



TPU BELTS

THERMOPLASTIC POLYURETHANE

WIDE BELTS SYNCHRONOUS CONVEYING



WIDE BELTS FOR SYNCHRONOUS CONVEYING

Gates TPU Wide Belts deliver the ideal solution for conveying applications wider than 150mm width including precise product positioning, even tension, and smooth-running operation. High strength aramid cords even belt tension for the belt to run smoothly while high-strength polyurethane is cut-resistant and non-marking – an ideal belt for abrasive environments. Our clean, abrasion resistant, and smooth drive wide belts offer easy replacement of both plastic modular and conveyor belting.

TPU Wide Belts combine the durability of Gates quality products with optimal lead times and a reliable partnership – making Gates TPU Wide Belts the number one choice for polyurethane synchronous belts. You can confidently rely on Gates TPU Wide Belts for synchronous conveying applications.

APPLICATIONS

Synchronous Conveying

Replace Flat Conveyor Belt

Positive Indexing

High Acceleration without Slip

Hygienic Applications

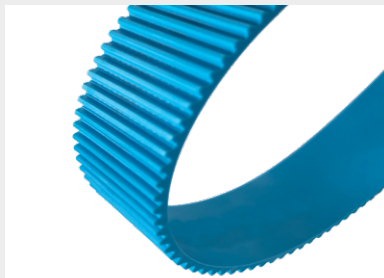
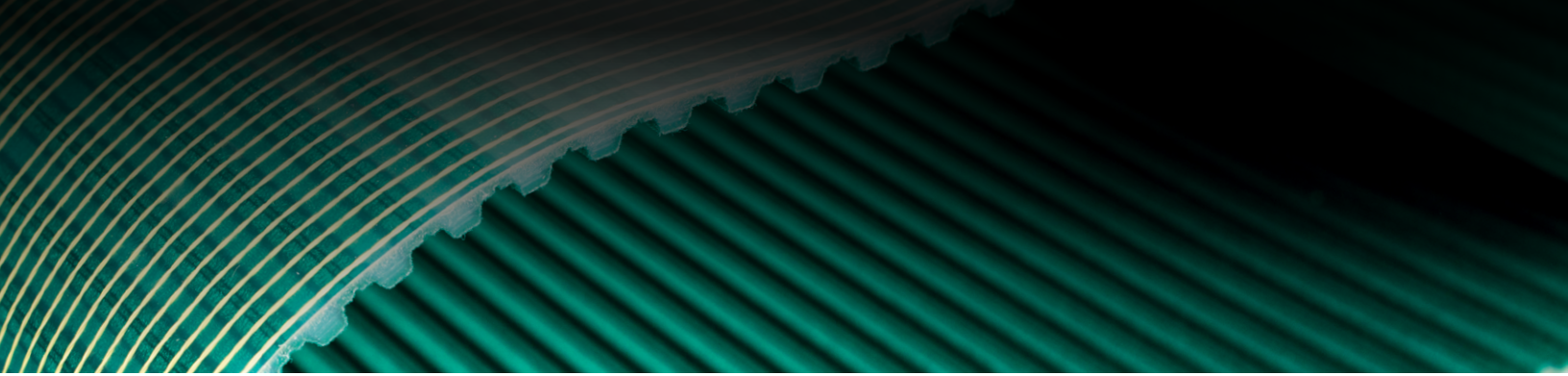
Tire Manufacturing

Food & Confectionary

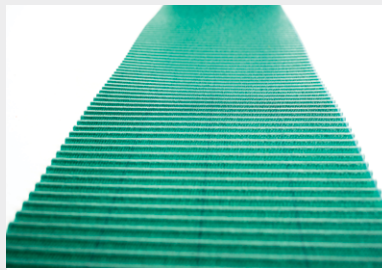
FEATURES + BENEFITS

- Widths up to 450mm
- No cord exposure along belt edges
- Low-noise, smooth operation
- Custom fabrications with engineering support
- FDA approval: WT10 / WH and GMT3
- EU food approval: GMT3





GMT3



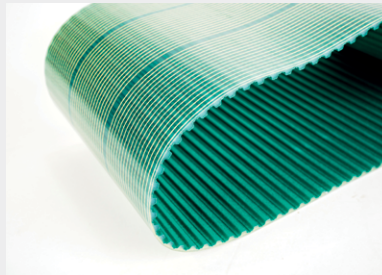
WT5



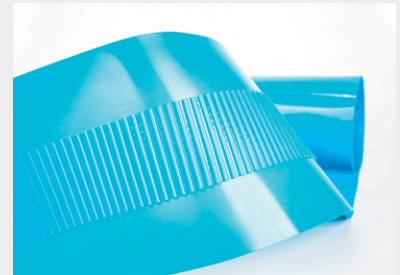
WT10



WHTD8M



WH



CC8



FABRICATION



BACKINGS

GMT3 WIDE BELT

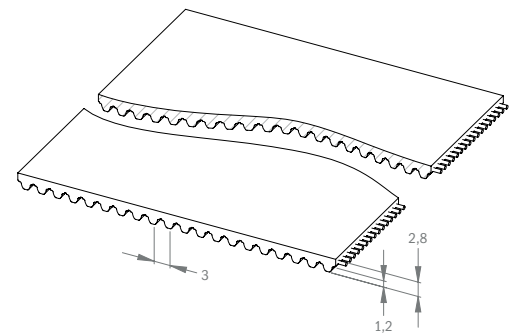


Gates GMT3 Wide Belts replace flat conveyor belts to avoid belt slippage and minimise running noise – the ideal solution for applications requiring small pulley diameters.

PRODUCT SPECIFICATIONS

PITCH	3 mm
STANDARD THICKNESS	2.8 mm
MINIMUM WELDED BELT LENGTH	1200 mm
STANDARD ROLL LENGTH (TOLERANCE ±1%)	60 m
STANDARD COLOR	Blue
FDA/EU APPROVAL	Option
POLYAMIDE FABRIC	NA
POLYURETHANE	R2
HARDNESS [° SHORE A]	85
TEMPERATURE RANGE [°C]	-20° to 60° C

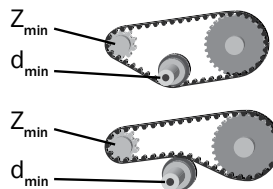
GMT3



TECHNICAL DATA

STANDARD WIDTH (MM)		50	100	150	200	250	300	450
ULTIMATE TENSILE STRENGTH	[N] AVERAGE VALUE							
ARAMID		3363	6851	10338	13826	17313	20801	30018
ALLOWABLE BELT TENSION	[N] OPEN ENDED							
ARAMID		498	1014	1530	2046	2561	3077	4441
ALLOWABLE BELT TENSION	[N] ENDLESS WELDED							
ARAMID		373	760	1147	1534	1921	2308	3331
ALLOWABLE EFFECTIVE TENSION	[N] MIN. 15 TEETH IN MESH							
ARAMID		880	1760	2640	3520	4400	6160	7920
BELT WEIGHT (KG/M)								
ARAMID		0,1	0,2	0,3	0,4	0,5	0,6	0,9
SPECIFIC BELT STIFFNESS	[N]							
ARAMID		124389	253385	382381	511377	640373	769369	1110287

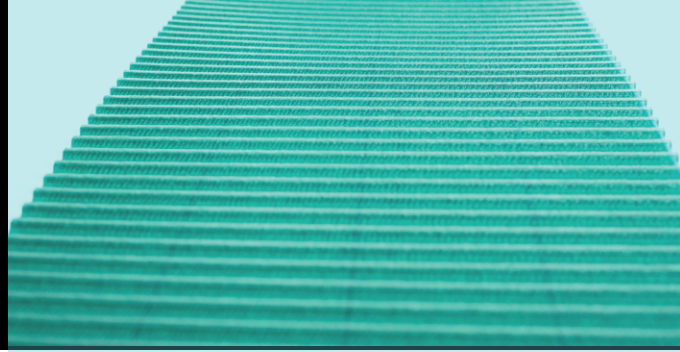
Gates TPU GMT3 belt runs in 3MR GM™, 3m HTD™ pulleys



ARAMID

z min	19
d min	18
z min	19
d min	30

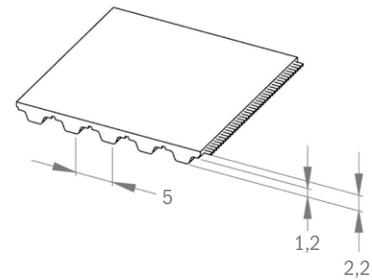
WT5 WIDE BELT



PRODUCT SPECIFICATIONS

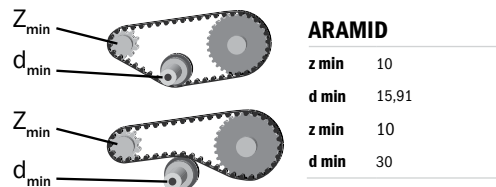
PITCH	5 mm
STANDARD THICKNESS	2.2 mm
MINIMUM WELDED BELT LENGTH	960 mm
STANDARD ROLL LENGTH (TOLERANCE ±1%)	100 m
STANDARD COLOR	White / Optional Transparent
FDA/EU APPROVAL	Option
POLYAMIDE FABRIC	Optional NT, NB & NTB
POLYURETHANE	R1 / R2
HARDNESS [° SHORE A]	92 / 85
TEMPERATURE RANGE [°C]	-5° to +70° / -20° to 60° C

WT5



TECHNICAL DATA

STANDARD WIDTH (MM)		150	200
ULTIMATE TENSILE STRENGTH	[N] AVERAGE VALUE		
ARAMID		25730	34410
ALLOWABLE BELT TENSION	[N] OPEN ENDED		
ARAMID		2814	3764
ALLOWABLE BELT TENSION	[N] ENDLESS WELDED		
ARAMID		2111	2823
ALLOWABLE EFFECTIVE TENSION	[N] MIN. 15 TEETH IN MESH		
		5340	7120
BELT WEIGHT (KG/M)			
ARAMID		0,3	0,4
SPECIFIC BELT STIFFNESS	[N]		
ARAMID		703579	940931



ARAMID

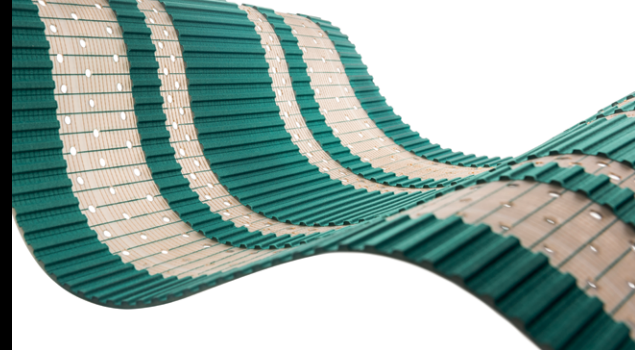
z min 10

d min 15,91

z min 10

d min 30

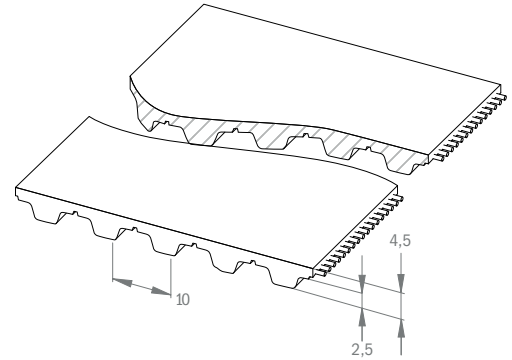
WT10 WIDE BELT



PRODUCT SPECIFICATIONS

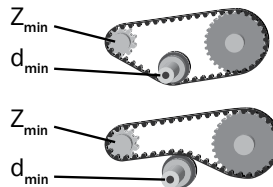
PITCH	10 mm
STANDARD THICKNESS	4.5 mm
MINIMUM WELDED BELT LENGTH	1100 mm
STANDARD ROLL LENGTH (TOLERANCE ±1%)	60 m
STANDARD COLOR	Transparent
FDA/EU APPROVAL	Option
POLYAMIDE FABRIC	Optional NT, NB & NTB
POLYURETHANE	R1 / R2
HARDNESS [° SHORE A]	92 / 85
TEMPERATURE RANGE [° C]	-5° to +70° / -20° to 60° C

WT10



TECHNICAL DATA

STANDARD WIDTH (MM)		150	200	250	300	450
ULTIMATE TENSILE STRENGTH	[N] AVERAGE VALUE					
ARAMID		25333	33957	42581	51205	77077
ALLOWABLE BELT TENSION	[N] OPEN ENDED					
ARAMID		6750	9048	11346	13644	20537
ALLOWABLE BELT TENSION	[N] ENDLESS WELDED					
ARAMID		3375	4524	5673	6822	10269
ALLOWABLE EFFECTIVE TENSION	[N] MIN. 15 TEETH IN MESH					
		7620	10160	12700	15240	22860
BELT WEIGHT (KG/M)						
ARAMID		0,6	0,8	1,0	1,2	1,8
SPECIFIC BELT STIFFNESS	[N]					
ARAMID		843744	1130976	1418208	1705440	2567136



ARAMID

z min	14
d min	44,56
z min	14
d min	80

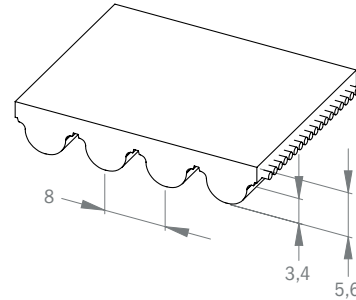
WHTD8M WIDE BELT



PRODUCT SPECIFICATIONS

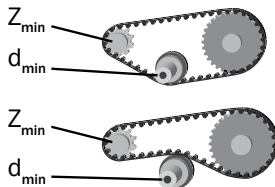
PITCH	8 mm
STANDARD THICKNESS	5.8 mm
MINIMUM WELDED BELT LENGTH	848 mm
STANDARD ROLL LENGTH (TOLERANCE ±1%)	60 m
STANDARD COLOR	White
FDA/EU APPROVAL	Option
POLYAMIDE FABRIC	Optional NT, NB & NTB
POLYURETHANE	R1 / R2
HARDNESS [° SHORE A]	92 / 85
TEMPERATURE RANGE [° C]	-5° to +70° / -20° to 60° C

WHTD8M



TECHNICAL DATA

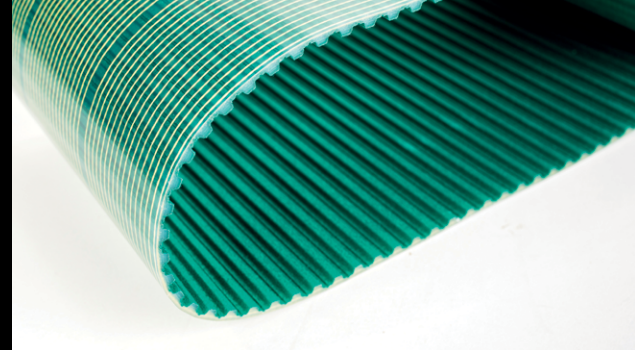
STANDARD WIDTH (MM)		150	200	250	300	450
ULTIMATE TENSILE STRENGTH	[N] AVERAGE VALUE					
ARAMID		102505	137033	171561	206089	309673
ALLOWABLE BELT TENSION	[N] OPEN ENDED					
ARAMID		16625	22225	27825	33425	50225
ALLOWABLE BELT TENSION	[N] ENDLESS WELDED					
ARAMID		8313	11113	13913	16713	25113
ALLOWABLE EFFECTIVE TENSION	[N] MIN. 15 TEETH IN MESH					
		11220	14960	18700	22440	33660
BELT WEIGHT (KG/M)						
ARAMID		0,7	0,9	1,2	1,4	2,1
SPECIFIC BELT STIFFNESS	[N]					
ARAMID		2770833	3704167	4637500	5570822	8370833



ARAMID

z min	20
d min	51
z min	20
d min	120

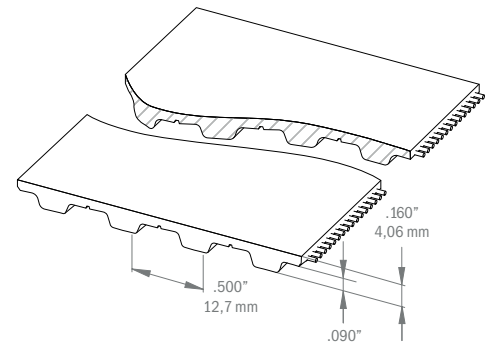
WH WIDE BELT



PRODUCT SPECIFICATIONS

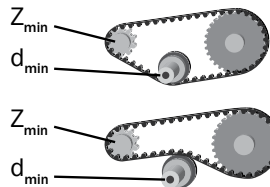
PITCH	0,500" / 12,7 mm
STANDARD THICKNESS	0,160" / 4.06 mm
MINIMUM WELDED BELT LENGTH	43,5" / 1104,9 mm
STANDARD ROLL LENGTH (TOLERANCE ±1%)	200 ft / 61 m
STANDARD COLOR	Clear
FDA/EU APPROVAL	Option
POLYAMIDE FABRIC	Optional NT, NB & NTB
POLYURETHANE	R1 / R2
HARDNESS [° SHORE A]	92 / 85
TEMPERATURE RANGE [° C]	-5° to +70° / -20° to 60° C

WH



TECHNICAL DATA

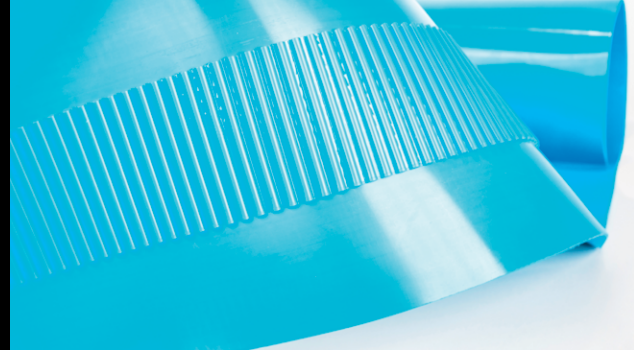
STANDARD WIDTH (INCH)		6"	8"	10"	12"	14"	18"
ULTIMATE TENSILE STRENGTH	[N] AVERAGE VALUE						
ARAMID		25333	34496	43120	51744	60368	77077
ALLOWABLE BELT TENSION	[N] OPEN ENDED						
ARAMID		6750	9191	11489	13787	16085	20537
ALLOWABLE BELT TENSION	[N] ENDLESS WELDED						
ARAMID		3375	4596	5745	6894	8042	10269
ALLOWABLE EFFECTIVE TENSION	[N] MIN. 15 TEETH IN MESH						
ARAMID		8961	11948	14935	17922	20909	26883
BELT WEIGHT (KG/M)							
ARAMID		0,5	0,7	0,8	1,0	1,1	
SPECIFIC BELT STIFFNESS	[N]						
ARAMID		843744	1148928	1436160	1723392	2010624	2567136



ARAMID

- z min** 14
- d min** 2,23" / 56,64 MM
- z min** 14
- d min** 3,12" / 79,24 MM

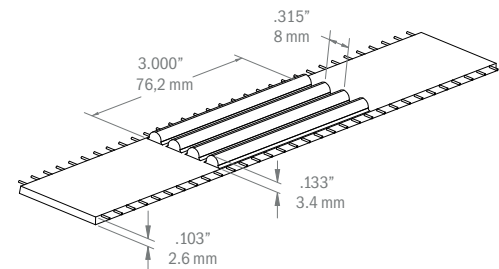
CC8 WIDE BELT



PRODUCT SPECIFICATIONS

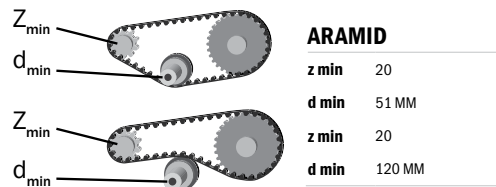
PITCH	8 mm
STANDARD THICKNESS	6 mm
MINIMUM WELDED BELT LENGTH	1104mm
STANDARD ROLL LENGTH (TOLERANCE ±1%)	61 m
STANDARD COLOR	Posiblue
FDA/EU APPROVAL	Yes
POLYAMIDE FABRIC	NA
SEALED CORD	Yes
POLYURETHANE	FG
HARDNESS [° SHORE A]	90
TEMPERATURE RANGE [° C]	-5 ° to +70 °

CC8



TECHNICAL DATA

STANDARD WIDTH (INCH)		8"	10"	12"	14"	18"
ULTIMATE TENSILE STRENGTH	[N] AVERAGE VALUE					
ARAMID		16170	18326	20482	22638	24794
ALLOWABLE BELT TENSION	[N] OPEN ENDED					
ARAMID		3231	3662	4093	4524	4955
ALLOWABLE BELT TENSION	[N] ENDLESS WELDED					
ARAMID		1616	1831	2047	2262	2477
ALLOWABLE EFFECTIVE TENSION	[N] MIN. 15 TEETH IN MESH					
		5610	5610	5610	5610	5610
BELT WEIGHT (KG/M)						
ARAMID		0,67	0,84	1,01	1,17	1,51
SPECIFIC BELT STIFFNESS	[N]					
ARAMID		538560	610368	682176	753984	825792

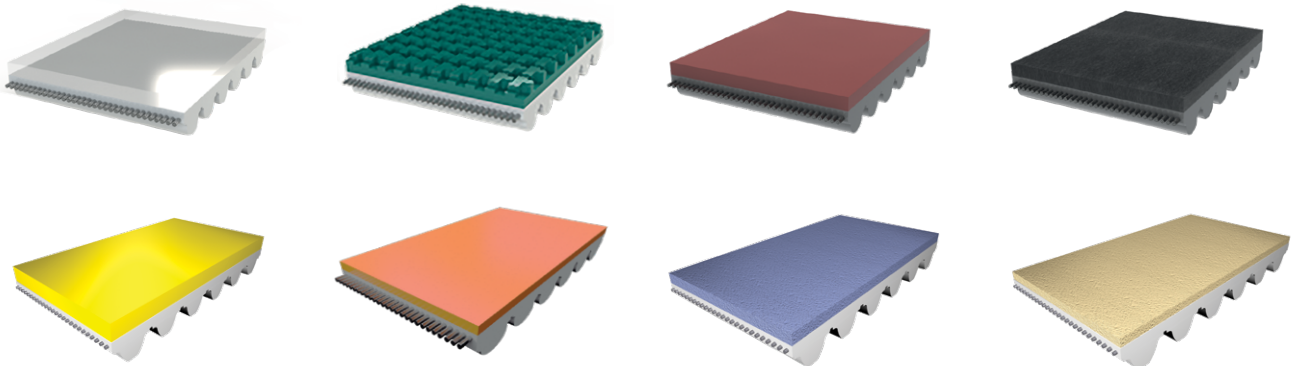


FABRICATION

CUSTOMISE GATES TPU WIDE BELTS FOR SPECIAL CONVEYING REQUIREMENTS

BACKINGS

Various backing materials are applied to the base belt for custom coefficient of friction and abrasion resistance specifications. Backing can be milled to create pockets for product transfer.



FEATURES

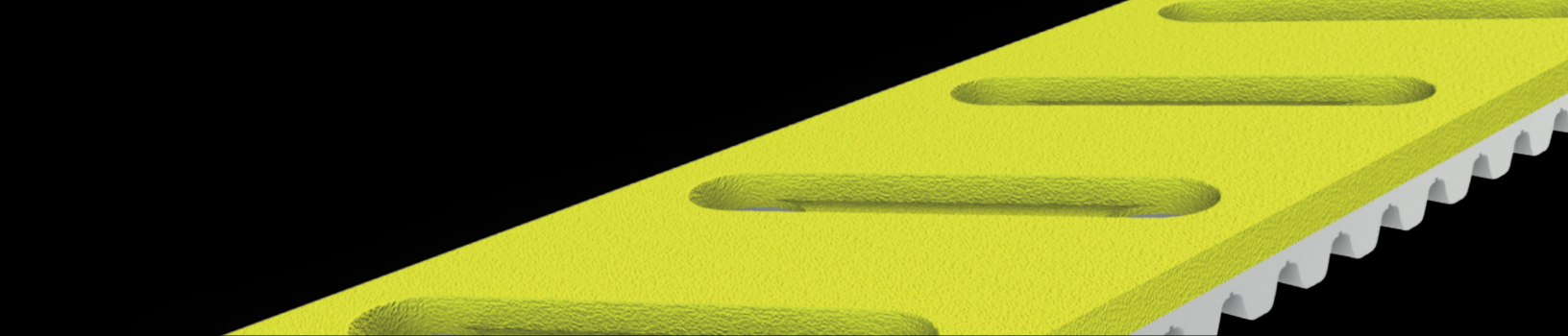
- Dramatic increase/decrease to coefficient of friction
- Custom cushioning & durability by material thickness & hardness selection
- Static conductivity
- Specified wear characteristics

CHARACTERISTICS

- High friction feeding or separating applications
- Low friction light feed or accumulation requirements
- Conforming to unusual product shapes
- Combine friction and vacuum for ultimate grab

BACKING MATERIALS

- Polyurethane
- Rubber
- PVC
- Foam
- Specialty Materials



MECHANICAL FABRICATION PROCESSES

Gates TPU offers a wide range of TPU Wide Belt modifications within our full range of fabrication options.

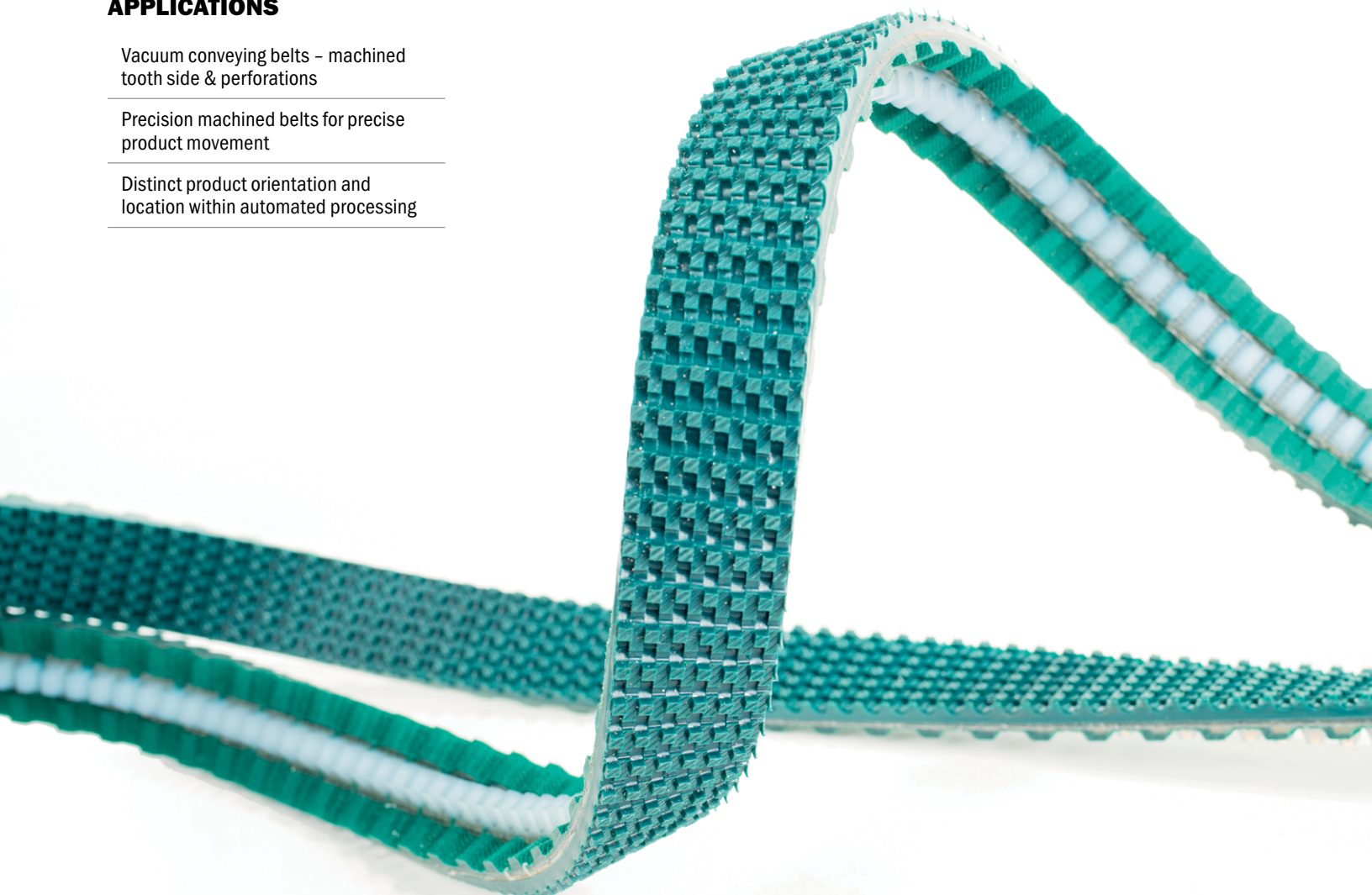
Gates TPU wide belt solutions include grinding edges to tight tolerances, punching or machining holes and slots, and CNC machining of 3-dimensional contours.

APPLICATIONS

Vacuum conveying belts - machined tooth side & perforations

Precision machined belts for precise product movement

Distinct product orientation and location within automated processing

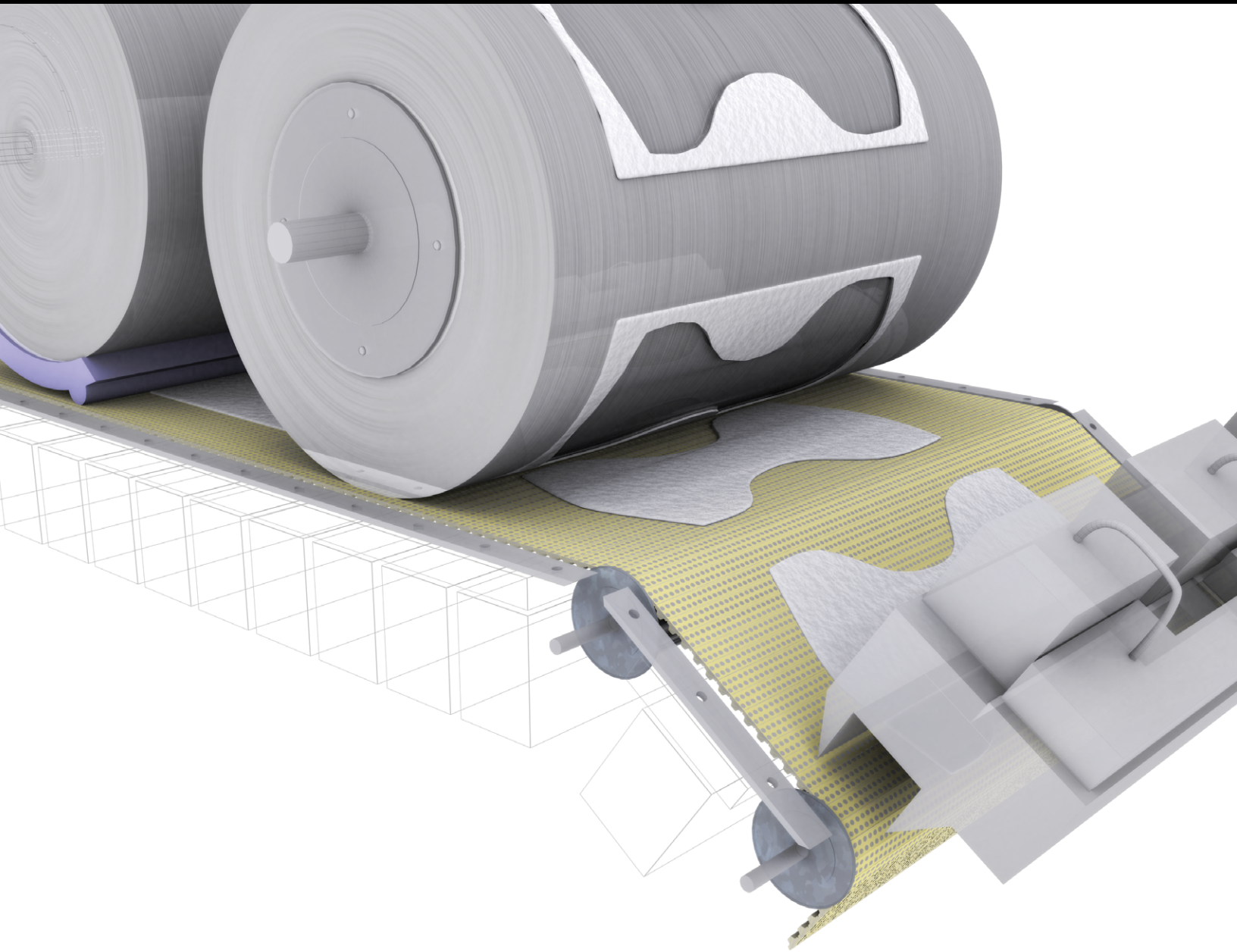




TPU BELTS

THERMOPLASTIC POLYURETHANE

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.



Belting Solved **24/7** On-Site Service 877 MIR-BELT

GATES.COM
05-2026

