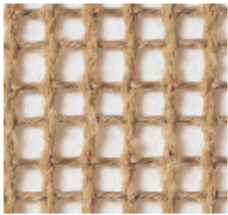
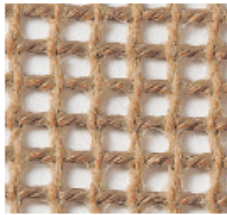


PTFE Belting Fabrics

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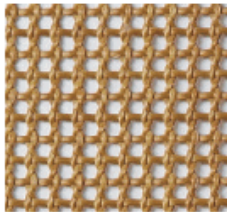
TCN 1590



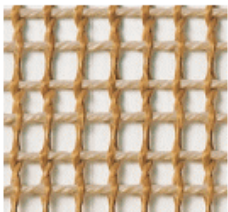
TCN 2000



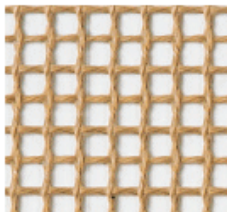
TCK 17



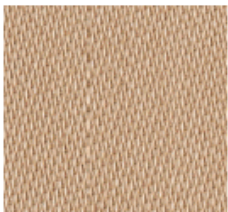
TCK 800



TCK 1000



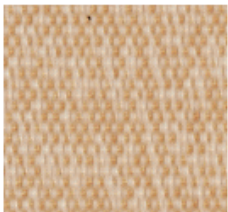
TCK 1590



CHEMFAB 183



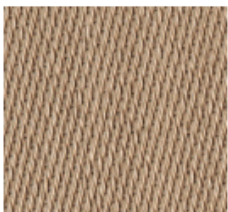
CHEMFAB 313X



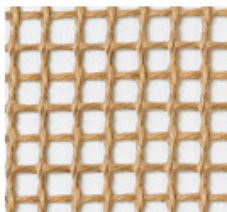
CHEMFAB 313X-K



CHEMFAB 1565V



CHEMFAB 1584G



CHEMFAB 1590

Saint-Gobain Performance Plastics developed its belting materials for applications that require superior release characteristics, permeability for rapid drying, dimensional and thermal stability, and the dynamic strength to stand up to the most rigorous operating conditions. The unique behavior of the materials results in a product that is more practical and cost-effective than conventional belting materials.

Release Properties

The release characteristics of PTFE are superior to those of any other high temperature material. This non-stick property is retained over a full range of operating temperatures.

Permeability

Our belting combines a maximum amount of open area with good mechanical strength. The result is a very high level of controlled air flow through the belt, maximizing the rate of drying.

Dimensional Stability

The woven reinforcement results in an elongation of approximately 1% under normal mechanical loading, even at temperatures of 550°F. Length distortion is exceptionally low, while width rigidity and stability are enhanced by the high-modulus of the reinforcement.

Thermal Stability

Chemfab® brand belting may be used continuously at temperatures up to 550°F without reducing its performance.

Dynamic Strength

Our belting has been subjected to static and dynamic tests which indicate that it can withstand all normal operating conditions affecting service life.

Chemical Resistance

PTFE surfaces are unaffected by most chemicals and solvents.

PTFE Belting Fabrics (continued)

[Click Here for a Price Quote](#)

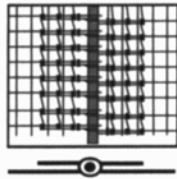
Fabrication Techniques

SEAM DESCRIPTIONS

Saint-Gobain Performance Plastics provides a broad range of seam options suited to the performance specifications of each belting system.

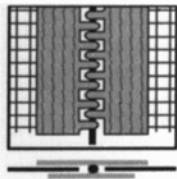
FOLD BACK LOOP SEAM

The carcass of our open weave belting material is folded back onto itself at each end and stitched into place. From the apex of each fold, one or more fill (cross-wise) threads are removed to create a series of loops. The looped ends are then meshed together and a joining pin is led through to complete the seam. This method is a direct and reliable means of creating a seam from the same material as the belt itself.



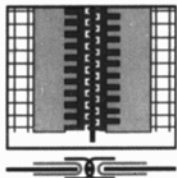
CABLE SEAM

High-temperature webbed synthetic fabric assures high-strength performance of the cable seam. Alternately woven one side open and one side closed every 1/8", sections of synthetic material are folded over the belt ends and stitched in place, creating a series of loops parallel to the width of the belt. These belt ends are then meshed and joined by a wire fed through to complete the seam. This seam is produced with high-strength, high-temperature synthetic fibers.



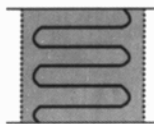
ALLIGATOR OR CLIPPER LACED SEAM

In this extremely strong and flexible mechanical seam, Alligator or Clipper type metal lacing is locked into reinforced belt ends. The laced ends are then meshed and joined by a pin. Available in stainless steel, steel or Monel.



FINGER SPLICE

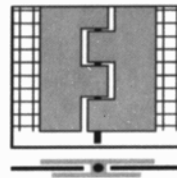
This unique splice uses "fingers" from the belt carcass that are locked together through heat



sealing. A finger splice used on a solid belt produces a very smooth, continuous release surface.

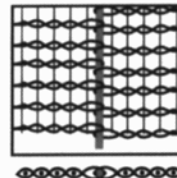
HINGE SEAM

Separate sections of material are folded over each of the belt ends, then heat sealed and/or stitched in place. A series of castellated or crenel notches cut into the apex of each fold form a pattern of square or "toothed" loops at the belt ends. The ends are then meshed and joined by a pin fed through the matched pattern of loops. This seam is produced with TCK (KEVLAR, a superior strength fabric, coated with PTFE).



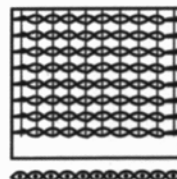
PIN SEAM

This seam incorporates reweaving to provide the convenience of a mechanical joining technique combined with the benefits of an endless belt. Fill (cross-wise) threads are removed at each belt end to free warp (lengthwise) threads. The warp threads are then folded back and reweaved into the belt carcass to form loops. The two ends are then meshed together and joined by a pin passed through the loops. Joining pins are available in stainless steel or non-metallic materials.



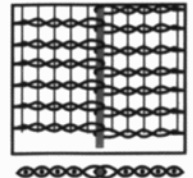
ENDLESS WOVEN SEAM

Fill (crosswise) threads are removed at each belt end to free warp (lengthwise) threads. The belt ends are then joined by reweaving the warp threads into the belt carcass of the opposite belt end. This technique produces a truly endless belt with excellent tracking characteristics, uniformity and greater overall flexibility than belts with conventional seams.



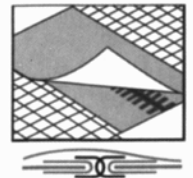
TCK 90 SEAM

Using our weaving technology, the TCK 90 seam incorporates braided KEVLAR yarns woven into an open weave. This extremely strong seam is then stitched to the belt carcass, resulting in an open weave seam that does not block airflow. This seam is ideal for drying applications.



FLAP OVER SEAM

A PTFE-coated, synthetic fabric flap over the seam area can be heat sealed and/or stitched to a belt. This will ensure a continuous release surface which will inhibit mark-off from seam contamination and protect the seams from abrasion. A flap over seam is generally used with a metal seam and is available with all Saint-Gobain Performance Plastics belting styles.

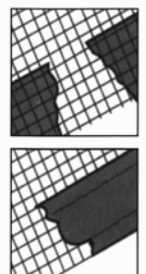


EDGE REINFORCEMENT

Belt edge reinforcement provides additional support for pin guides, grommets and eyelets, protects belt edges from wear and unraveling and presents a uniform edge for automatic tracking sensors. We offer the following edge reinforcements with all belting styles and recommend them for use with porous or screen dryers materials such as TCK 1590, TCN 1590, TCK 1589, CHEMFAB 1590 and CHEMFAB 1589.

3 Mil PTFE Film: Heat sealed to the belt edge, this reinforcement is available in widths from 1" to 1-1/2".

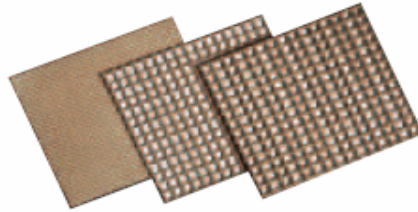
5 Mil/10 Mil Fabric: Reinforcing strips of 5 or 10 mil woven glass fabric coated with PTFE are heat sealed and/or stitched to the belt edge. Available in widths from 1/2" to 2".



PTFE Belting Fabrics (continued)

Product Specifications

TCN™



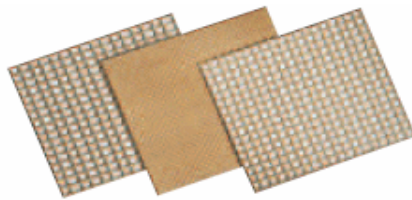
Typical Applications:

- TCN-PTFE coated Nomex
- High-temperature polyamide fiber offers a belting material with excellent flex life and superior abrasion resistance
- TCN belts are easily tracked and have less than 1% elongation

Product Style Number	Fiber Length (warp)	Content Width (fill)	Coating	Weight (oz./sq.yd)	Thickness	Open Area (%)	Edge Reinforcement
1590	NOMEX®	GLASS	PTFE®	16.2	.070	80	3 mil Skived PTFE
2000	NOMEX	GLASS	PTFE	37.0	.085	65	3 mil Skived PTFE

Width Availability (in)	Tensile Strength (lbs/in width) (warp)	Elongation (% - tension up to 10 PLI)	Min. Pulley Dia. (ins - 180 warp)		Maximum Temperature (°F)		Maximum Allowable Working Tension (lbs/in width)
			Drive	Idlers	Continuous	Intermittent	
up to 175	140	GLASS	6	3	500	550	15
2000	160	GLASS	6	3	500	550	15

TCK™



Typical Applications:

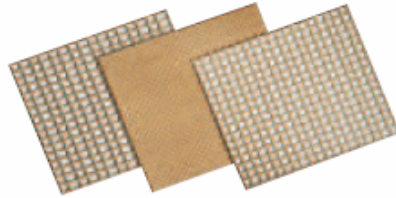
- TCK-PTFE coated Kevlar
- High-temperature aramid fiber offers a belting material with an extremely high strength-to-weight ratio
- Kevlar is an excellent fabric for use in high moisture environments

Product Style Number	Fiber Length (warp)	Content Width (fill)	Coating	Weight (oz./sq.yd)	Thickness	Open Area (%)	Edge Reinforcement
17	KEVLAR®	KEVLAR	PTFE	20.0	.017	0	Not Required
800	KEVLAR	KEVLAR	PTFE	12.0	.034	50	3 mil Skived PTFE
1000	KEVLAR	GLASS	PTFE	18.9	.050	80	3 mil Skived PTFE
1589	KEVLAR	KEVLAR	PTFE	6.2	.018	50	3 mil Skived PTFE
1590	KEVLAR	KEVLAR	PTFE	6.3	.025	50	3 mil Skived PTFE

Width Availability (in)	Tensile Strength (lbs/in width) (warp)	Elongation (% - tension up to 10 PLI)	Min. Pulley Dia. (ins - 180 warp)		Maximum Temperature (°F)		Maximum Allowable Working Tension (lbs/in width)
			Drive	Idlers	Continuous	Intermittent	
58	450	less than 1	6	3	400	450	25
up to 75	360	less than 1	6	3	400	450	25
up to 162	350	less than 1	6	3	400	450	25
up to 78	425	less than 1/2	6	3	400	450	25
up to 175	370	less than 1	6	3	400	450	25

PTFE Belting Fabrics *(continued)*

Chemfab®



Typical Applications:

- CHEMFAB-PTFE coated fiberglass offers a belting material of proven performance in industry
- Fiberglass is a durable, high temperature material that provides maximum value

Product Style Number	Fiber Length (warp)	Content Width (fill)	Coating	Weight (oz./sq.yd)	Thickness	Open Area (%)	Edge Reinforcement
313X	GLASS	GLASS	PTFE	30.8	.024	0	Not Required
313XK	KEVLAR/GLASS	GLASS	PTFE	35.0	.030	0	Not Required
1565V	GLASS	GLASS	PTFE	29.0	.023	0	Not Required
183	GLASS	GLASS	PTFE	20.0	.024	0	Not Required
1584G	GLASS	GLASS	PTFE	32.0	.037	0	Not Required
1590	GLASS	GLASS	PTFE	13.0	.033	75	3 mil SKIVED PTFE

Width Availability (in)	Tensile Strength (lbs/in width) (warp)	Elongation (% - tension up to 10 PLI)	Min. Pulley Dia. (ins - 180 warp)		Maximum Temperature (°F)		Maximum Allowable Working Tension (lbs/in width)
			Drive	Idlers	Continuous	Intermittent	
up to 170	460	less than 1/2	8	4	500	600	25
up to 155	900	less than 1/2	8	4	500	600	25
up to 170	500	less than 1/2	8	4	500	600	25
up to 62	600	less than 1/2	8	4	500	600	25
up to 66	1100	less than 1/2	8	4	500	600	25
up to 175	235	less than 1	10	3	500	600	15

PROCESS	TYPICAL APPLICATIONS	PRODUCTS												
		TEN 1590	TEN 2000	TCK TF	TCK 800	TCK 1000	TCK 1589	TCK 1590	CHEMFAB 313X	CHEMFAB 313XK	CHEMFAB 1565V	CHEMFAB 183	CHEMFAB 1584G	CHEMFAB 1590
Conveying	Packaging, screen printing	•	•	•	•	•	•	•	•	•	•	•	•	•
Casting	Polymer processing; manufacturing floor coverings, carpet tiles and rubber extrusions			•						•	•	•	•	•
Releasing	Food processing; screen printing; rubber extrusions processing; composites manufacturing			•						•	•	•	•	•
Laminating	Textile fuse pressing; wood processing; composites manufacturing			•						•	•	•		
Drying	Screen printing; packaging; food processing	•	•		•	•	•	•					•	•