# transtex belting conveyor belts





transtex<sup>®</sup>-lightweight rubber & pvc

#### **PVK**®

Georgia Duck innovation since the late 1960s, PVK has an allsynthetic carcass impregnated with a PVC elastomer, creating a solid bond of high-performance PVC belting; for superior performance. PVK is available in single-ply straight-warp. This is a premium belt construction - tough, long-lasting and with characteristics unmatched in any other construction and a standard in the parcel-handling industry.

### **PHR**<sup>®</sup>

PHR is a superior plied rubber conveyor belt that provides excellent creates an exceptionally uniform physical properties. Available warp, plain weave, twill weave or and a variety of textures allow this belt to be customized for a variety of applications. Whether you need excellent grip in a non-marking belt, chemical-resistance or a belt that operates in extreme temperatures, PHR is your belt solution.

#### **PRL**<sup>®</sup>

PRL is a specialized process that finish. Extraordinary release carcasses include low-stretch straight- characteristics are enhanced by small pulley diameter capability. PVC or monofilament.Over 60 configurations Urethane covers provide an excellent seal for resistance against chemicals, oils and greases. They also make the belt surface conducive to texturing with a variety of possible patterns. Transtex Belting Belting manufactures PRL utilizing all types of carcasses: twill, plied or monofilament.







# **Conveyor Belt Components**

## **Fabric and Carcasses**

The plied yarn, and sometimes additional materials such as monofilament or aramid fibers, are woven together to create the belt's fabric or carcass. This is the foundation of a conveyor belt. It is the blueprint for basic structural factors like transverse stiffness, flexibility, stretch, and fastener retention. It also determines static conductivity, noise level and mechanical orshock absorbing properties. Transtex Belting has mastered a variety of weaves to create belts with various characteristics such as low noise, minimum stretch, exceptional load support and good fastener retention. Your belt selection should provide the best balance of these properties based on the demands of your application.

### Covers

The specific cover formulation used in an individual belt construction is determined by thematerials to be carried and the environment in which it operates. Specific applications oftenrequire the belt cover to withstand a variety of conditions and Transtex Belting therefore offers a wide variety of polymers including Polyvinyl Chloride, Natural Rubber, Synthetic Rubber and Urethane to ensure optimum performance for each application.

## Polyvinyl Chloride (PVC)

Transtex Belting PVC belting product line is designed to resist plasticizer extraction, which provides extended life in comparison to ordinary PVC formulations. PVC can handle strong oxidizing agents such as chromic acid, nitric acid, hydrogen peroxide, sodium perborate and chlorine. It resists abrasion, is smooth and non-porous, and can be readily formed to a variety of surface textures. PVC is flame retardant to the current MSHA 2G test and ASTM D-378. PVC can be made static conductive to less than 300 Mega-Ohms. It will safely dissipate a static charge on a conveyor or elevator system providing the system is properly grounded.Retardant (FR This is a SBR rubber that has been formulated to be flame retardant. It meets the fire resistant standards of the US Department of Labor and ASTM D-378.

### ISO 340

Flame retardant compounds available to meet the standards for ISO 340. Self-extinguishing belts cease to burn as soon as the source of the fire is removed.

### Urethane

Offered as a surface coating on certain Polyvinylok belt constructions where it is coupled with a polyester carcass impregnated with a high performance PVC elastomer. Urethane offers excellent physical properties, superior abrasion resistance and excellent oil and solvent resistance. It is an ideal product for rough applications.

### Rubber

The broad family of rubbers (including natural and synthetic) offer physical properties similar to those offered by the broad family of PVC formulations. However, they are significantly more durable.

### **Natural Gum**

Natural rubber (polyisoprene) offers an excellent balance of properties which result in outstanding performance in many demanding mechanical applications, such as in conveying heavy logs, hard rock ores, glass cullet, trap and other sharp abrasive materials. It offers high resilience, high tensile strength, and excellent flexibility at low temperatures. When properly compounded with appropriate additives, natural gum can exhibit excellent abrasion/wear resistance, and good oxygen, ozone and sunlight resistance.

# RMA Grade II

SBR (styrene butadlene rubber) is a polymer that has been the general purpose rubber of the belting industry for many years. It is a compound for medium heat resistance and good oxygen, ozone, and sunlight applications. Flame Retardant (FR This is a SBR rubber that has been formulated to be flame retardant. It meets the fire resistant standards of the US Department of Labor and ASTM D-378.





# ISO 340

Flame retardant compounds available to meet the standards for ISO 340. Self-extinguishing belts cease to burn as soon as the source of the fire is removed.

# Moderate Oil Resistant (MOR)

This premium formulation is designed to withstand attack in moderate oil environments such as wood chips and whole grains like corn and soybeans.

# Super Oil Resistant (SOR)

This premium formulation is designed to have excellent abrasion, tear, ozone, and weather resistance and is highly resistant to mineral oil and most other oils that cause swelling and sponginess in other elastomers. SOR is recommended for handling oily metal parts, crushed soybeans, and other materials where animal or vegetable fats are a deteriorating factor.

# **Conveyor Belt Components**

## Nitrile

Nitrile is a co-polymer recommended for applications requiring excellent resistance to petroleum oils, mineral oils, and vegetable oils. Nitrile's resistance to the more aromatic distillants of petroleums is better than neoprene. It resists acids and bases with the exception of those having strong oxidizing effects. Resistance to heat-aging is good.

# **Textures and Profiles**

A wide variety of cover configurations are offered to meet the exacting requirements of specific belting applications.

# Friction Surface (FS)

A process of impregnating of PVC into the polyester carcass. The excess PVC is removed and all bottom side friction surfaces are automatically brushed. This results in a very low coefficient of friction which is highly desirable for slider bed applications. Plied PRL & PHR products' friction surface is referred to as Bareback surface (BB).

# Mini Rough Top (MRT)

A light PVC or rubber fabric impression, similar to tylerwire impression, especially designed for providing excellent inclinability, as well as more positive package control on horizontal installations. Designed to produce better release of conveyed product at the head pulley than conventional rough top surfaces.

# Rough Top (RT)

An impression made by either a "Roebling" type cloth, for PHR (rubber) products, or a roller, for PRL, PVK and PVC products, for moving boxes, cartons, packages, luggage and units of all types on inclines up to 30°. Made with premium covers to afford resistance to oils, greases, acids, etc.

# High Incline (HI)

Lower durometer rubber or PVC rough top for moving units, boxes, cartons, packages, luggage, etc., on severe inclines or declines. SGRT is normally produced in green so that it can be easily identified.

# Press Cure (PC)

This PVC coated surface is smoothed by a unique process resulting in a smooth cover. Provides good release characteristics and is easily cleaned.

# Heavy Matte Finish (HM)

This new, innovative, non-reflective PVC top surface is an alternative to the traditional planished cover. The Heavy Matte finish offers an enhanced appearance and reduces noise created by a planished surface releasing from the return rollers' surface. The non-reflective cover reduces eye-strain and stress caused by reflective glare.

# Longitudinal Rib Surface (LR)

This profile is manufactured to give better than 50% surface contact and results in a high coefficient of friction. Commonly used on steep incline/decline conveyors up to 25°, induction conveyors and transverse/lateral conveyors in parcel and package handling applications. This product is ideal for controlling slick totes and hard-sided luggage due to the elimination of slippage.





# Light Impression Surface (LI)

This rubber light fabric impression is ideal for parcel and package handling applications because of its high coefficient of friction and wear-resistance. Suitable for slider or roller bed applications, common applications include metering and extendable conveyors.

# Cresent Top (CT)

A raised PVC surface texture that is made to handle freeflowing materials such as grain, fertilizer and vegetables. Due to its exceptional inclinability and small arc shaped cleats, this profile is also ideal for conveyors used in recycling, parcel/package handling and warehouse/ distribution.

#### Industry Proven Designs

#### **PHR**<sup>®</sup>



S-Weave



Straight-Warp Weave



**Twill Weave** 



Plain Weave



**Multi-plied Construction** 

The unique combination of polyester carcass, high quality rubber compounds and advanced engineering mean that the Transtex Belting PHR rubber conveyor belting range truly earns its reputation as the "Proven Performer". Suitable for applications in the package & parcel, distribution & warehousing, wood products and agriculture industries, PHR belting off ers a range of features designed to make your conveyors run as smoothly as possible with the minimum of costly downtime and maintenance. The PHR range contains a high modulus polyester carcass with a plain and twill weave construction, off ering a very low rate of stretch, excellent fastener retention and a low coefficient of friction. The alternating twist in the warp yarns equalizes the internal tensions in the belt, facilitating tracking. Where there is a side loading application, we off er PHR products with monofi lament fi II yarns that increase the belt's lateral stiff ness. This, along with a low coeffcient of friction, makes defl ection onto or off the belt easier, resulting in increased effi ciency and reducing the risk of operator injury. Low coeffcient of friction of bottom surfaces reduces the power necessary to drive the belt, leading to lower power consumption and operating costs.

Due to the high quality of the rubber compounds used in the manufacture of PHR belting, this range has excellent wear life, reducing the frequency of replacements and downtime. PHR belting is available in a variety of cover profi les to withstand the toughest applications, and the covers are available with ASTM 378 (FR) and ISO 340 (SE) fl ame-retardant certification.

#### **PRL**<sup>®</sup>

The PRL range of PVC belting is ideal for lighter duty, as well as complex system applications, such as merge conveyors, trash conveyors and induction conveyors used in package/parcel handling and warehouse distribution. PRL's lightweight and low friction bottom surface reduces the amount of power required to drive the belt, resulting in lower operating costs. Its anti-static surface (less than 300 Mega Ohms) reduces static discharge, improving operator comfort and safety.

The carcass of the PRL range is a tightly woven plain weave, spun monofilament fabric. This allows the belt to operate at much higher speeds and lower noise levels than solid woven PVC and PVK constructions. A balanced carcass, provided by the S & Z twist in the warp yarns, promotes excellent tracking and is easy to pre-tension. This construction is ideal for conveyors utilizing small pulley diameters which can result in component cost savings and more compact conveyor designs.

PVC or PVN covers provide an excellent seal for resistance against strong oxidizing agents, vegetable and animal fats and various oils. The combination of superior cover compounds and carcass constructions results in exceptional abrasion resistance, fastener retention and release characteristics. All PRL products are available in a variety of cover profi les and are available in ASTM 378 (FR) or ISO 340 (SE) fl ame-retardant certifi cation.

#### **PVK**<sup>®</sup>

Superior performance is what the industry has come to expect from the PVK product line. A proprietary innovation of Transtex Belting since the late 1960's, this premium PVC product is preferred by the giants of the package and parcel handling industry for their most demanding unit handling applications. In airport baggage handling where efficiency in side loading is critical, PVK makes an outstanding choice.

PVK off ers exceptional wear life due to an all synthetic carcass impregnated with a premium PVC elastomer. A single-ply straight-warp carcass construction is used in PVK to provide greater dimensional stability, increased load support, better transverse rigidity and excellent tear and impact resistance, translating into reduced maintenance and lower replacement costs for the end user. Minimal downtime is necessary due to the superior fastener retention and low elongation, which is achieved by this high modulus balanced polyester carcass. The use of a high quality PVC compound sets this product apart. The compound consists of polymeric plasticizers and contains no secondary additives or fillers that may be used in other PVC products. Benefits include the reduction of pulley and slider bed contamination, superior chemical resistance and improved belt life and performance. A variety of profiles are offered, as well as ISO 340 (FR) and ASTM 378 (SE) flame-retardant certification, to meet your demanding needs.

### PVC

Developed to support a myriad of applications, the PVC product range has proven to be the economical answer for conveying materials around the world. This product line can be found in the most demanding environments of Agriculture, Baggage Handling, Package Handling and Forest Products, as well as general conveying, offering superior performance at a lower cost when the application does not demand the advanced construction of the PVK line. The unique single-ply twill weave carcass construction used in PVC allows for improved tracking and a smoother surface, resulting in reduced noise levels. This balanced polyester carcass has a high impregnation of PVC which promotes outstanding fastener retention, low elongation, shorter take-ups and is inert to temperature/humidity fluctuation, translating into reduced downtime and maintenance costs.

Because of the many cover configurations and premium compounds available, PVC has something to offer a diverse number of industries. Wear life is enhanced by the superior cover configurations used to resist abrasion, moisture, chemicals and oils. The premium compounds allow for easy fabrication, making it a dependable choice for applying configurations such as v-guides and cleating for specialized applications. Flame-retardant certification is available in ASTM 378 (FR) or ISO 340 (SE), depending on the requirements of the applications.

### QB (Quiet Belt)

Transtex Belting Quiet Belt series truly lives up to its name. The innovative needled fabric construction means that this product range can offer a reduction of up to 20dB in the level of noise produced by a conveyor belt. This makes QB an ideal choice for horizontal package/ parcel handling, luggage handling, stackers, feeders and sorters, public view conveyors and difficult incline/decline conveyors.

Designed with a superior balanced polyester carcass implementing S & Z twists in the warp yarns, the Quiet Belt offers excellent tracking, flexibility and fastener holding. The belt construction has exceptional edge integrity, is dimensionally stable and has low elongation, making mechanical or endless splicing easy. The non-woven, needled construction is resistant to impact and cutting, providing longer service life, as well as eliminating the possibility of stringing and ply separation.

The Quiet Belt is manufactured with cover types and coefficients of friction to meet the requirements of the applications, and flame-retardant compounds are available to meet either ASTM 378 (SE) or ISO 340 (FR) standards.

### Splicing

All Transtex Belting lightweight belting constructions can easily be spliced endless. However, splicing can be an important factor in choosing the correct Transtex Belting belt, since each type of belting construction has its own requirements relative to expertise, equipment available and the physical characteristics of the splice.

Consult your local sales representative or branch location regarding the proper splicing procedure for your belt.









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Committed staff, quality-oriented organization and production processes ensure the constantly high standards of our products and services. The Forbo Siegling Quality Management System is certified in accordance with ISO 9001.

In addition to product quality, environmental protection is an important corporate goal. Early on we also introduced an environmental management system, certified in accordance with ISO 14001.

#### Forbo Siegling service - anytime, anywhere

The Forbo Siegling Group employs more than 2,500 people. Our products are manufactured in ten production facilities across the world. You can find companies and agencies with warehouses and workshops in over 80 countries. Forbo Siegling service points are located in more than 300 places worldwide.

#### Forbo Movement Systems

**Transtex® Belting** 10125 South Tryon Street Charlotte, NC 28273

Toll Free: (800) 922-1735 E-Mail: transtex.us@forbo.com www.forbo-transtex.com

Forbo Movement Systems is part of the Forbo Group, a global leader in flooring, bonding and movement systems.

