belt. This belt is also suited for use in conveying applications where a lower contact area between the belt and the conveyed item is desired.

APPLICATION

Serpentine Drive

Problem *This custom designed machinery utilized a double-V B section belt as the main drive system. Unfortunately, the design did not include adequate take-up to tension the belts, so belt life was extremely short.*

Solution *PowerTwist Double-V belts dropped right into this application. The link design allowed for quick installation and the double V profile easily transmitted the power. Since links could be easily removed to achieve proper belt tension, PowerTwist Double-V out-lasted the rubber belts by a factor of five!*



PowerTwist® Ground Round®



Stuck with ancient round leather belts? Frustrated with round rubber? Or tired of welding urethane? PowerTwist Ground Round is the effortless upgrade. With a round profile, this PowerTwist Plus based belt will drop right into your existing equipment. Its extreme flexibility makes it ideally suited for use with the small pulley/idler diameters often found in these systems.

APPLICATION

Consumer Goods

Problem *A light bulb producer was plagued with downtime when endless round belts needed to be replaced in their operation. With a large installed base of round belt equipment, their options seemed limited.*

Solution *PowerTwist Ground Round was the perfect solution to their round belt dilemma. Since PowerTwist Ground Round's profile is a perfect match for round belt pulleys, idlers and guides, the belts slide right in and are easily joined with the twist of a tab. Breaking down the systems to install endless belts became a thing of the past.*



The Proven Choice for Material and Unit Handling

NEW from Fenner Drives:

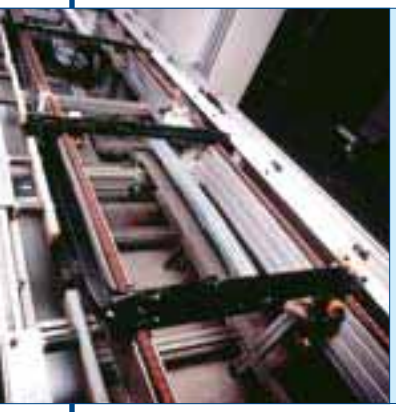
PowerTwist® RCS (Reduced Contact Surface) was developed specifically for the glass industry; combine the benefits of PowerTwist Plus with 99% reduction in contact area from standard V-belts. Custom tabs will not mark or scuff glass.



Warehousing

In addition to its use as a conveying belt, PowerTwist Plus is used extensively as a power transmission belt on belt driven roller, power curve and line shaft conveyors. Costly system downtime can be avoided with "quick fit" PowerTwist Plus... no tools — no time — no trouble!





Glass

PowerTwist Plus V-Belts are used extensively in the glass industry. Non-marking; high temperature rating; resistant to cuts and tears.



Sheet Metal

With high tensile strength plus excellent oil and abrasion resistance, PowerTwist Plus is used commonly to transport metal sheeting and fabricated forms. Non-marking. Ideally suitable for use on long conveyor runs.

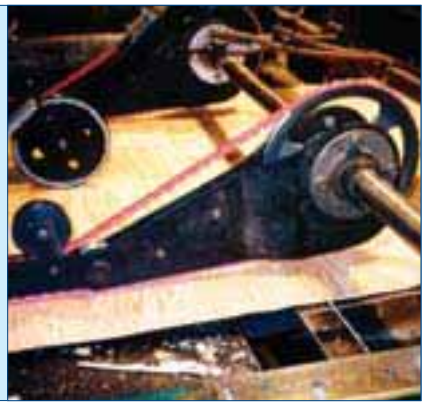
Washdowns

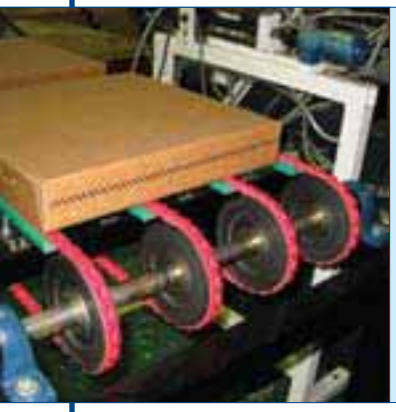
PowerTwist Plus is ideal for use in applications involving washdowns. On this crate washer, high resistance to water, elevated temperatures and detergents is essential.



Wood Conveying

Excellent abrasion resistance and product grip combined with easy installation makes PowerTwist Plus the transfer belt of choice in the fabricated wooden components sector.





Packaging

PowerTwist Plus V-Belts are widely used in time sensitive packaging operations. Replacement belts of any length can be made up by hand on site and fitted in minutes without the use of belt welding tools or the dismantling of drive components.



Tile Conveying

The composite material of PowerTwist Plus is resistant to abrasion, making it suitable for use with heavy, abrasive loads that cause polyurethane or other belting to fail prematurely.

Part Numbers

PowerTwist Plus® V-Belts

Belt Section	Carton Pack	Product Number	Carton Pack	Product Number	Carton Pack	Product Number
3L	2m Sleeve	04100102	10m	0410010	30m	0418013
Z/10	2m Sleeve	04100202	10m	0410020	30m	0418023
A/13	2m Sleeve	04090502M	10m	0410030	30m	0418033
B/17	2m Sleeve	04090302M	10m	0410050	30m	0418053
C/22	—	—	10m	0410070	30m	0418073
D/32	—	—	10m	0410090	30m	0418093

PowerTwist Plus® Antistatic

Belt Section	Carton Pack	Product Number	Carton Pack	Product Number
A/13	10m	040850010	30m	0408500
B/17	10m	040860010	30m	0408600

NuTLink® V-Belts

Belt Section	Carton Pack	Product Number	Carton Pack	Product Number
Z/10	5m	L01Z5	20m	L01Z20
A/13	5m	L01A5	20m	L01A20
B/17	5m	L01B5	20m	L01B20
C/22	—	—	20m	L01C20

SuperTLink® SP Wedge Belts

Belt Section	Carton Pack	Product Number	Carton Pack	Product Number
SPZ	5m	L02Z5	20m	L02Z20
SPA	5m	L02A5	20m	L02A20
SPB	5m	L02B5	20m	L02B20

PowerTwist® SuperGrip Top PU

Belt Section	Carton Pack	Product Number
A/13	30m	0430100
B/17	30m	0435100
C/22	30m	0440100

PowerTwist® SuperGrip Top PVC

Belt Section	Carton Pack	Product Number
A/13	30m	04091030
B/17	30m	04092030
C/22	30m	04093030

PowerTwist® Friction Top®

Belt Section	Carton Pack	Product Number
A/13	30m	0418085
B/17	30m	0418088

PowerTwist® Bridge Top™

Belt Section	Carton Pack	Product Number
A/13	30m	0419022
B/17	30m	0419002
C/22	30m	0418072

PowerTwist® Cushion Top®

Belt Section	Carton Pack	Product Number
B/17	30m	0411100

PowerTwist® Roller Drive™

Belt Section	Carton Pack	Product Number
B/17	10m	0411301
B/17	30m	0411300

PowerTwist® Double-V

Belt Section	Carton Pack	Product Number
AA	30m	0419230
BB	30m	0419250
CC	30m	0419270

PowerTwist® Ground Round®

Belt Section	Carton Pack	Product Number
5/16"	30m	04191050
3/8"	30m	0419110
1/2"	30m	0419120
9/16"	10m	04151079
9/16"	30m	04151070

Length Equivalents

2m = 6.56 ft

5m = 16.40 ft

10m = 32.81 ft

20m = 65.62 ft

30m = 98.43 ft

The colour red for link V-belts is registered in the U.S. Patent and Trademark Office as a trademark of Fenner, Inc.

For detailed technical data and power ratings, please visit www.fennerdrives.com.

Count on Fenner Drives.

We've got the right product for your application.



EAGLE®
POLYURETHANE BELTING & O-RINGS

PowerTwist Plus® V-BELTS

SUPER T LINK® SPWEDGE BELTS

NU T LINK® V-BELTS

T-MAX® BELT & CHAIN TENSIONERS

PowerMax™ PULLEYS & IDLERS

B-LOC® KEYLESS BUSHINGS

Trantorque® Keyless Bushings

Trackstar® UHMW BELT & CHAIN GUIDES

Fenner Drives is a proven leader in the design and manufacture of problem-solving power transmission and motion transfer components. Recognized widely for our expertise and innovation in manufacturing technology, we consistently blend reliability, quality and value in our products. Our ISO 9001:2000 certified production facilities are located in Leeds, UK; Manheim, PA; and Wilmington, NC. As part of our commitment to provide unsurpassed technical support and service, we maintain extensive engineering, development and testing facilities.

Visit us at www.fennerdrives.com

Fenner Drives®
an ISO 9001:2000 certified company

311 West Stiegel Street
Manheim, PA 17545-1747

www.fennerdrives.com
TEL: 800-243-3374
TEL: 717-665-2421
FAX: 717-665-2649

Hudson Road
Leeds, LS9 7DF UK

www.fennerdrives.com
TEL: +44 (0)870 7577007
TEL: +44 (0)113 2493486
FAX: +44 (0)113 2489656

© 2009 FENNER DRIVES FDHPCVB-008