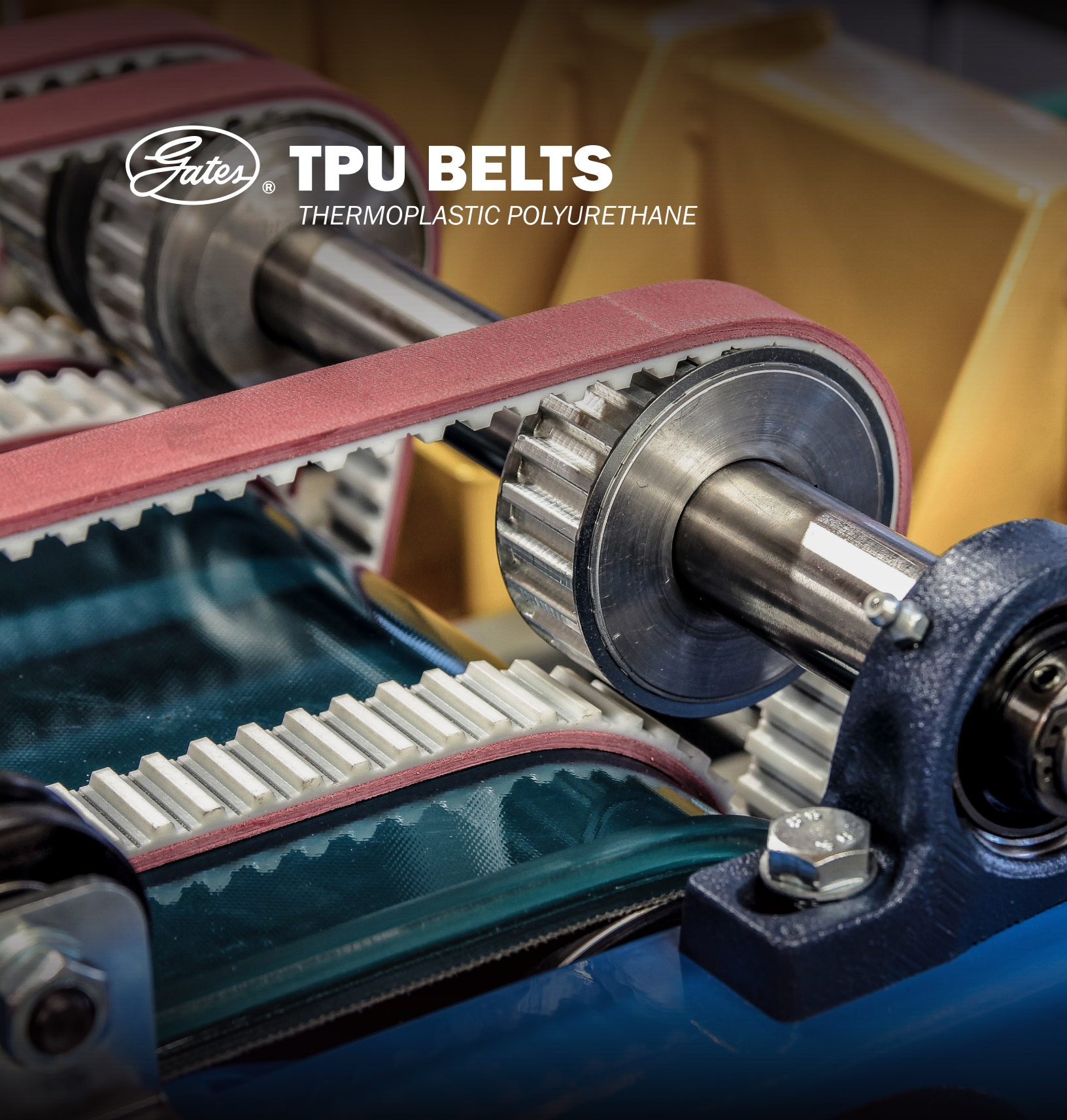


TPU BELTS

THERMOPLASTIC POLYURETHANE

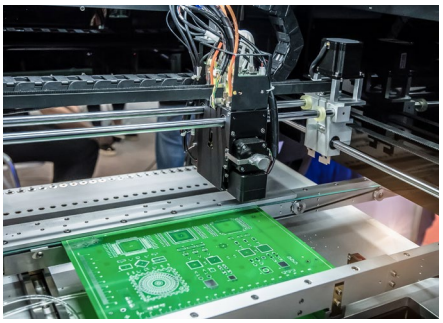
TIMING BELT BACKINGS

INFINITE BACKING AND PROCESSING POSSIBILITIES

Gates offers infinite design possibilities for endless timing belts from over 30 different backing material options. We can manufacture the customized belt for your application – whether the coefficient of friction, chemical resistance, or static conductivity specifications need to be tailored for your need, we offer additional surface finishing for any unique surface characteristics for your application. Ground edges or surfaces, tight tolerances, punching or machining holes and slots, CNC machining of 3-dimensional contours – Gates provides customized solutions for all applications.

FABRICATION POSSIBILITIES

All industry standard widths and lengths are available – while this brochure provides an overview of the most common backings. Specialized backings, thicknesses, and dimensions are available upon request.



OVERVIEW BACKINGS

Polyurethane Backings	**3**
Rubber Backings	**4**
Foam Backings	**5**
PVC Backings	**6**
Special Backings	**7**

POLYURETHANE BACKINGS

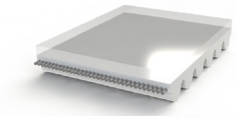
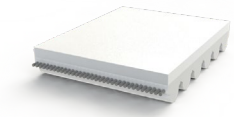
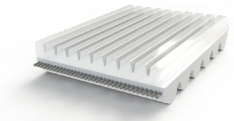
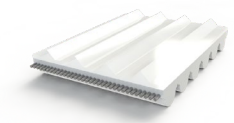
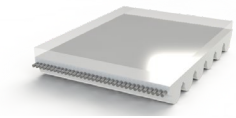
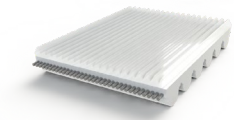
Polyurethane is the most abrasion-proof, resilient and durable backing – with a variety of thickness & hardness selections available, we offer options to suit your application. Polyurethane backings are applied by welding process onto the belt to ensure a strong bond to the base belt for enhanced durability.

APPLICATIONS

- Stone processing industry
- Wood processing industry
- Glass processing industry
- Card sheet processing industry
- Cardboard transport
- Packaging industry
- Feeding and pulling applications
- Ascending conveyor

ATTRIBUTES

- High friction
- Abrasion resistance
- Chemical resistance
- Oil/fat resistance
- Available with FDA/EU food approval

MATERIAL	COLOR	HARDNESS	MATERIAL THICKNESS	MINIMUM Ø/Ø FACTOR	NAME	BACKING
PU (FDA/EU Approved)	Clear	85 Shore A	2mm/3mm*	x 30	Polyurethane Clear	
PU	White	92 Shore A	2mm/3mm*	x 30	Polyurethane White	
PU	Clear	85 Shore A	5mm	Ø 120mm	Glass Backing	
PU	Clear	85 Shore A	3mm	Ø 90mm	Ridge Top	
PU	Clear	85 Shore A	1mm/2mm	x 30	HV Foil	
PU	Clear	85 Shore A 95 Shore A	2.7mm	Ø 75mm	Fine Glass Backing	

* Several layers can be welded together or ground for other thicknesses.

RUBBER BACKINGS

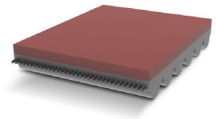
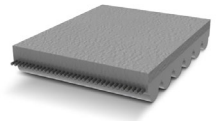
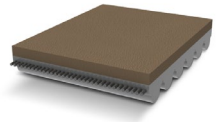
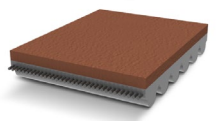
Rubber backings deliver a high coefficient of friction, temperature resistance, and are commonly used within wood processing, glass processing, and ceramics industries. Rubber backings are applied by adhesive bonding to suit the material characteristics.

APPLICATIONS

- Wood processing industry
- Metal processing industry
- Paper processing industry
- Textile sheet processing industry
- Packaging industry
- Feeding and pulling applications
- Pharmaceutical/cosmetic industry

ATTRIBUTES

- High friction
- Abrasion resistance
- High/Low temperature resistance
- Atmospheric resistance
- Flexibility at low temperatures
- Available with FDA Approval

MATERIAL	COLOR	HARDNESS	MATERIAL THICKNESS	MINIMUM Ø/Ø FACTOR	NAME	BACKING
Natural Rubber	Red	38 Shore A	1.6mm up to 10mm*	x 20	Linatex®	
Natural Rubber (FDA Approved)	White	38 Shore A	3mm 5mm 8mm*	x 20	Linaplus FG™	
Natural Rubber	Beige	40 Shore A	3mm 6mm	x 20	Tan Natural Rubber	
Natural Rubber	Black	65 Shore A	3mm 5mm 6mm*	x 25	Nitrile Rubber	
Natural Rubber	Orange	55 Shore A	3mm 8mm*	x 20	Linatrile®	
Natural Rubber	Yellow	38 Shore A	2mm 4mm*	x 20	RP400	

* Several layers can be welded together or ground for other thicknesses.

FOAM BACKINGS

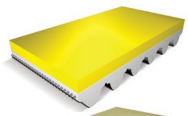
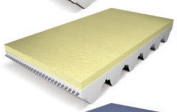
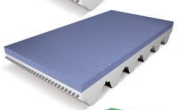
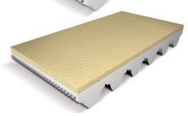
Foam backings provide high flexibility and are commonly used within glass, paper, textile, and wood processing industries. Foam backings are applied by adhesive bonding.

APPLICATIONS

- Paper processing industry
- Foil processing industry
- Wood processing industry
- Glass processing industry
- Labelling machines
- Feeding and pulling applications
- Vaccum applications
- Cleaning/bottling applications

ATTRIBUTES

- Excellent compressibility
- Abrasion resistance
- High coefficient of friction
- Chemical resistance
- Oil/fat resistance

MATERIAL	COLOR	HARDNESS/ DENSITY	MATERIAL THICKNESS	MINIMUM Ø/Ø FACTOR	NAME	BACKING
Polyurethane	Yellow	55 Shore A	2mm up to 8mm*	x 30	HD® Yellow	
Foamed Polyurethane	Yellow	160 kg/m^3	12mm*	x 15	Sylomer® Yellow	
Foamed Polyurethane	Blue	220 kg/m^3	12mm 25mm*	x 15	Sylomer® Blue	
Foamed Polyurethane	Green	300 kg/m^3	6mm 12mm 25mm*	x 15	Sylomer® Green	
Foamed Polyurethane	Brown	400 kg/m^3	6mm 12mm 25mm*	x 15	Sylomer® Brown	
Foamed Polyurethane	Red	500 kg/m^3	6mm 12mm 25mm*	x 15	Sylomer® Red	
Cellular Rubber	Black	150-200 kg/m^3	3mm 5mm 10mm*	x 15	Neoprene	
Natural Foamed Polyurethane (High Flexibility)	Beige or Yellow	400 kg/m^3	3mm up to 8mm*	x 15	Natural	

* Several layers can be welded together or ground for other thicknesses.

PVC BACKINGS

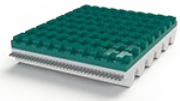
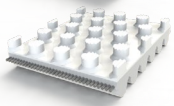
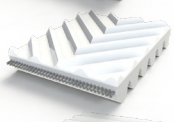
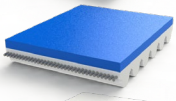
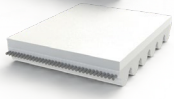
Polyvinylchlorid (PVC) backings are commonly used in glass and wood processing, ceramic and packaging industries. Due to various FDA/EU approvals, PVC backings are allowed within food processing or industry applications requiring high hygiene. PVC backings are applied by adhesive bonding.

APPLICATIONS

- Wood processing industry
- Glass processing industry
- Stone processing industry
- Paper processing industry
- Labelling industry
- Packaging industry

ATTRIBUTES

- Excellent compressibility
- Abrasion resistance
- High coefficient of friction
- Chemical resistance
- Oil/fat resistance
- Available with FDA/EU food approval

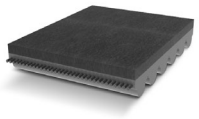
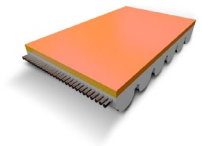
MATERIAL	COLOR	HARDNESS/ DENSITY	MATERIAL THICKNESS	MINIMUM Ø/Ø FACTOR	NAME	BACKING
PVC	Green	46 Shore A	4.8mm	90mm	Rough Top	
PVC (FDA/EU Approved)	White	65 Shore A	1.2mm*	25mm	Small Pebbles Structure	
PVC (FDA/EU Approved)	White	35 Shore A	6mm	40mm	Large Pebbles Structure	
PVC (FDA Approved)	White	70 Shore A	4.5mm	90mm	PVC Herringbone	
PVC (FDA/EU Approved)	White	40 Shore A	2.5mm	90mm	PVC Saw Tooth	
PVC (FDA/EU Approved)	White	65 Shore A	0.7mm	50mm	PVC Waffle Structure	
PVC	Blue	60 Shore A	1mm 2mm	40mm	PVC Blue	
PVC (FDA/EU Approved)	White	65 Shore A	2mm	40mm	PVC White	

* Several layers can be welded together or ground for other thicknesses.

SPECIAL BACKINGS + FABRIC

SPECIAL BACKINGS

Gates offers additional special backings such as Novo Fleece, Chrome Leather, and Taracx. All special backings are applied by adhesive bonding.

MATERIAL	COLOR	HARDNESS	MATERIAL THICKNESS	MINIMUM Ø	ATTRIBUTES	NAME	NAME	BACKING
Polyester	Anthracite	Not Measurable	1.2mm	25mm	Suited for High Temp Ranges Oil/fat Resistance	General Conveying Applications Glass Processing	Novo Fleece	
Leather	Grey	65 Shore A	2mm 3mm	90mm	High Coefficient of Friction Abrasion Resistance Oil Resistance	General Conveying Applications	Chrome Leather	
PU-based Compound	Orange	60 Shore A	2mm 3mm*	30mm	High Coefficient of Friction Abrasion Resistance	Wood, Paper, and Textile Processing Feeding and Pulling Applications Metal Stamping Applications Packaging	Taracx	

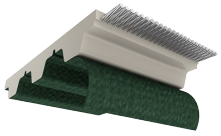
* Several layers can be welded together or ground for other thicknesses.

FABRIC

Polyamide fabric reduces the coefficient of friction to provide smooth & enhanced operating characteristics.

APPLICATIONS

- Accumulating conveyor
- Sliding applications

MATERIAL	COLOR	CODE	BACKING
Polyester Fabric on Tooth Side	Green	NT [PAZ]	

ATTRIBUTES

- Low coefficient of friction
- High wear resistance
- Good sliding attributes
- Low-noise operation
- Oil/fat resistance

TPU BELTS

THERMOPLASTIC POLYURETHANE

BACKING MATERIALS TO FIT YOUR APPLICATION NEEDS

Gates is a leading manufacturer of innovative thermoplastic polyurethane power transmission and conveyor belts. We are a trusted partner delivering superior quality and reliability with optimal lead times worldwide.

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