



**mafdel**

**THERMOWELDABLE  
PROFILES**





**mafdel**



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## THE FRENCH MANUFACTURER OF THERMOWELDABLE CONVEYOR BELTS

Mafdel is a family-owned company, which, since 1981, has been designing and manufacturing a wide range of thermoweldable conveyor belts, profiles and associated tools.

Mafdel's product range is manufactured in France at the group's 3 factories:



Saint-Georges d'Espéranche (38)



Heyrieux (38)

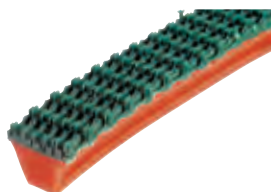


Vigneux de Bretagne (44)

Whether it's extruding, calendaring or fitting accessories, our production is managed by our experienced technicians, ensuring an optimised level of quality.

When you work with Mafdel, you can be assured that the solution will satisfy the most arduous challenges whether they be hygienic, mechanical or environmental.

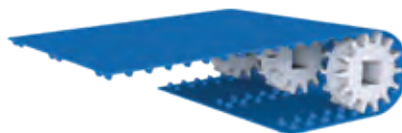
## AN EXTENSIVE RANGE



Thermoweldable  
profiles



Monolithic  
conveyor belts



Positive drive belts



Welding  
and tooling

Accessories, such as guides, slides, scrapers and sprockets are all available.



## A TEAM OF EXPERTS AT YOUR SERVICE

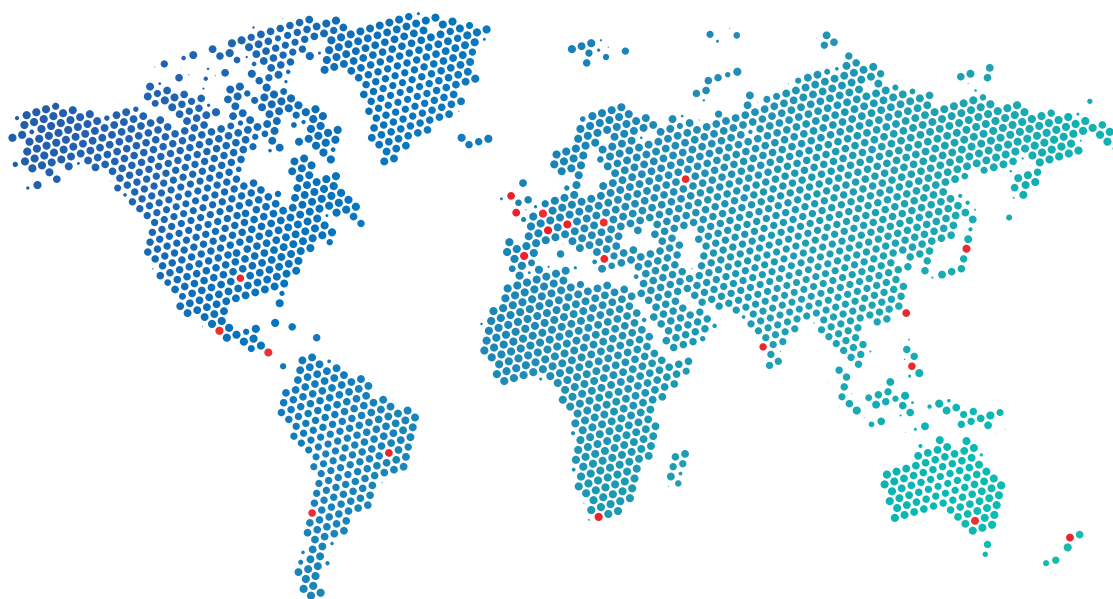
Our design and technical sales teams are at your service to help you to create belts to meet your product handling requirements.

Our large stocks and the flexibility of our production facilities ensures the shortest delivery times possible.



## A WORLDWIDE PRESENCE

Mafdel products are available worldwide through a network of distributors and partners in over 60 countries.



Find your sales and technical contacts in France, abroad and at trade shows:



Mafdel is an active member of:





# APPLICATIONS



## FOOD



## TILE AND BRICK



## CERAMICS - CONCRETE PRODUCTS



## AGRICULTURAL MACHINERY





# APPLICATIONS



## ROLLER CONVEYORS



## METAL PACKAGING



## CARDBOARD - WOOD



## OTHER SECTORS



# BENEFITS



## Thermoweldable belts bring many advantages

Improved efficiency, reduced costs and waste are advantages that Mafdel thermoweldable belts bring to your processes:

### REDUCTION OF MAINTENANCE COSTS

- Thermoweldable belts allow simple and fast on-site joining without the need to dismantle machinery.
- Belt failures can be repaired immediately which reduces production downtime.
- Reduced and simplified stocks.



### IMPROVED OPERATIONAL EFFICIENCY

- A wide choice of materials, hardnesses, profiles and coatings are available allowing applications to be fine tuned for maximum performance.
- Mafdel profiles offer high resistance to abrasion, cuts, oils, greases and solvents, which greatly increases service life compared to traditional plied textile belts.
- Aramid, polyester, steel or stainless steel reinforced versions are available for maximum load capacities.



### FOOD SAFETY

- Mafdel profiles offer monolithic, waterproof and rot-proof design.
- They also have a high resistance to many chemicals, animal and vegetable oils and fats.
- Easy cleaning, results in a significant reduction in water and detergent consumption.
- All profiles comply with European and international food standards.







# BENEFITS

**Comparison of the advantages associated with different common conveying modes:**

	MAFDEL PROFILES	FABRIC CONVEYOR BELTS	CONVEYOR CHAINS	MODULAR BELTS
Easy to assemble	+	-	-	+
No adjustment required	+	-	+	+
Is self tracking	+	-	-	+
Can handle nose bar	+	+	-	-
Chemical and hydrocarbon resistance	+	-	-	+
Abrasion resistance	+	-	-	-
No contaminating fabrics	+	-	+	+
Can be partially replaced	+	-	-	-
Easily cleaned	+	-	-	-
Water, chemical, labour saving	+	-	-	-
Simplicity of inventory management	+	-	-	+
Silent operation	+	+	+	-

# ROUND PROFILES



# ROUND PROFILES



			2	3	4	5	6	6.3	7	8	9	9.5	10	12	12.5	15	18	20		
Reinforced	Smooth	<b>DEL/ROC «DRW»</b> Polyester-reinforced 63 ShD										○		○						
		<b>DEL/ROC</b> Polyester-reinforced 100 ShA 55 ShD											○	○		○	○	○		
		<b>DEL/ROC</b> Steel or Stainless reinforced 100 ShA 55 ShD											●			●				
		<b>DEL/SAN</b> Reinforced Aramid 95 ShA									●			●		●	●	●		
		<b>POLY/FLEX</b> Reinforced Aramid 85 ShA						●			●			●	●		●	●		
	Rough	<b>POLY/FLEX</b> Rough Aramid-Reinforced 85 ShA											●	●		●				
Standard	Smooth	<b>DEL/ROC</b> 100 ShA 55 ShD			●	●	●			●		○	●							
		<b>DEL/FLEX</b> 90 ShA		●	●	●	●		●	●		●			●	●	●	●	●*	
		<b>DEL/FLEX</b> 90 ShA	●	●	●	●	●				●									
		<b>DEL/FLEX</b> Metal detectable** 90 ShA			●	●	●				●									
	Rough	<b>SOUPLEX</b> 85 ShA		●	●	●	●				●		●			●	●	●	●*	
		<b>SOUPLEX</b> 85 ShA		○	○	○	○				○									
		<b>SOUPLEX</b> Antistatic 85 ShA			●	●	●													
		<b>POLY/FLEX</b> Rough 85 ShA	●	●	●	●	●			●	●	●		●	●		●	●		
Smooth	<b>POLY/FLEX</b> Rough 85 ShA		●	●	●	●				●			●	●		●				
	<b>SOUPLEX</b> 80 ShA				●			●		●		●								
Tubular	<b>DEL/FLEX</b> Tubular 90 ShA				○	○				○			○	○		○	○		○*	
	<b>SOUPLEX</b> Tubular 85 ShA												○							

\*Manufacturing on demand dependent upon quantity.

\* Mafdel recommends that products intended for use are first tested in your environment to validate compliance with the desired detection level.



# REINFORCED ROUND PROFILES



## DEL/ROC DRW ivory polyester-reinforced



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
DRWRIAP9.5	9.5	67	2%	180	160
DRWRIAP12	12	120	2%	260	220

Food	CE - FDA	Coefficient of friction	PEHD : 0.15 - 0.2	Temperature extremes	-30°C / +90°C
Hardness	63 ShD		Acier : 0.35 - 0.4		
Pretension	1 - 2%		Inox : 0.5		

## DEL/ROC ivory polyester-reinforced



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
DRRIAP9.5	9.5	54	2%	160	140
DRRIAP10	10	56	2%	180	160
DRRIAP12.5	12.5	98	2%	250	200
DRRIAP15	15	140	2%	300	250
DRRIAP18	18	200	2%	360	300

Food	CE - FDA	Coefficient of friction	PEHD : 0.15 - 0.2	Temperature extremes	-30°C / +90°C
Hardness	100 ShA - 55 ShD		Acier : 0.35 - 0.4		
Pretension	1 - 2%		Inox : 0.5		

## DEL/ROC blue steel or stainless steel reinforced



Reference	Section (ø in mm)	Cable	Traction strength (daN)	Pulley Ø (mm)	
				Advised	Minimum
DRRBST9.5	9.5	Steel ø1.8mm	166	250	
DRRBST9.5001	9.5	Steel ø2.36mm	200	270	
DRRBIN12.5	12.5	Stainless ø2.5mm	200	350	

Joint by overlap or mechanical. Consult us.

Food	CE - FDA	Coefficient of friction	HDPE: 0.15 0.2	Temperature extremes	-30°C / +90°C
Hardness	100 ShA - 55 ShD		Steel: 0.35 - 0.4		
Pretension	-		Stainless steel: 0.5		

\*The profiles can be delivered in a single length on a wooden drum:

500m in ø9.5-10mm / 400m in ø12-12.5mm / 300m in ø15 mm / 200m in ø18mm



# REINFORCED ROUND PROFILES

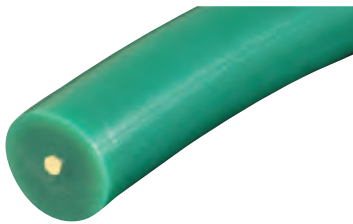
## DEL/SAN blue Aramid-reinforced



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
DSRBAR08	8	20	1%	120	100
DSRBAR10	10	40	1.5%	140	120
DSRBAR12.5	12.5	65	1.5%	160	140
DSRBAR15	15	93	1.5%	220	180
DSRBAR18	18	125	1.5%	250	210

Food Hardness Pretension	CE - FDA 95 ShA See table	Coefficient of friction	HDPE: 0.2 Steel: 0.4 Stainless steel: 0.5	Temperature extremes Packaging	-20°C / +70°C 50m
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## POLY/FLEX green Aramid-reinforced



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
PFRGAR06	6	7	0.5%	60	50
PFRGAR08	8	12	0.5%	90	75
PFRGAR10	10	23	1%	110	90
PFRGAR12	12	33	1.5%	130	110
PFRGAR15	15	50	1.5%	150	130
PFRGAR18	18	68	1.5%	220	180

Food Hardness Pretension	CE - FDA 85 ShA See table	Coefficient of friction	HDPE: 0.35 Steel: 0.6 Stainless steel: 0.7	Temperature extremes Packaging	-20°C / +60°C 30m
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## POLY/FLEX rough green Aramid-reinforced



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
PFRGAR10RU	10	23	1%	110	90
PFRGAR12RU	12	33	1.5%	130	110
PFRGAR15RU	15	50	1.5%	150	130

Food Hardness Pretension	CE - FDA 85 ShA See table	Coefficient of friction	HDPE: 0.25 Steel: 0.45 Stainless steel: 0.55	Temperature extremes Packaging	-20°C / +60°C 30m
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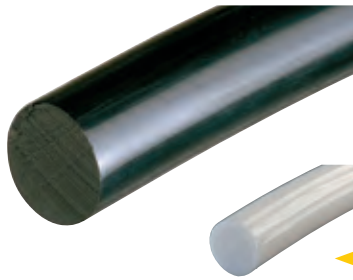


The recommended and minimum diameters are given for end-to-end joints. The life of the belt is reduced on minimum diameters depending on the operating conditions (load, accumulation, stop/start operation, tension etc.). In the case of overlap joints, use the recommended diameters for an optimal lifespan.

# ROUND PROFILES



## DEL/ROC black



Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
DRRN04	4	6.3	2%	50	40
DRRN05	5	9	2%	60	50
DRRN06	6	13	2%	80	70
DRRN08	8	25	2%	100	90
DRRW9.5	9.5	35	2%	140	120
DRRN10	10	39	2%	160	140

Food	CE - FDA	Coefficient of friction	HDPE: 0.15 - 0.2	Temperature extremes	-30°C / +90°C
Hardness	100 ShA - 55 ShD		Steel: 0.35 - 0.4	Packaging	30 m
Pretension	1 - 2%		Stainless steel: 0.5		

## DEL/FLEX red



\* Manufacturing on demand by quantity.

Food : CE - FDA

Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
DFRR03	3	1.7	5%	30	20
DFRR04	4	2.5	5%	40	30
DFRR05	5	4	5%	50	40
DFRR06	6	6.5	5%	60	50
DFRR07	7	9.6	5%	70	55
DFRR08	8	12	5%	80	65
DFRR9.5	9.5	17	5%	100	85
DFRR12.5	12.5	30	5%	140	120
DFRR15	15	43	5%	170	140
DFRR18	18	63	5%	220	180
DFRR20*	20	78	5%	280	250

## DEL/FLEX blue



Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
DFRB02	2	0.77	5%	20	12
DFRB03	3	1.7	5%	30	20
DFRB04	4	2.5	5%	40	30
DFRB05	5	4	5%	50	40
DFRB06	6	6.5	5%	60	50
DFRB08	8	12	5%	80	65

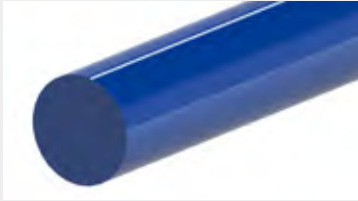
Food	CE - FDA	Coefficient of friction	HDPE: 0.25	Temperature extremes	-20°C / +70°C
Hardness	90 ShA		Steel: 0.5	Packaging	30 m
Pretension	3 - 6%		Stainless steel: 0.6		



# ROUND PROFILES



## DEL/FLEX blue metal detectable



Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
DFRB03MD	3	1.5	5%	40	30
DFRB04MD	4	2.2	5%	40	30
DFRB05MD	5	3.5	5%	50	40
DFRB06MD	6	5.8	5%	60	50
DFRB08MD	8	11	5%	80	65

Food : CE

Hardness	90 ShA	Coefficient of frottement	HDPE : 0.25	Temperature extremes	-20°C / +70°C
Pretension	3 - 6%		Steel : 0.5		
			Stainless steel : 0.6		

## SOUPLEX brown



\*Manufacturing on demand  
dependent upon quantity.

Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
SXRM03	3	0.9	8%	20	15
SXRM04	4	1.5	8%	35	25
SXRM05	5	2.5	8%	40	30
SXRM06	6	4	8%	50	40
SXRM08	8	7	8%	70	55
SXRM9.5	9.5	10	8%	80	65
SXRM12.5	12.5	18	8%	110	95
SXRM15	15	25	8%	140	120
SXRM18	18	38	8%	200	150
*SXRM20	20	47	8%	240	190

Food : CE - FDA

## SOUPLEX translucent



Food : CE - FDA

Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
SXRT03	3	0.9	8%	20	15
SXRT04	4	1.5	8%	35	25
SXRT05	5	2.5	8%	40	30
SXRT06	6	4	8%	50	40
SXRT08	8	7	8%	70	55

## SOUPLEX antistatic



Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
SXRN04AS	4	1.5	8%	45	35
SXRN05AS0001	5	2.5	8%	50	40
SXRN06AS	6	4	8%	60	50

Food	No	Coefficient of friction	HDPE : 0.35	Temperature extremes	-20°C / +60°C		
Hardness	85 ShA		Steel : 0.6			Packaging	30 m
Pretension	5 - 8%		Stainless steel : 0.7				

# ROUND PROFILES



## POLY/FLEX rough green



Food : no

Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
PFRG02	2	0.47	8%	15	10
PFRG03	3	1	8%	20	15
PFRG04	4	1.9	8%	35	25
PFRG05	5	2.9	8%	40	30
PFRG06	6	4.2	8%	50	40
PFRG07	7	5.7	8%	60	50
PFRG08	8	7.5	8%	70	55
PFRG09	9	9.5	8%	80	65
PFRG10	10	11.8	8%	90	75
PFRG12	12	17	8%	100	90
PFRG15	15	26.5	8%	140	120
PFRG18	18	38.1	8%	190	150
PFRG20	20	47	8%	240	190

## POLY/FLEX rough blue



Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
PFRB03	3	1	8%	20	15
PFRB04	4	1.9	8%	35	25
PFRB05	5	2.9	8%	40	30
PFRB06	6	4.2	8%	50	40
PFRB08	8	7.5	8%	70	55
PFRB10	10	11.8	8%	90	75
PFRB12	12	17	8%	100	90
PFRB15	15	26.5	8%	140	120

Food	CE - FDA	Coefficient of friction	HDPE: 0.25	Temperature extremes	-20°C / +60°C
Hardness	85 ShA		Steel: 0.45		
Pretension	5 - 8%		Stainless steel: 0.55		

## SOUPLEX blue



Reference	Section ( $\phi$ in mm)	Traction strength (daN)	Tension	Pulley $\phi$ (mm)	
				Advised	Minimum
SXRB05-0001	5	2.3	10%	35	25
SXRB6.3-0001	6.3	3.7	10%	40	35
SXRB08-0001	8	6	10%	55	50
SXRB9.5-0001	9.5	7.1	10%	65	55

Food	CE - FDA	Coefficient of friction	HDPE: 0.35	Temperature extremes	-20°C / +60°C
Hardness	80 ShA		Steel: 0.6		
Pretension	6 - 10%		Stainless steel: 0.7		

# ROUND PROFILES



## DEL/FLEX tubular red



\*Manufacturing on demand by quantity.

Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
DFTR05	5/2.5	3	5%	60	50
DFTR06	6/2.5	5	5%	70	60
DFTR08	8/3	10	5%	90	70
DFTR10	10/4	16	5%	100	85
DFTR12	12/4	22	5%	140	125
DFTR15	15/5	35	5%	170	140
*DFTR18	18/5	50	5%	220	190

Food	CE - FDA	Coefficient of friction	HDPE: 0.25	Temperature extremes	-20°C / +70°C
Hardness	90 ShA		Steel: 0.5		
Pretension	3 - 6%		Stainless steel: 0.6		

## SOUPLEX tubular brown



Reference	Section (ø in mm)	Traction strength (daN)	Tension	Pulley Ø (mm)	
				Advised	Minimum
SXTM10	10/4	9	8%	80	70

Food	CE - FDA	Coefficient of friction	HDPE: 0.35	Temperature extremes	-20°C / +60°C
Hardness	85 ShA		Steel: 0.6		
Pretension	5 - 8%		Stainless steel: 0.7		

## JOINING PLUGS (ALUMINIUM)



Ten plugs per packet.

Reference	For diameter belt (mm)	Reference	For diameter belt (mm)
AGR4	5 and 6 mm	AGR7	10 and 12 mm
AGR6	8 mm	AGR9	15 and 18 mm

## DEGLAZED PROFILES



All-round profiles with a diameter of between 6 and 18 mm can be frosted (deglazed).

Frosting lowers the friction Coefficient of friction between the profile and the conveyor bed and facilitates the accumulation of transported products:

- On steel and stainless steel: reduces the coefficients of smooth profiles by **0.1**.
- On HDPE: reduces the coefficients of smooth profiles by **0.05**.

**Reference:** Complete the item code of the profile with **DE**.



# ENDLESS ROUND BELTS



## ENDLESS-MADE BELTS

Manufacturing of small, endless round belts on demand for small, medium and large productions in the following qualities:

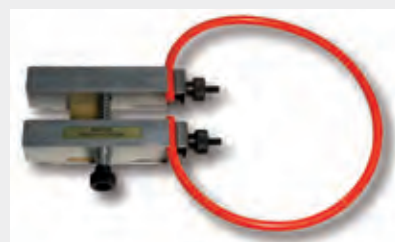
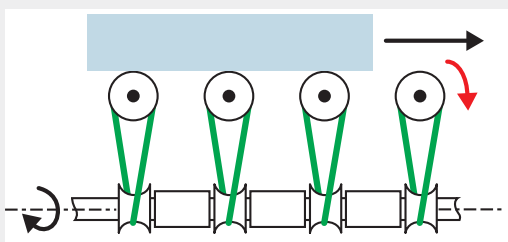


DEL/ROC  
DEL/FLEX  
POLY/FLEX  
SOUPLEX

- Great flexibility in the choice of length.
- It's also possible to manufacture moulded belts for very large productions (Please enquire to discuss).

## LINE SHAFT DRIVEN ROLLER CONVEYORS

- Direct transmission of power to individual rollers, using SOUPLEX, POLY/FLEX or DEL/FLEX drive belts.
- Silent, maintenance-free systems.
- Accumulation and full-load starts can be made possible by adjusting the tension (length) of the belts on the pulleys.
- Fast welding of a belt during installation using the J15 clamp.
- It is advisable to keep the pulleys positioned under the rollers.
- Minimum tension recommended: - SOUPLEX or POLY/FLEX : 8%  
- DEL/FLEX : 6%

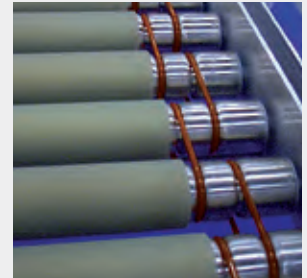
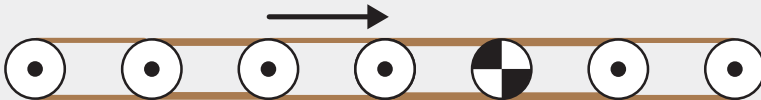




# ENDLESS ROUND BELTS

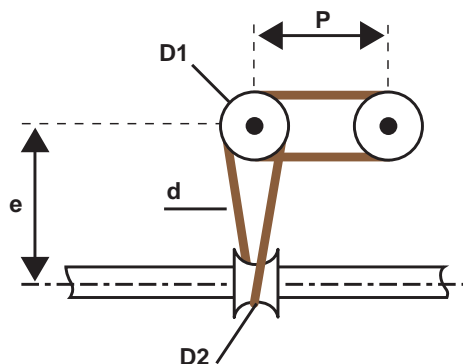
## ROLLER TO ROLLER DRIVES

- A group of several rollers driven by round belts from a motorised roller.



- It is advisable not to drive more than 6 rollers: 4 behind and 2 ahead of the motor roller.
- Minimum tension recommended:
  - 8% for SOUPLEX or POLY/FLEX
  - 6% for DEL/FLEX.

## BELT LENGTH CALCULATION



- D1: diameter of driven portion of roller
- D2: pulley inner diameter
- d: belt diameter
- e: centre distance
- p: roller centres

**EXAMPLE:** SOUPLEX belt -  $\varnothing$  5 mm

**D1 = 38 mm**

**D2 = 28 mm**

**d = 5 mm**

**e = 120 mm**

**p = 100 mm**

### Roller-to-roller driving

$$L_{\text{theoretical}} = (D1 + d) \times \pi + 2 \times p$$

$$L_{\text{real}} = L_{\text{theoretical}} - \text{tension}$$

$$L_{\text{Theoretical}} = (38 + 5) \times 3.14 + 2 \times 100 = 335 \text{ mm}$$

$$L_{\text{Real}} = 335 - 8\% = 308 \text{ mm}$$

### Twisted belt drive

$$L_{\text{theoretical}} = [(D1 + d) + (D2 + d)] \times \pi / 2 + 2 \times \sqrt{[(D1+d)^2/4 + e^2]}$$

$$L_{\text{theoretical}} = [(38+5)+(28+5)] \times 3.14/2 + 2 \times \sqrt{[(38+5)^2/4 + 120^2]} = 363 \text{ mm}$$

$$L_{\text{real}} = L_{\text{theoretical}} - \text{tension}$$

$$L_{\text{real}} = 363 - 8\% = 334 \text{ mm}$$

# TRAPEZOIDAL PROFILES







# TRAPEZOIDAL PROFILES

			L x h in mm										
			6 x 4 (Y)	8 x 5 (M)	10 x 6 (Z)	13 x 8 (A)	17 x 11 (B)	22 x 14 (C)	32 x 19 (D)	13 x 15 (A)	17 x 20 (B)	22 x 25 (C)	
Reinforced	<b>DEL/SAN</b> Reinforced Aramid	95 ShA											
	<b>H15 / H16</b> Reinforced Aramid	92 ShA											
	<b>SOUPLEX</b>	85 ShA											
	<b>POLYBELT+</b>	85-70 ShA 95-70 ShA											
Standard	<b>DEL/ROC</b>	100 ShA 55 ShD											
	<b>DEL/ROC</b>	100 ShA 55 ShD											
	<b>DEL/FLEX</b>	90 ShA											
	<b>DEL/FLEX</b>	90 ShA											
	<b>DEL/FLEX</b> Metal detectable	90 ShA											
	<b>SOUPLEX</b>	85 ShA											
	<b>SOUPLEX</b>	80 ShA											
	<b>SUPERFLEX</b>	70 ShA											
A crest	TOPGRIP	<b>DEL/SAN</b> Reinforced Aramid	95 ShA										
		<b>H15 / H16</b> Reinforced Aramid	92 ShA										
		<b>SOUPLEX</b> Reinforced Aramid	85 ShA										
	Standard	<b>DEL/FLEX</b>	90 ShA										
		<b>SOUPLEX</b>	92 ShA										
		<b>DEL/FLEX</b>	92 ShA										
		<b>SOUPLEX</b>	85 ShA										

\* Mafdel recommends that products intended for use are first tested in your environment to validate compliance with the desired detection level.



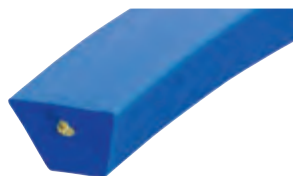
**COGGING (Notching):** All trapezoidal profiles can be 'cogged' (notched) from a 10x6mm section upwards. The cogging allows the belt to negotiate smaller pulleys.



**COATINGS:** Coatings are available from a 10x6mm section upwards. A wide range of smooth or structured coatings, in PU, PVC, felt or rubber is available. See page 33.



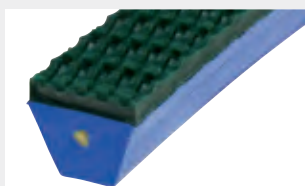
# REINFORCED TRAPEZOIDAL PROFILES



**DEL/SAN**  
blue reinforced Aramid



Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DSVBAR13	35	150	130	13x8 (A)	1%	DSVBAC13	35	120	100
DSVBAR17	60	180	160	17x11 (B)	1.5%	DSVBAC17	60	150	130
DSVBAR22	95	260	240	22x14 (C)	1.5%	DSVBAC22	95	210	180



**DEL/SAN**  
Supergrip PVC coated



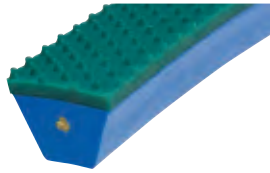
Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DSVBAR13NA	35	150	130	13x8 (A)	1%	DSVBAC13NA	35	120	100
DSVBAR17NA	60	180	160	17x11 (B)	1.5%	DSVBAC17NA	60	150	130
DSVBAR22NA	95	260	240	22x14 (C)	1.5%	DSVBAC22NA	95	210	180

Food	CE - FDA*	Coefficient of friction	HDPE: 0.2	Temperature extremes	-20°C / +70°C
Hardness	95 ShA		Steel: 0.4		
Pretension	See table		Stainless steel: 0.5		
				Packaging	30m

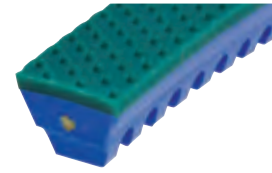
\*Except Supergrip coatings (NA) and green SOUPLEX.



# REINFORCED TRAPEZOIDAL PROFILES



**DEL/SAN**  
**Souplex 85 ShA**  
**nubtop coated**



Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DSVBAR13SPI	35	170	150	13x8 (A)	1%	DSVBAC13SPI	35	140	120
DSVBAR17SPI	60	200	180	17x11 (B)	1.5%	DSVBAC17SPI	60	170	150
DSVBAR22SPI	95	280	260	22x14 (C)	1.5%	DSVBAC22SPI	95	230	200



**DEL/SAN**  
**Totalgrip 70 ShA**  
**nubtop coated**



Reference	Traction strength (daN)	pulley Ø mm		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DSVBAR13TPI	35	160	140	13x8 (A)	1%	DSVBAC13TPI	35	130	110
DSVBAR17TPI	60	190	170	17x11 (B)	1.5%	DSVBAC17TPI	60	160	140
DSVBAR22TPI	95	270	250	22x14 (C)	1.5%	DSVBAC22TPI	95	220	190

Food	CE - FDA*	Coefficient of friction	HDPE: 0.2	Temperature extremes	-20°C / +70°C
Hardness	95 ShA		Steel: 0.4		
Pretension	See table		Stainless steel: 0.5		

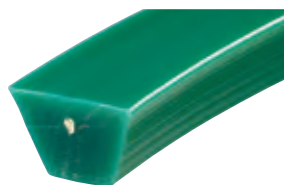
\*Except Supergrip coatings (NA) and green SOUPLEX.



The recommended and minimum diameters are given for end-to-end joints.  
The life of the belt is reduced on minimum diameters depending on the operating conditions (load, accumulation, stop/start operation, tension etc.).  
In the case of overlap joints, use the recommended diameters for an optimal lifespan.



# REINFORCED TRAPEZOIDAL PROFILES



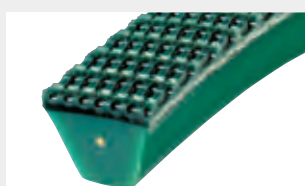
## H15 / H16 green reinforced Aramid



H15  
Plain

H16 Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
H15GAR10	15	110	90	10x6 (Z)	1%	H16GAC10	15	80	65
H15GAR13	30	140	110	13x8 (A)	1%	H16GAC13	30	100	70
H15GAR17	50	170	140	17x11 (B)	1.5%	H16GAC17	50	130	110
H15GAR22	75	250	230	22x14 (C)	1.5%	H16GAC22	75	180	150
H15GAR32	140	350	300	32x19 (D)	1.5%	H16GAC32	140	300	250



## H15 / H16 Supergrip PVC coated



H15  
Plain

H16 Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
H15GAR10NA	15	110	90	10x6 (Z)	1%	H16GAC10NA	15	80	65
H15GAR13NA	30	140	110	13x8 (A)	1%	H16GAC13NA	30	100	70
H15GAR17NA	50	170	140	17x11 (B)	1.5%	H16GAC17NA	50	130	110
H15GAR22NA	75	250	230	22x14 (C)	1.5%	H16GAC22NA	75	180	150
H15GAR32NA	140	350	300	32x19 (D)	1.5%	H16GAC32NA	140	300	250

Food  
Hardness  
Pretension

CE - FDA\*  
92 ShA  
See table

Coefficient  
of friction

HDPE: 0.25  
Steel: 0.45  
Stainless steel: 0.55

Temperature extremes  
Packaging

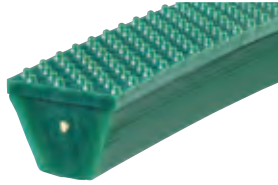
-20°C / +70°C  
30m

\*Except Supergrip coatings (NA) and green SOUPLEX.





# REINFORCED TRAPEZOIDAL PROFILES



H15  
Plain

## H15 / H16 Souplex 85 ShA nubtop coated



H16 Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
H15GAR10SPI	15	130	110	10x6 (Z)	1%	H16GAC10SPI	15	100	80
H15GAR13SPI	30	160	130	13x8 (A)	1%	H16GAC13SPI	30	120	100
H15GAR17SPI	50	190	170	17x11 (B)	1.5%	H16GAC17SPI	50	150	130
H15GAR22SPI	75	270	250	22x14 (C)	1.5%	H16GAC22SPI	75	200	170
H15GAR32SPI	140	370	320	32x19 (D)	1.5%	H16GAC32SPI	140	320	270



H15  
Plain

## H15 / H16 Totalgrip 70 ShA nubtop coated



H16 Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
H15GAR10TPI	15	120	100	10x6 (Z)	1%	H16GAC10TPI	15	90	75
H15GAR13TPI	30	150	120	13x8 (A)	1%	H16GAC13TPI	30	110	80
H15GAR17TPI	50	180	160	17x11 (B)	1.5%	H16GAC17TPI	50	140	120
H15GAR22TPI	75	260	240	22x14 (C)	1.5%	H16GAC22TPI	75	190	160
H15GAR32TPI	140	360	310	32x19 (D)	1.5%	H16GAC32TPI	140	310	260

Food	CE - FDA*	Coefficient of friction	HDPE: 0.25	Temperature extremes	-20°C / +70°C
Hardness	92 ShA		Steel: 0.45		
Pretension	See table		Stainless steel: 0.55		

\*Except Supergrip coatings (NA) and green SOUPLEX.



The recommended and minimum diameters are given for end-to-end joints. The life of the belt is reduced on minimum diameters depending on the operating conditions (load, accumulation, stop/start operation, tension etc.). In the case of overlap joints, use the recommended diameters for an optimal lifespan.

# REINFORCED TRAPEZOIDAL PROFILES



## SOUPLEX white reinforced Aramid

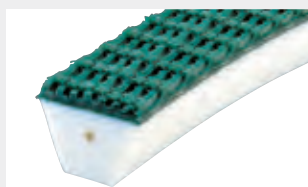


Plain

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension
		Advised	Minimum		
SXVWAR10	10	90	75	10x6 (Z)	0.5%
SXVWAR13	25	100	80	13x8 (A)	0.5%
SXVWAR17	40	150	130	17x11 (B)	1%
SXVWAR22	60	220	200	22x14 (C)	1.5%
SXVWAR32	120	280	250	32x19 (D)	1.5%

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
SXWAC10	10	60	50
SXWAC13	25	80	60
SXWAC17	40	110	90
SXWAC22	60	160	130
SXWAC32	120	220	180



## SOUPLEX reinforced Supergrip PVC coated



Plain

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension
		Advised	Minimum		
SXVWAR10NA	10	90	75	10x6 (Z)	0.5%
SXVWAR13NA	25	100	80	13x8 (A)	0.5%
SXVWAR17NA	40	150	130	17x11 (B)	1%
SXVWAR22NA	60	220	200	22x14 (C)	1.5%
SXVWAR32NA	120	280	250	32x19 (D)	1.5%

Cogged

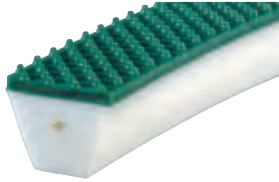
Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
SXWAC10NA	10	60	50
SXWAC13NA	25	80	60
SXWAC17NA	40	110	90
SXWAC22NA	60	160	130
SXWAC32NA	120	220	180

Food Hardness	CE - FDA* 85 ShA	Coefficient of friction	HDPE: 0.35	Temperature extremes	-20°C / +70°C
Pretension	See table		Steel: 0.6		
			Stainless steel: 0.7	Packaging	30m

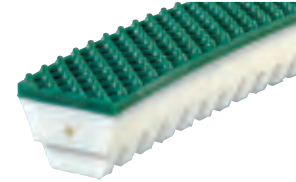
\* Except Supergrip coatings (NA) and green SOUPLEX.



# REINFORCED TRAPEZOIDAL PROFILES



**SOUPLEX**  
Souplex 85 ShA  
nubtop coated

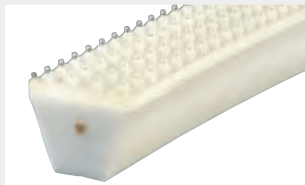


Plain

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
-	-	-	-
SXVWAR13SPI	25	120	100
SXVWAR17SPI	40	170	150
SXVWAR22SPI	60	240	210
SXVWAR32SPI	120	330	280

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
-	-	-	-
SXWAC10SPI	10	90	75
SXWAC13SPI	25	100	80
SXWAC17SPI	40	130	110
SXWAC22SPI	60	180	150
SXWAC32SPI	120	240	200



**SOUPLEX**  
Totalgrip 70 ShA  
nubtop coated



Plain

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
-	-	-	-
SXVWAR13TPI	25	110	90
SXVWAR17TPI	40	160	140
SXVWAR22TPI	60	230	200
SXVWAR32TPI	120	300	250

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
-	-	-	-
SXWAC10TPI	10	80	70
SXWAC13TPI	25	90	75
SXWAC17TPI	40	120	100
SXWAC22TPI	60	170	140
SXWAC32TPI	120	230	190

Food Hardness Pretension	CE - FDA* 85 ShA See table	Coefficient of friction	HDPE: 0.35 Steel: 0.6 Stainless steel: 0.7	Temperature extremes Packaging	-20°C / +60°C 30m
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\* Except Supergrip coatings (INA) and green SOUPLEX.



The recommended and minimum diameters are given for end-to-end joints. The life of the belt is reduced on minimum diameters depending on the operating conditions (load, accumulation, stop/start operation, tension etc.). In the case of overlap joints, use the recommended diameters for an optimal lifespan.



# POLYBELT+



PV17PCK7085

## POLYBELT+ blue reinforced Aramid



PV17PCK7095

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Backflex					Advised	Backflex
PV17PCK7085	65	120	140	17x11 (B)	1%	PV17PCK7095	68	150	170
	112	120	140	17x11 (B)	1.5%		124	150	170

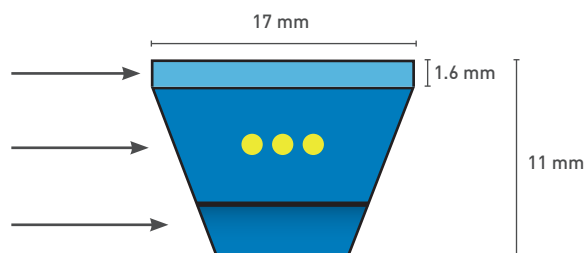
Food	CE - FDA	Temperature extremes	-20°C / +70°C
Hardness of belt	85 ShA		
Hardness of coating	70 ShA	Coil length	50m
Pretension	1 to 1.5%		
Friction coefficient	HDPE: 0.35	Steel: 0.6	Stainless steel: 0.7

Food	CE - FDA	Temperature extremes	-20°C / +70°C
Hardness of belt	95 ShA		
Hardness of coating	70 ShA	Coil length	50m
Pretension	1 to 1.5%		
Friction coefficient	HDPE: 0.2	Steel: 0.4	Stainless steel: 0.5

### Overlap joint (see page 43)

### APPLICATIONS

- Roller driving
- Conveyance of heavy loads
- 1 High grip cover in PU 70 ShA
- 3 cords of Aramid reinforcement
- 1 trapezoidal base profile in cogged 85 or 95 ShA PU



In the case of tangential roller drives in a greasy and/or moist environment, we recommend replacing the top cover with our PU 70 ShA Totalgrip SG3 coating.

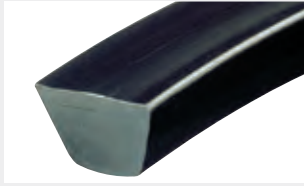


Other coating possibilities, on the upper side.

- TOTALGRIP smooth
- TOTALGRIP nubtop



# TRAPEZOIDAL PROFILES



## DEL/ROC black



Plain

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DRVN10	22	120	100	10x6 (Z)	2%	DRVNCR10	15	100	80
DRVN13	40	160	140	13x8 (A)	2%	DRVNCR13	28	120	100
DRVN17	74	220	200	17x11 (B)	2%	DRVNCR17	51	160	140
DRVN22	122	280	250	22x14 (C)	2%	DRVNCR22	85	240	190



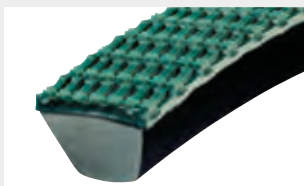
## DEL/ROC white



Plain

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DRWW10	22	120	100	10x6 (Z)	2%	DRWWCR10	15	100	80
DRWW13	40	160	140	13x8 (A)	2%	DRWWCR13	28	120	100
DRWW17	74	220	200	17x11 (B)	2%	DRWWCR17	51	160	140
DRWW22	122	280	250	22x14 (C)	2%	DRWWCR22	85	240	190



## DEL/ROC Supergrip PVC coated



Plain

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DRVN10NA	22	120	100	10x6 (Z)	2%	DRVNCR10NA	15	100	80
DRVN13NA	40	160	140	13x8 (A)	2%	DRVNCR13NA	28	120	100
DRVN17NA	74	220	200	17x11 (B)	2%	DRVNCR17NA	51	160	140
DRVN22NA	122	280	250	22x14 (C)	2%	DRVNCR22NA	85	240	190

Food	CE - FDA*	Coefficient of friction	HDPE: 0.15 - 0.2	Temperature extremes	-30°C / +90°C
Hardness	100 ShA - 55 ShD		Steel: 0.35 - 0.4		
Pretension	0.5 - 2%		Stainless steel: 0.5		
				Packaging	30 m

\*Except Supergrip coated (NA).



# TRAPEZOIDAL PROFILES



## DEL/FLEX red

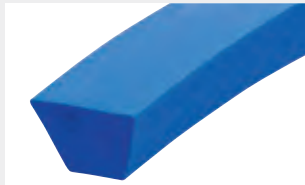


Plain

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
DFVR08	7	55	50
DFVR10	11	80	65
DFVR13	20	100	80
DFVR17	36	150	130
DFVR22	60	220	180
DFVR32	118	300	250

Cogged

Reference	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
				Advised	Minimum
8x5 (M)	5%	-	-	-	-
10x6 (Z)	5%	DFVRCR10	7	60	50
13x8 (A)	5%	DFVRCR13	14	80	60
17x11 (B)	5%	DFVRCR17	25	110	90
22x14 (C)	5%	DFVRCR22	42	150	120
32x19 (D)	5%	DFVRCR32	82	220	180



## DEL/FLEX blue

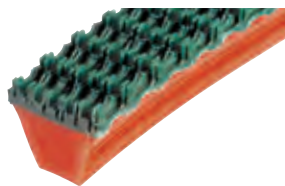


Plain

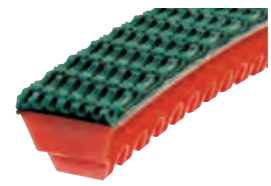
Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
DFVB06	4.5	45	40
DFVB08	7	55	50
DFVB10	11	80	65
DFVB13	20	100	80
DFVB17	36	150	130

Cogged

Reference	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
				Advised	Minimum
6x4 (Y)	5%	-	-	-	-
8x5 (M)	5%	-	-	-	-
10x6 (Z)	5%	DFVBCR10	7	60	50
13x8 (A)	5%	DFVBCR13	14	80	60
17x11 (B)	5%	DFVBCR17	25	110	90



## DEL/FLEX Supergrip PVC coated



Plain

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
DFVR10NA	11	80	65
DFVR13NA	20	100	80
DFVR17NA	36	150	130
DFVR22NA	60	220	180
DFVR32NA	118	300	250

Cogged

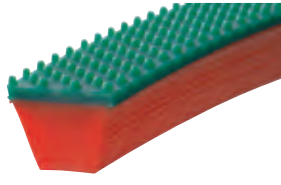
Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
				Advised	Minimum
10x6 (Z)	5%	DFVRCR10NA	7	60	50
13x8 (A)	5%	DFVRCR13NA	14	80	60
17x11 (B)	5%	DFVRCR17NA	25	110	90
22x14 (C)	5%	DFVRCR22NA	42	150	120
32x19 (D)	5%	DFVRCR32NA	82	220	180

Food Hardness	CE - FDA* 90 ShA	Coefficient of friction	HDPE: 0.25 Steel: 0.5 Stainless steel: 0.6	Temperature extremes	-20°C / +70°C
Pretension	3 - 6%		Packaging	30 m	

\* Except Supergrip coatings (NA) and green SOUPLEX.



# TRAPEZOIDAL PROFILES



## DEL/FLEX Souplex 85 ShA nubtop coated



Plain

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DFVR10SPI	15	90	80	10x6 (Z)	5%	DFVRCR10SPI	11	80	70
DFVR13SPI	25	120	100	13x8 (A)	5%	DFVRCR13SPI	19	100	80
DFVR17SPI	43	170	150	17x11 (B)	5%	DFVRCR17SPI	32	130	110
DFVR22SPI	69	240	210	22x14 (C)	5%	DFVRCR22SPI	51	170	140
DFVR32SPI	132	340	260	32x19 (D)	5%	DFVRCR32SPI	96	240	200



## DEL/FLEX Totalgrip 70 ShA nubtop coated



Plain

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DFVR10TPI	11	85	75	10x6 (Z)	5%	DFVRCR10TPI	7	70	60
DFVR13TPI	20	110	90	13x8 (A)	5%	DFVRCR13TPI	14	90	75
DFVR17TPI	36	160	140	17x11 (B)	5%	DFVRCR17TPI	25	120	100
DFVR22TPI	60	230	200	22x14 (C)	5%	DFVRCR22TPI	42	160	130
DFVR32TPI	118	310	260	32x19 (D)	5%	DFVRCR32TPI	82	230	190



## DEL/FLEX metal detectable



Plain

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DFVB08MD	6	55	50	8x5 (M)	5%	-	-	-	-
DFVB10MD	10	80	65	10x6 (Z)	5%	DFVBCR10MD	6	60	50
DFVB13MD	18	100	80	13x8 (A)	5%	DFVBCR13MD	13	80	60

Available from stock in rolls of 30 m

Food	CE - FDA*	Coefficient of friction	HDPE: 0.25	Temperature extremes	-20°C / +70°C
Hardness	90 ShA		Steel: 0.5		
Pretension	3 - 6%		Stainless steel: 0.6		

\* Except Supergrip coatings (NA) and green SOUPLEX.  
CE for DEL/FLEX Metal detectable



# TRAPEZOIDAL PROFILES



## SOUPLEX brown

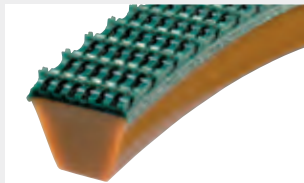


Plain

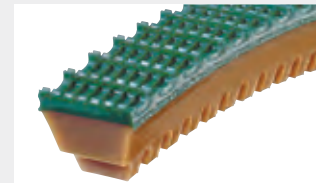
Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension
		Advised	Minimum		
SXVM08	4	50	40	8x5 (M)	8%
SXVM10	6	70	55	10x6 (Z)	8%
SXVM13	12	80	70	13x8 (A)	8%
SXVM17	22	130	110	17x11 (B)	8%
SXVM22	36	170	130	22x14 (C)	8%
SXVM32	71	250	220	32x19 (D)	8%

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
-	-	-	-
SXVMCR10	4	50	40
SXVMCR13	8	60	50
SXVMCR17	15	90	70
SXVMCR22	25	130	110
SXVMCR32	50	180	150



## SOUPLEX Supergrip PVC coated



Plain

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension
		Advised	Minimum		
SXVM08NA	4	50	40	8x5 (M)	8%
SXVM10NA	6	70	55	10x6 (Z)	8%
SXVM13NA	12	80	70	13x8 (A)	8%
SXVM17NA	22	130	110	17x11 (B)	8%
SXVM22NA	36	170	130	22x14 (C)	8%
SXVM32NA	71	250	220	32x19 (D)	8%

Cogged

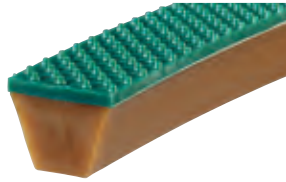
Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
-	-	-	-
SXVMCR10NA	4	50	40
SXVMCR13NA	8	60	50
SXVMCR17NA	15	90	70
SXVMCR22NA	25	130	110
SXVMCR32NA	50	180	150

Food	CE - FDA*	Coefficient of friction	HDPE: 0.35	Temperature extremes	-20°C / +60°C
Hardness	85 ShA		Steel: 0.6		
Pretension	5 - 8%		Stainless steel: 0.7		
				Packaging	30 m

\*Except Supergrip coatings (NA) and green SOUPLEX.



# TRAPEZOIDAL PROFILES



**SOUPLEX**  
Souplex 85 ShA  
nubtop coated



Plain

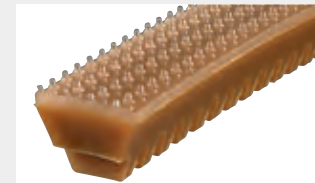
Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension
		Advised	Minimum		
SXVM10SPI	10	80	70	10x6 (Z)	8%
SXVM13SPI	17	100	90	13x8 (A)	8%
SXVM17SPI	29	150	130	17x11 (B)	8%
SXVM22SPI	45	190	150	22x14 (C)	8%
SXVM32SPI	85	280	240	32x19 (D)	8%

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum			Advised	Minimum
SXVMCR10SPI	8	70	60	SXVMCR10SPI	8	70	60
SXVMCR13SPI	13	80	70	SXVMCR13SPI	13	80	70
SXVMCR17SPI	22	110	90	SXVMCR17SPI	22	110	90
SXVMCR22SPI	34	150	130	SXVMCR22SPI	34	150	130
SXVMCR32SPI	64	200	170	SXVMCR32SPI	64	200	170



**SOUPLEX**  
Totalgrip 70 ShA  
nubtop coated



Plain

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension
		Advised	Minimum		
SXVM10TPI	6	75	65	10x6 (Z)	8%
SXVM13TPI	12	90	80	13x8 (A)	8%
SXVM17TPI	22	140	120	17x11 (B)	8%
SXVM22TPI	36	180	140	22x14 (C)	8%
SXVM32TPI	71	260	230	32x19 (D)	8%

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum			Advised	Minimum
SXVMCR10TPI	4	60	50	SXVMCR10TPI	4	60	50
SXVMCR13TPI	8	70	60	SXVMCR13TPI	8	70	60
SXVMCR17TPI	15	100	80	SXVMCR17TPI	15	100	80
SXVMCR22TPI	25	140	120	SXVMCR22TPI	25	140	120
SXVMCR32TPI	50	190	160	SXVMCR32TPI	50	190	160

Food	CE - FDA*	Coefficient of friction	HDPE: 0.35	Temperature extremes	-20°C / +60°C
Hardness	85 ShA		Steel: 0.6	Packaging	30 m
Pretension	5 - 8%		Stainless steel: 0.7		

\*Except Supergrip coatings (NA) and green SOUPLEX.

# TRAPEZOIDAL PROFILES

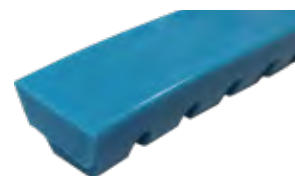


Blue SOUPLEX 80 ShA and SUPERFLEX 70 ShA profiles are mainly used as welded guides on our DEL/FLEX and SOUPLEX conveyor belts.

The elasticity, flexibility and adhesion of these profiles limit them to handling lightweight products without accumulation on short centre distances and preferably on HDPE slider beds.



## SOUPLEX blue



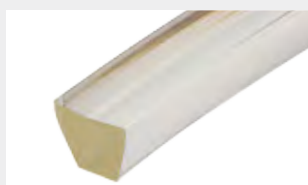
Plain

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension
		Advised	Minimum		
SXVB06-0001	2.5	30	25	6x4 (Y)	8%
SXVB08-0001	3.5	45	35	8x5 (M)	8%
SXVB10-0001	5.5	65	50	10x6 (Z)	8%
SXVB13-0001	10	75	65	13x8 (A)	8%
SXVB17-0001	18	120	100	17x11 (B)	8%

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
-	-	-	-
-	-	-	-
SXVBCR10-0001	3.7	45	35
SXVBCR13-0001	7.5	55	45
SXVBCR17-0001	12	80	65

Food	CE - FDA	Coefficient of friction	HDPE: 0.35	Temperature extremes	-20°C / +60°C
Hardness	80 ShA		Steel: 0.6		
Pretension	6 to 10%		Stainless steel: 0.7		



## SUPERFLEX translucent



Plain

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension
		Advised	Minimum		
SFVT08	3	35	30	8x5 (M)	10%
SFVT10	4.5	55	45	10x6 (Z)	10%
SFVT13	8	70	60	13x8 (A)	10%
SFVT17	13	110	90	17x11 (B)	10%

Cogged

Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum
-	-	-	-
-	-	-	-
SFVTCR13	5	50	40
SFVTCR17	10	75	60

Food	CE - FDA	Coefficient of friction	HDPE: 0.5	Temperature extremes	-20°C / +40°C
Hardness	70 ShA		Steel: 0.7		
Pretension	8 - 12%		Stainless steel: 0.8		





# TRAPEZOIDAL PROFILE COATINGS

## COATINGS OF SOUPLEX 85 ShA AND TOTALGRIP 70 ShA PU

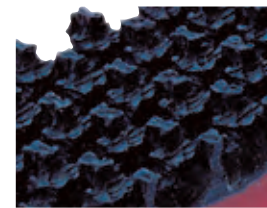


Quality	Color	Smooth	Nubtop	Sawtooth	SG3	Trellis
Standard SOUPLEX	Green	SLI	SPI	SUS	SSG	SLO
SOUPLEX Food	White / Blue					
TOTALGRIP Food	Translucent	TLI	TPI	TUS	TSG	TLO

## SUPERGRIP COATINGS



GREEN PVC 40 ShA



BLACK RUBBER 60 ShA

Reference

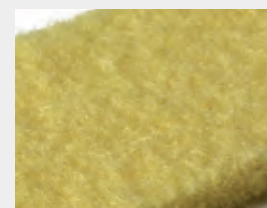
NA

NC

## OTHER COATINGS



POLYESTER FELT

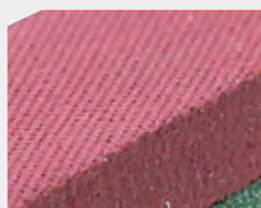


ARAMID FELT

Reference

FP

FA



LINATEX 40 ShA



LYCRA 25 ShA

Reference

LI

LY

For any coated belt, complete the item code by referencing the coating reference letters.

# TRAPEZOIDAL PROFILES WITH A RIDGED TOPGRIP



adhesive  
flexible  
abrasion resistant

The TOPGRIP ridge can be welded on all trapezoidal profiles in the range except for the DEL/ROC profile, providing a wide choice of ridged profiles for application depending on the loads carried and pulley diameters available.

The technical characteristics (traction force, tension, friction coefficients,...) are those of trapezoidal profiles, only the coil diameters will change:

Packaging 30 m

Food: CE - FDA

DEL/SAN Reinforced



DSVBAR-TO  
95 ShA

H15 Reinforced



H15GAR-TO  
92 ShA

SOUPLEX Reinforced



SXWAR-TO  
85 ShA

DEL/FLEX



DFVR-TO  
90 ShA

SOUPLEX



SXVM-TO  
85 ShA

Reference  
Hardness

Section (mm)	pulley Ø (mm)		pulley Ø (mm)		pulley Ø (mm)		pulley Ø (mm)		pulley Ø (mm)	
	Advised	Minimum	Advised	Minimum	Advised	Minimum	Advised	Minimum	Advised	Minimum
13x15 (A)	180	160	170	150	150	130	150	130	130	110
17x20 (B)	210	190	200	180	180	160	180	160	160	140
22x25 (C)	290	270	280	260	240	210	260	230	220	200

DEL/SAN Cogged Reinforced



DSVBAC-TO  
95 ShA

H15 Cogged Reinforced



H16GAC-TO  
92 ShA

SOUPLEX Cogged Reinforced



SXWAC-TO  
85 ShA

DEL/FLEX Cogged



DFVCR-TO  
90 ShA

SOUPLEX Cogged



SXVMCR-TO  
85 ShA

Reference  
Hardness

Section (mm)	pulley Ø (mm)		pulley Ø (mm)		pulley Ø (mm)		pulley Ø (mm)		pulley Ø (mm)	
	Advised	Minimum	Advised	Minimum	Advised	Minimum	Advised	Minimum	Advised	Minimum
13x15 (A)	150	130	130	110	120	100	120	100	100	90
17x20 (B)	180	160	160	140	140	120	140	120	120	100
22x25 (C)	240	210	220	200	190	160	190	170	180	150



The recommended and minimum diameters are given for end-to-end joints.

The life of the belt is reduced on minimum diameters depending on the operating conditions (load, accumulation, stop/start operation, tension etc.).

In the case of overlap joints, use the recommended diameters for an optimal lifespan.



# TRAPEZOIDAL PROFILES WITH RIDGES



Plain

## DEL/FLEX red



Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
DFVR13F2	28	160	140	13x15 (A)	5%	DFVFCR13F2	22	120	100
DFVR17F2	50	240	200	17x20 (B)	5%	DFVFCR17F2	35	170	140
DFVR22F2	81	300	240	22x25 (C)	5%	DFVFCR22F2	56	220	190

Food	CE - FDA	Coefficient of friction	HDPE: 0.25	Temperature extremes	-20°C / +70°C
Hardness	90 ShA		Steel: 0.5		
Pretension	3 - 6%		Stainless steel: 0.6		
				Packaging	30 m



Plain

## SOUPLEX white Reinforced Aramid



Cogged

Reference	Traction strength (daN)	pulley Ø (mm)		Section	Tension	Reference	Traction strength (daN)	pulley Ø (mm)	
		Advised	Minimum					Advised	Minimum
SXWAR17F2	50	200	170	17x20 (B)	1.5%	SXWAC17F2	50	160	130
SXWAR22F2	64	250	220	22x25 (C)	1.5%	SXWAC22F2	64	200	170

Food	CE - FDA	Coefficient of friction	HDPE: 0.35	Temperature extremes	-20°C / +60°C
Hardness	85 ShA		Steel: 0.6		
Pretension	1 - 1.5%		Stainless steel: 0.7		
				Packaging	30 m

# BRUSH PROFILES



Quality	Reference	Section (mm)	Minimum pulley (mm)	Bristle height	Number rows	Pitch (mm)	Bristle section (mm)
DEL/FLEX	DFVR13BR	13x8 (A)	120	27	1	8	40/100
SOUPLEX	SXVM17BR	17x11 (B)	180	60	2	8	40/100
SOUPLEX	SXVM22BR	22x14 (C)	240	60	3	8	40/100

White Nylon bristles.

### Special brush profiles:

- Height
- Section
- Bristle gauge
- Bristle colour
- Special inserts

On request.



# SPECIAL PROFILES



Section (mm)		25 x 2.3 with guide 4 x 2.5		12 x 2.3 with guide 4 x 2.5		25 x 2.3 with guide 4 x 2.5		30 x 8	30 x 8	8 x 6.5
Top side		embossed	smooth	embossed	smooth	embossed	smooth	smooth	smooth	cambered top
reference/ colour	green	ATC63	ATC63LI	ATC12	ATC12LI	-	-	-	-	-
	blue	ATC63B	ATC63BLI	ATC12B	ATC12BLI	ATC63BMD	ATC63BLIMD	SXVVB30 light blue	SXVM30 brown	SXVB08D0 dark blue
Food		CE - FDA		CE - FDA		metal detectable*		CE - FDA	CE - FDA	CE - FDA
Hardness		90 ShA		90 ShA		90 ShA		80 ShA	85 ShA	87 ShA
Traction strength (daN)		16		8,8		14		20	25	7
Tension		5%		5%		5%		8%	8%	6%
pulley Ø (mm)	Advised	60		60		60		80	100	55
	Minimum	50		50		50		70	90	45

\* Mafdel recommends that products intended for use are first tested in your environment to validate compliance with the desired detection level.



### U-shaped profile

Hardness: 85 ShA  
Pulley tyres for wire cutting etc.



### U-shaped profile

Hardness: 85 ShA  
Pulley tyres for wire cutting etc.



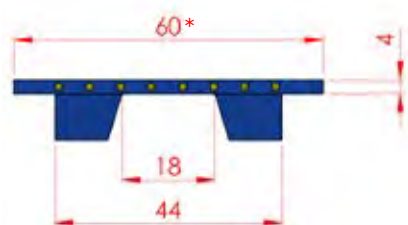
### Goulotte Profile

Hardness : 70 ShA  
Width: 32mm  
Support : flat belt to be agreed

## TRACKROLL®

Flat, positively driven belt reinforced with Aramid cords, ref TRPB4R30.

The TRACKROLL® belt is perfectly suited for applications such as tangential roller drives, requiring high traction resistance, and good grip.



\* Minimum gap 45mm.

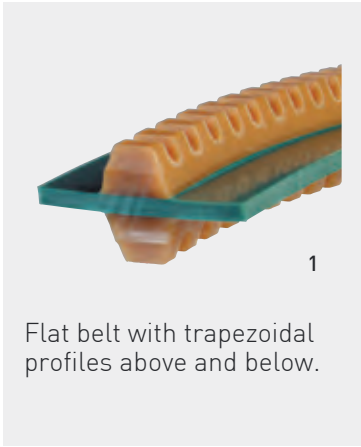


- Large load capacity due to the reinforcement of Aramid cords.
- No risk of slipping, even in a greasy and humid environment.
- Tension-free operation reducing stress on the conveyor's mechanical components.
- Without a tension system, the fixed pulleys facilitate transfers between conveyors.
- Sprocket drive for 40mm square shaft, or, for motorised drums. Consult us.
- Food CE/FDA.





# SPECIAL PROFILES



1

Flat belt with trapezoidal profiles above and below.



2

Flat belt with a trapezoidal profile below and round walls above.



3

Flat belt with a trapezoidal profile below and SF7 walls above.



4

Reinforced trapezoidal profile with ATC surface embossing.



5

Trapezoidal profile with an SF7 above.



6

Reinforced trapezoidal profile with a round profile above.



7

Trapezoidal profiles welded back to back to create a hexagon profile



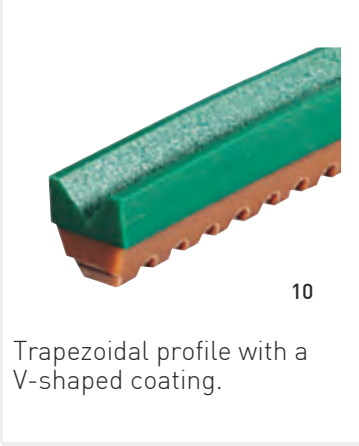
8

Asymmetrical hexagonal profile with custom machining.



9

Trapezoidal profile with a V-shaped groove of varying depth.



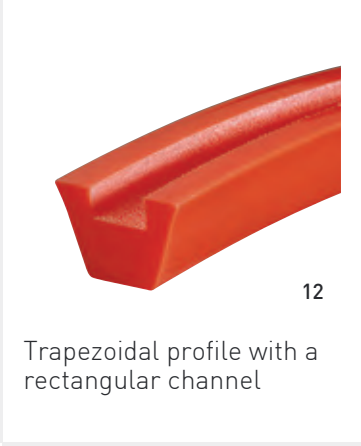
10

Trapezoidal profile with a V-shaped coating.



11

Trapezoidal profile with a round groove of varying depth.



12

Trapezoidal profile with a rectangular channel



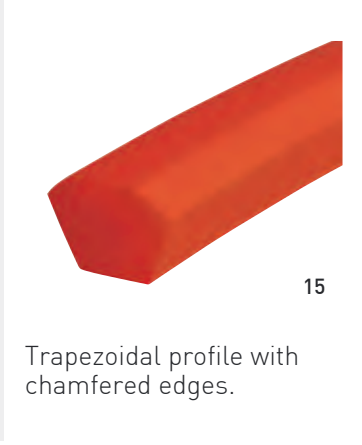
13

Trapezoidal profile with machined sidewalls.



14

Reinforced dome-topped trapezoidal profile.



15

Trapezoidal profile with chamfered edges.



16

Trapezoidal profile reduced in height.

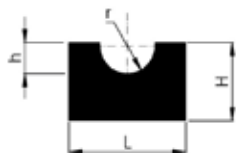




# LOW FRICTION GUIDES FOR ROUND PROFILES

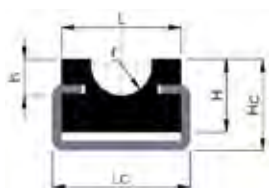


Made of High Density Polyethylene (HDPE), the VIT/GLISS slides offer, in addition to good guidance, an excellent friction coefficient that increases the load carrying capacity of the belts.



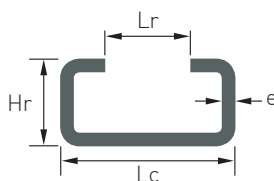
Type	Ref.	∅ Profiles	L	H	r	h
R6	GR06	∅ 6	20	10	4	4
R8	GR08	∅ 8	20	12	5	5
R10	GR10	∅ 9.5 - 10	25	15	6	6
R12	GR12	∅ 12 - 12.5	30	20	7	8
R15	GR15	∅ 15	35	25	8.5	10
R18	GR18	∅ 18	40	25	10	12

Delivered in 3m lengths.



Type	Ref.	∅ Profiles	L	H	r	h	Hc	Lc	Hr	e	Lr
RC6	GRC06	∅ 6	20	15	4	4	18	20	10	1.5	10
RC8	GRC08	∅ 8	20	15	5	5	18	20	10	1.5	10
RC10	GRC10	∅ 9.5 - 10	20	15	6	6	20	20	10	1.5	10
RC12	GRC12	∅ 12 - 12.5	28	15	7	8	20	28	12	2	14
RC15	GRC15	∅ 15	33	20	8.5	10	25	38	18	2.5	22
RC18	GRC18	∅ 18	38	20	10	12	25	38	18	2.5	22

Delivered in 3m lengths.



- Galvanized steel rail.
- Option of white or food blue HDPE slide on stainless steel rail.
- Custom slides available.

Consult us.

### Benefits:

- Perfect belt guidance.
- Low coefficient of friction.
- Excellent abrasion resistance.
- Good shock resistance.
- Good resistance to corrosion and most chemical agents.
- Maximum continuous operating temperature: 70°C.
- Temperature extremes at peak speeds: -40°C to 100°C.

### CAUTION

When fitting, consider the HDPE's thermal expansion, which is 2 mm per metre for every 10°C of temperature rise.

# RADIUSSED ROUND BELT SLIDES



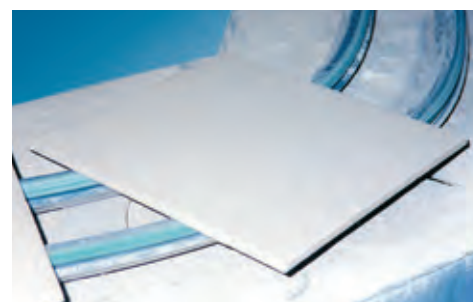
GR12CO25x16 GR12CO20x20 GR12CO20x20N

The flexibility of this slide allows it to be installed in a curve allowing the belt to change direction (Minimum radius: 500 mm).

3 standard models for round profiles - 12 mm:

25 x 16 mm and 20 x 20 mm with or without positioning groove.

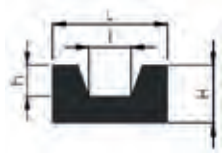
Recommended profiles: POLY/FLEX rough or other deglazed profile.





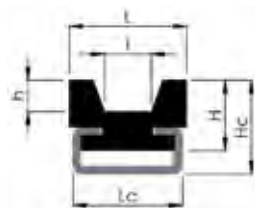
# LOW FRICTION GUIDES FOR TRAPEZOIDAL PROFILES

Made of High Density Polyethylene (HDPE), the VIT/GLISS slides offer, in addition to good guidance, an excellent friction coefficient that increases the load carrying capacity of the belts.



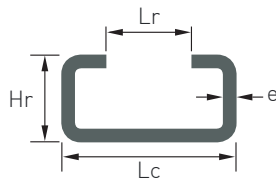
Type	Reference	Belt Dimensions	L	H	l	h
T10	GT10	10x6	20	10	7	4
T13	GT13	13x8	20	12	9	5
T17	GT17	17x11	30	15	11	8
T22	GT22	22x14	35	20	14	10
T32	GT32	32x19	50	30	21	13

Delivered in 3m lengths.



Type	Reference	Belt Dimensions	L	H	l	h	Hc	Lc	Hr	e	Lr
TC10	GTC10	10x6	20	15	7	4	18	20	10	1.5	10
TC13	GTC13	13x8	20	18	9	5	22	20	10	1.5	10
TC17	GTC17	17x11	30	18	11	8	24	28	12	2	14
TC22	GTC22	22x14	35	25	14	10	30	38	18	2.5	22
TC32	GTC32	32x19	50	30	21	13	38	38	18	2.5	22

Delivered in 3m lengths.



- Galvanized steel rail.
- Option of white or food blue HDPE slide on stainless steel rail.
- Custom slides available.

Consult us.

## Benefits:

- Perfect belt guidance.
- Low coefficient of friction.
- Excellent abrasion resistance.
- Good shock resistance.
- Good resistance to corrosion and most chemical agents.
- Maximum continuous operating temperature: 70°C.
- Temperature extremes at peak speeds: -40°C to 100°C.

## CAUTION

When fitting, consider the HDPE's thermal expansion, which is 2mm per metre for every 10°C of temperature rise.



# SPECIAL LOW FRICTION SLIDES FOR TRAPEZOIDAL PROFILES



Off-center groove and chamfering



Narrow sides



Double/multiple grooves





FIND OUR JOINING TUTORIALS ON OUR WEBSITE AND YOUTUBE CHANNEL



## STANDARD BUTT WELDING KIT



Includes:

- 1 **MC50** welding tool
- 1 **S135** shears
- 1 **P10** side cutter
  - 1 **J50** clamp - **MALLETTESTDJ50**
- or
  - 1 **J60** clamp - **MALLETTESTDJ60**
- or
  - 1 **J15** clamp - **MALLETTESTDJ15**

### MC50

For butt welding trapezoidal and flat profiles up to 50mm wide.



### J50

Clamp for round and flat profiles up to 60 mm wide.



### J60

Clamp for round and trapezoidal profiles up to 22 x 14 mm.



### J15

Small clamp for round profiles up to the 10mm and trapezoidal 6x4mm and 8x5mm.



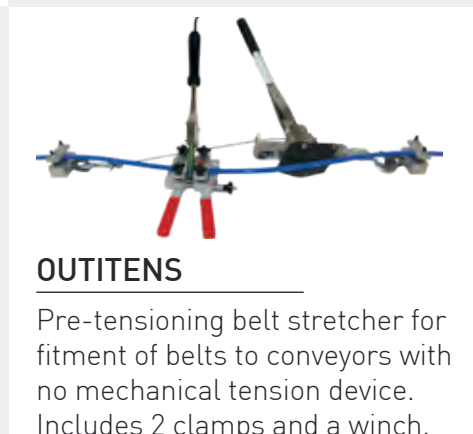
### S135

Cutting shears for 90 and 45 degree cuts.



### P10

Flat faced side cutter for trimming flash of the weld.



### OUTITENS

Pre-tensioning belt stretcher for fitment of belts to conveyors with no mechanical tension device. Includes 2 clamps and a winch.



# WELDING TOOLS



FIND OUR JOINING TUTORIALS ON OUR WEBSITE AND YOUTUBE CHANNEL



## OVERLAP WELDING KIT

### MALLETTEOVERL-030

Includes:

- 1 **MC150** welding tool
- 1 **J150P** clamp
- 1 set of moulds of your choice
- 1 **S135** shears
- 1 roll of double-sided adhesive tape



### MC150

For overlap welding round and trapezoidal profiles.



### J150M

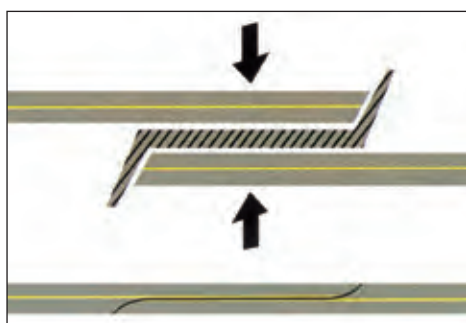
A bench mounted clamp, recommended for reinforced DEL/ROC profiles - 9.5 - 10mm and 12 - 12.5mm



### J150P

Clamp with replaceable moulds to accommodate round and trapezoidal profiles

## OVERLAP WELDING



Welding by overlapping the ends of the belt.

Fits all profiles in the range:

- ROUND
- TRAPEZOIDALS, Cogged or Plain, with coated, ridged and especially, reinforced profiles.
- Enhanced joint strength
- Simple and fast
- Increased belt strength
- Increased load capacity
- Excellent weld integrity
- Safe working procedure

# LOAD CALCULATIONS

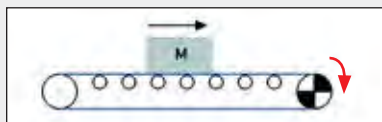


Symbol	Unit	Designation	Information in this catalogue
M	Kg	Transported load	
Mmax	Kg	Maximum allowable load per belt	
Mtotal	Kg	Total allowable load for the whole drive/conveyor	
Mr	Kg	Mass of tangentially driven rollers	
L	m	Length of conveyor	
H	m	Height of the conveyor	
F	daN	Minimum <b>M</b> Traction strength for continuous operation	
F'	daN	Minimum <b>M</b> Traction strength for direct on line start up	
Ft	daN	Traction force of the selected belt	X
t	%	Elongation corresponding to the force applied to the belt <b>Ft</b>	X
Cfp		Friction coefficient of the product on the belt	
Cf		Friction coefficient of the belt against the conveyor bed or runner	X
Cr		Friction coefficient on a rolling medium (0.05 to 0.1 depending on conditions: smooth bearings, ball bearings...)	
Cs		Safety factor	

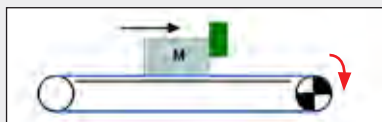
## Configuration examples



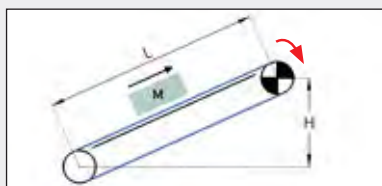
HORIZONTAL SOLID BED CONVEYOR



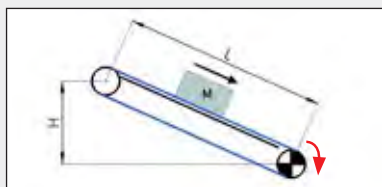
HORIZONTAL ROLLER BED CONVEYOR



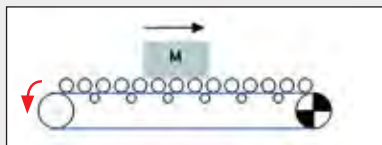
HORIZONTAL CONVEYOR WITH ACCUMULATION



INCLINED CONVEYOR



DECLINED CONVEYOR



ROLLER CONVEYOR - TANGENTIAL DRIVE

In all cases of conveying, when there is a **STOP/START OPERATION** (Full load start):

## Simplified calculation of the traction force required to drive a load

$$F = M \times Cf$$

$$F = M \times Cr$$

$$F = M \times (Cf + Cfp)$$

$$F = (M \times Cf) + (M \times H / L)$$

$$F = (M \times Cf) - (M \times H / L)$$

$$F = (M + Mr) \times Cr$$

For accumulation, take into account the friction coefficient of the product to be carried on the belt. This is added to the coefficient of the belt on the bed:

If the conveyor belt is inclined or declined, take into account the angle:

In the case of tangential roller driving, the weight of all rollers must be taken into account.

The **F**-traction force determined above must be multiplied by 2.

$$F' = F \times 2$$

## Simplified calculation of the maximum allowable load on a belt

$$M_{max} = Ft / Cf$$

$$M_{max} = Ft / Cr$$

$$M_{max} = Ft / (Cf + Cfp)$$

$$M_{max} = Ft / (Cf + H / L)$$

$$M_{max} = Ft / (Cf - H / L)$$

$$M_{max} = (Ft / Cr) - Mr$$

The calculation of **Mmax**, takes into account only half the traction force of the belt.

Replace **Ft** with **Ft/2**



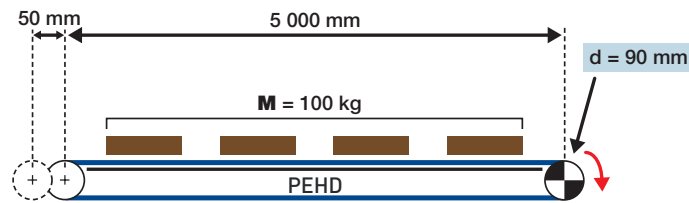


# EXAMPLE

## 1. EXISTING CONVEYOR OR MACHINE

Take into account the mechanical properties of the machine, the nature of the products transported and the operating conditions. Use all the data in this catalogue to determine the best belt for the application.

Continuous transport of wood panels on 2 17x11 mm trapezoidal belts mounted in parallel on an HDPE slide bed.



### CHOOSING A BELT TYPE

Long belt > 10 meters  
Small pulley diameter: 90mm  
Short tension adjustment: 50mm maximum



Reinforced belt  
Cogged belt  
SOUPLEX Reinforced or H16

### CHECKING PULLEY DIAMETERS

To avoid premature belt failure, the recommended pulley diameters must be adhered to. Repeated operations on undersized pulleys cause belt fatigue and significantly decreases the belt's lifespan.

Diameter of the installation  $d=90\text{mm}$

	SOUPLEX Reinforced Cogged 17x11mm	H16 Cogged Reinforced 17x11mm
Advised $\emptyset$ (mm)	110	130
Minimum $\emptyset$ (mm)	<b>90</b>	110

### CALCULATING THE ALLOWABLE LOAD ON THE BELT

Total load (kg) on the conveyor belt $M=100\text{kg}$		SOUPLEX Reinforced Cogged 17x11mm	H16 Cogged Reinforced 17x11mm
The traction force of the belt	$F_t$ (daN)	40	50
Corresponding elongation	$t$ (%)	1	1.5
Coefficient of friction on HDPE	$C_f$	0.35	0.25
Maximum allowable load on 1 belt	$M_{\text{max}} [\text{Kg}] = F_t / C_f$	114	200
Maximum allowable load on 2 belts	$M_{\text{total}} [\text{Kg}] = 2 \times M_{\text{max}}$	<b>228</b>	<b>400</b>
Safety factor	$C_s = M_{\text{total}} / M$	<b>2.3</b>	<b>4</b>

### SOLUTIONS

The 2 types chosen can support the 100 kg load continuously, but the H16 17x11 mm belt requires pulleys with a minimum diameter well above 90mm, while the Souplex cogged and reinforced belt can accommodate the 90 mm minimum diameter.

In this case, the suitable solution is: the Souplex trapezoidal reinforced and cogged 17x11 elongated to 1% (limited lifespan on the minimum diameter).

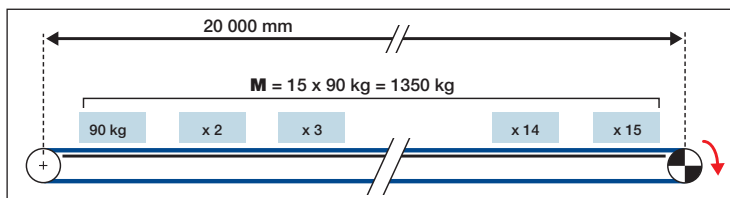
# EXAMPLE



## 2. NEW APPLICATION

Determining the belt according to the specifications laid out in this catalogue.  
The conveyor's design can be based upon the characteristics of the belt.

Construction of an industrial cheese conveyor to transport 15, 90kg blocks of cheese on a 20-metre long structure.  
Stop/Start operation.



### CHOOSING A BELT TYPE

Long centres, heavy load, loaded start up	→	Reinforced belt (large section)
Low coefficient of friction	→	DEL/ROC or DEL/SAN
Ease of cleaning	→	Round belt

### CALCULATING THE MINIMUM TRACTION FORCE TO DRIVE THE LOAD

Total load (kg) on the conveyor belt	M=1350 kg	DEL/ROC round Reinforced			DEL/SAN round Reinforced		
		on a bed		on pulley support	on a bed		on pulley support
		Stainless	HDPE		Stainless	HDPE	
Belt friction coefficient	Cf	0.5	0.15	0.1	0.55	0.2	0.1
Continuous Traction strength	$F \text{ (daN)} = M \times Cf$	675	203	135	743	270	135
Traction strength at start-up (step by step)	$F' \text{ (daN)} = F \times 2$	<b>1350</b>	<b>406</b>	<b>270</b>	<b>1486</b>	<b>540</b>	<b>270</b>

### CHOICE OF SECTION AND NUMBER OF PROFILES

Choose a section and number of profiles in the selected type(s) to achieve a total traction force greater than the Minimum force with a safety factor of about 1.5.

		DEL/ROC round Reinforced ø18mm			DEL/SAN round Reinforced ø18mm			
		Traction force: Ft = 200 daN			Traction force: Ft = 125 daN			
		F' (daN)	Nbre = F' / Ft	Ftotal (daN) = Nbre x Ft	Cs = Ftotal / F'	F' (daN)	Nbre = F' / Ft	Ftotal (daN) = Nbre x Ft
Traction strength at start-up	F' (daN)	1350	<b>406</b>	<b>270</b>	1486	540	<b>270</b>	
Number of profiles needed	Nbre = F' / Ft	7	<b>3</b>	<b>2</b>	12	5	<b>3</b>	
Total Traction strength	Ftotal (daN) = Nbre x Ft	1400	<b>600</b>	<b>400</b>	1500	625	<b>375</b>	
Safety factor	Cs = Ftotal / F'	1.04	<b>1.5</b>	<b>1.5</b>	1.01	1.16	<b>1.4</b>	

### SOLUTIONS

Several solutions can be considered

- 3 - 18mm Ø DEL/ROC reinforced belts on an HDPE bed
- 2 - 18mm Ø DEL/ROC reinforced belts on roller supports
- 3 - 18mm Ø DEL/SAN reinforced belts on roller supports

The recommended pulley diameters must be respected in the final choice:

→	<b>DEL/ROC reinforced - 18mm Ø</b> ø 360mm	<b>DEL/SAN Reinforced - 18mm Ø</b> ø 250mm
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The respective 200 daN and 125 daN traction strengths of the DEL/ROC reinforced and DEL/SAN reinforced (18mm Ø) profiles are given in the catalogue for 2% and 1.5% respectively. It is highly advisable to respect these belt tensions on assembly to ensure proper operation of the conveyor.



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