Material Options

Fabric Grades

Most belts are made of standard belt fabric although premium grade fabrics are preferred where fabric weave impression is undesirable or where sticky and gummy materials are being conveyed. Mechanical grade and economy grade fabrics are preferred where economy is more important than maximum resistance to chemicals or solvents. Crease and tear resistant belts are suggested for higher speeds. Tight weave porous belts and open weave mesh belts are specified for applications where porosity is required as in drying applications or microwave cooking ovens.

Premium
The smoothest products we produce, these fabrics have a heavy coating of PTFE for easiest release, highest chemical resistance and highest electrical strength.

Standard
The most widely used PTFE-Glass belts. Slightly less PTFE than premium grade belts, but all the mechanical strength.

Mechanical
Slightly less PTFE than standard belt materials. Used in applications where increased surface texture is useful.

Crease & Tear Resistant
Possesses most of the attributes of standard PTFE-Glass, but with substantially higher tear strength.

Semi-Conductive
Possesses most of the attributes of standard PTFE-Glass, but with a special treatment to reduce static build up.

Porous
Lightly coated porous belts allow outgassing of volatile products. Also useful in promoting drying by allowing airflow through the belt.

SRC-Glass
Silicone coated fiberglass fabrics offer exceptional flexibility and good release characteristics. Available in one or two side coated in red or white.

How To Order a Taconic Belt

To help you determine the best belt for your unique application an experienced customer service representative is always on hand to discuss your belting needs.
When possible, have the following information available:

*Dimensions of belt: width & length

*Desired splice, edge reinforcement and tracking devices, where needed

*Roller size & type

*Any special construction or instructions concerning the fabrication. In some cases of complex fabrication, a print may be requested.

Choosing The Right Material

There are a number of factors to keep in mind when choosing the belting material for your application.

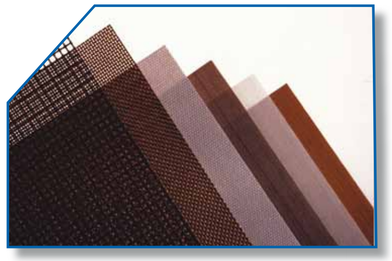
Temperature Range - Our PTFE coated glass fabrics have the capabilities of withstanding -70ºC - +260ºC constant operating temperatures whilst our silicone coated glass fabrics can withstand +230ºC and PTFE coated Kevlar® +180ºC.

Pliability - If the material is to track around pulleys that drive the belt, the diameter of the pulley is critical. The smaller the roller the more flexible the belt must be. Taconic's thinner materials (0.254mm and under) are more pliant than the heavier coated fabrics.

Release Qualities - The surface finishes range from a rough, semi-porous finish to a super smooth surface. The products being processed and/or the required impression on the finished product will determine the required surface finish.

Strength - Other options to be considered are breaking, tensile, and tear strength. How much of a load the belt carries, how fast it moves, and how tightly it will be tensioned all must be considered.

Abrasion Resistance - Taconic has recently introduced a range of PTFE coated products with an increased resistance to abrasion. This characteristic is key in application where aggressive materials can quickly wear away the coating and lead to delamination. The resultant longer belt lifetime will increase machine output and efficiency. Contact your local Taconic office or visit our website for details on available products in this range.



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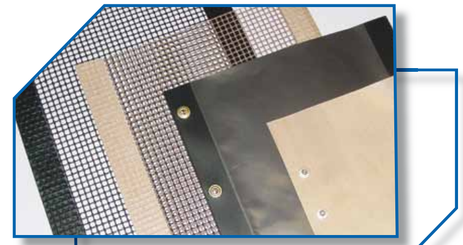
Quality Approved

nsai ISO 9001:2000 QUALITY

European Headquarters - Ireland

Lester T. Russell, the acknowledged inventor of the process for applying polytetrafluorethylene (PTFE) to fiberglass fabric, founded Taconic in 1961. Over the last four decades, we have expanded on this core capability by serving numerous markets. Taconic is now able to supply the international market through global manufacturing, fabrication, sales and service to organizations that support the sale of our products. Facilities in the Americas, Europe and Asia serve customers with high-quality fabricated materials and multilingual local sales support.

Taconic's Industrial Division delivers high-quality PTFE and silicone elastomer coated fabrics, engineered belts and specialty tapes for standard and custom applications. Taconic's talented R&D engineers, multi-lingual sales and customer service representatives are ready to take on your latest project - let us provide timely solutions that help make your application successful. Our offices are strategically located in Ireland, Germany, UK & France to service the ever increasing demands of the current marketplace. Contact the Taconic Industrial Products Division in your area today to take advantage of our expertise.



Industrial Products Division

Belting Brochure

Fabrication Options

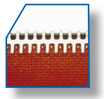
Splices

Various splices are available depending on your unique requirements. Metallic, non-metallic, and endless splices can be specified.

Metallic Splices

Taconic offers alligator & clipper splices. These splices are the most durable and easy to use. Belts can be installed without taking machinery apart. A coverflap can be added to these splices to reduce mark-off and heat transfer to your material.

Clipper Lacing

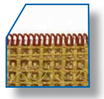


Alligator Lacing

Non-Metallic Splices

A castellated splice, smartloop splice or peek lacing are ideal when metal lacing cannot be used. All are durable and flexible. The smartloop or peek lacing should be chosen when maximum airflow is necessary.

Castellated Splice



Peek Lacing

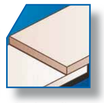
Smart-loop Splice

Endless Splices

Butt splices, overlap splices and scarfed splices are all made endless in our factories. Typical splices would be 25mm x 90°, 50mm x 67.5° or 75mm x 45°. These splices can be left open to be heat-sealed on your machine by your operators using Taconic welding materials and equipment. Alternatively, our On-Site Fitting Team can come to your premises to weld those particularly challenging joints.

Scarfed Splice

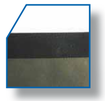
Butt Splice



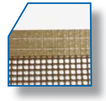
Overlap splice

Edge Reinforcements

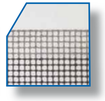
Taconic belts can be supplied with strips of heat-sealed fabric on one or both edges. This reinforcement serves a dual purpose; it reduces fraying of belt edges which rub on guiding rollers and it also provides the strongest possible anchor for guiding studs and eyelets. Edge reinforcement is standard for belts with studs or eyelets and for open-mesh belts. It typically consists of a 25mm wide film or fabric strip heat-sealed to one or both edges of the belt. The fabric edge strips can also be sewn for extra strength.



Heat-sealed Fabric Edge



Sewn & Sealed Fabric Edge



TFE-Film Edge, Heat-Sealed

Tracking & Guiding Devices

Taconic offers a variety of options to guide belts on your machine. These devices can be placed on one or both edges of your belts.

- Nickel studs are available with an external diameter of 4.5mm or 10mm.
- Nickel plated brass eyelets are offered with internal diameters of 6mm and 10mm.
- A Kevlar guide with a 5mm square profile is available to assist with tracking.

Guide Studs

Eyelets

Kevlar® Guide

Two-Ply Belts

Two-ply belts are constructed of two plies of TFE-Glass, laminated together with staggered splices. This provides a smooth, continuous thickness along the entire belt length which guarantees a uniform seal in packaging and heat-sealing applications. These belts are typically available in widths of 1/2" up to 3".

Laminated Belts

Taconic also offers a range of laminated two, three and four ply belts which are far superior to woven endless belts due to lateral stability and exceptional tracking. The belts are stronger and harder wearing than standard fusing belts, with a smoother top surface and a super smooth joint for lowest mark off, next to seamless belts.

Typical Values

	Part Number	Thickness µ	Coated Weight g/m ^{2}	Tensile Strength N/5cm (Warp)	Tear Strength N/5cm (Warp)
Packaging	5038	70	135	1000	15
	7039	73	146	1000	15
	9075-3	210	271	2000	150
	7115	330	390	2800	200
	9054	125	255	1800	50
	9064	140	296	1600	45
	9104-3	235	490	2500	50
	7242	560	760	3500	N/A
	7305	1000	460	2000	N/A
Food Processing*	9119-3	260	550	2800	30
	A1046	260	550	2800	30
	9119-3FG Brown	260	550	2800	30
	9110-3FG Black	265	650	2800	30
	Tacmaster 10 Blue	280	600	2800	30
	Tacmaster 10 Black	280	600	2800	30
Rubber Extrusion / Carpet Bonding*	5108	220	455	2800	30
	7148	340	680	3800	60
	7278	675	1085	4000	100
	7279	680	1200	4000	100
	7278MG	800	1085	4500	65
	7278 Smooth	640	1000	4500	90
	7358	850	1380	6000	300
Screenprinting	7255	700	445	1700	
	7305	1000	460	2000	
	7305AS	1000	460	1600	
	7305K	780	320	4200	N/A
	7305KG	1100	644	5000	
	7305DF Blue	1200	740	2100	
	7405	1200	630	2800	
Textiles	9103-3	230	490	2800	30
	7143	340	680	3800	60
	7208	460	880	4000	90
	7195P	620	520	3000	N/A
	7255	700	445	1700	N/A
	7305	1000	460	2000	N/A
	7305K	780	320	4200	N/A
	7305KG	1100	644	5000	N/A
	7305K (2x4mm)	1000	400	6400	N/A

These values listed are typical.

Information contained in this document is based on our general experience and is given in good faith, but we are unable to accept responsibility in respect to factors which are outside our knowledge or control.

Please contact your local Taconic office regarding available widths of the products listed as well as alternatives. Some items may not be available ex-stock and may require a minimum order quantity.

*Products in this series are readily available with abrasion resistant coating.

We pride ourselves on and fully guarantee the workmanship of every one of our Taconic belts.

Applications

There are numerous applications for Taconic belting materials. Following are examples of uses for PTFE coated fiberglass conveyor belts. If you think that a Taconic PTFE or SRC coated belt is right for your application, please call our sales or customer service staff to discuss your needs.

We have dedicated & multi-lingual customer service representatives in our Irish, German, UK & French sites, as well as an extensive sales force across the continent waiting to take on your next challenge. Put our expertise to the test!

Rubber Extrusion / Carpet Bonding

Non-stick, high temperature PTFE coated belts are a perfect solution for the carpet industry. Carpet surfaces are bonded to backing material on a PTFE belt, which pulls the carpet through a curing oven. Several grades of material are available depending on your bonding system and required undersurface topography. Perforation of belts is available upon request to facilitate the addition of profile to the underside of carpet mats.

Food Processing

PTFE belts are ideal in food processing applications. Belts for the food processing industry have been specifically engineered to resist grease penetration, increasing belt life which translates into less downtime. Cooking applications include precooking meats such as steak, chicken, and bacon and precooking tortillas, pizza crusts and eggs.

Packaging

Taconic PTFE-Glass and SRC-Glass belts are used widely in the packaging industry. Open mesh belts are used to convey film wrapped packages through shrink tunnels while two ply belts are used to pull objects through a heat-sealing process.

Screenprinting

Open mesh belts are chosen in the screenprinting industry for their open construction, which facilitates airflow and the drying and curing of inks. They are also chosen for their ability to withstand high drying temperatures. An anti-static or blue belt can be used to help withstand UV rays.

Textiles

Due to the non-stick nature of PTFE coated glass belts, they are a natural in textile applications. Pictured: non-woven materials are pressed and laminated on PTFE belts with very little mark off. PTFE mesh belts are used in textile drying applications. PTFE coated Kevlar® & Kevlar®/Glass are chosen for their excellent dimensional stability to assist in tracking and to withstand higher line speeds.