

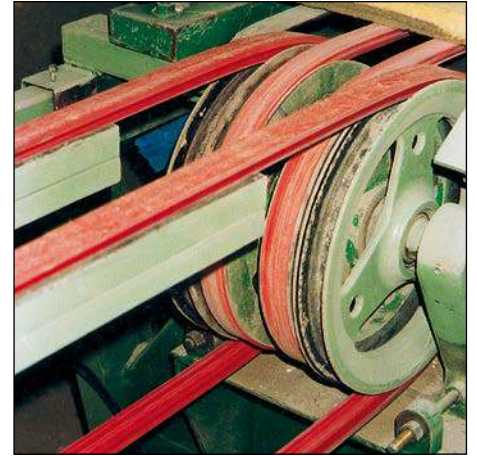
**thermoweldable** BELTS



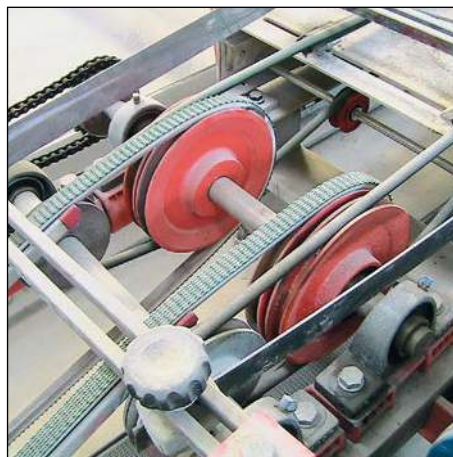
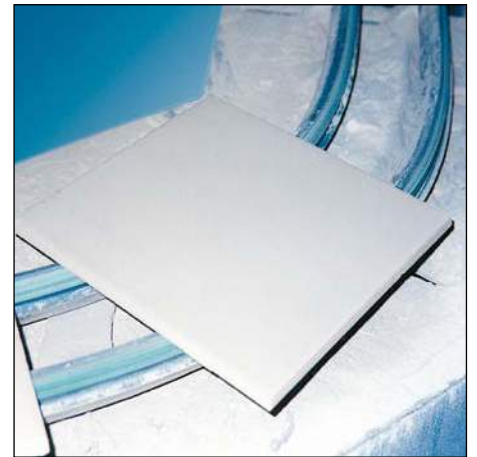
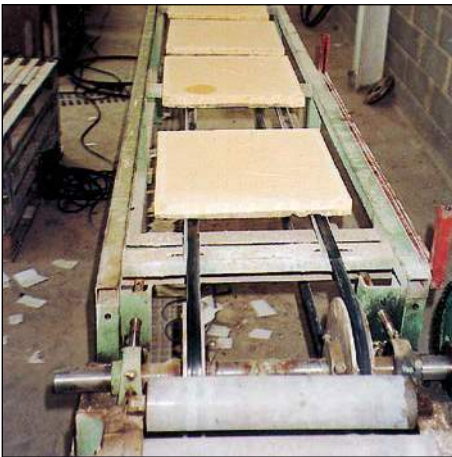
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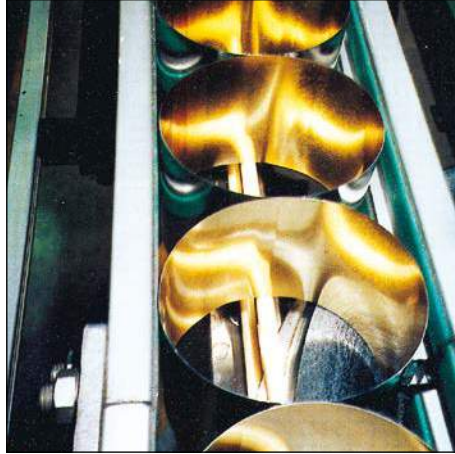
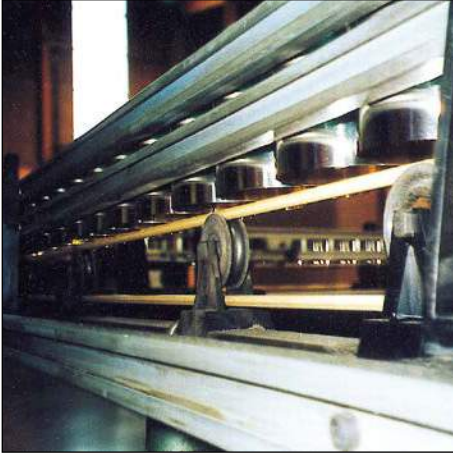
## tile factories • brick factories



## manufacturing ceramics • slabs concrete products



## metal packaging manufacturers

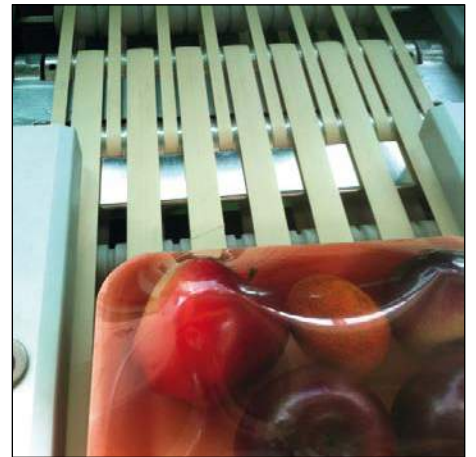
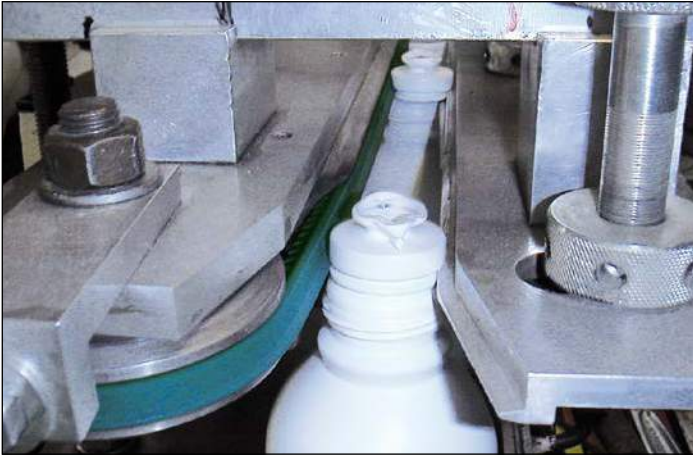


## cardboards • wood industry

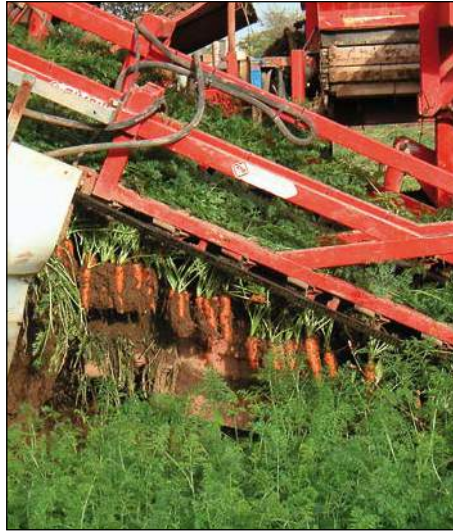


## glass industry





# farming equipment



# roller conveyors





## introduction



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## round belts



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## special belts



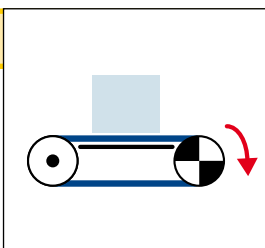
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## welding tools



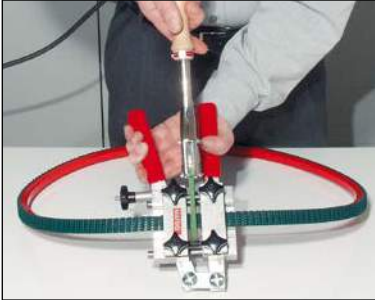
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**Our weldable belts provides many advantages in a wide range of applications :**



## easiness of use

- Easy on-site welding without previous dismantling.
- Fast repairing with minimum down-time.
- Convenient length adjustments by lengthening or shortening.
- Easy repairing of damaged belts.
- All off-cuts are useable.
- Great freedom in designing conveyors and selecting spacings.
- Reduced and simplified stocks.



## main characteristics

- High resistance to tear and wear.
- High resistance to oil, fat and solvents.
- Various qualities allowing a wide choice with outstanding belting solution of highest quality, tailored to your specific needs.
- Wide choice of coatings on V belts.



## food quality range

- Mono-material products, waterproof, rot-resistant.
- Smooth surface for reduced bacteria development.
- Excellent water, oil, animal and vegetable fat resistance.
- Support of cleaning and sanitation measures.
- Easy cleaning, reduced water consumption.



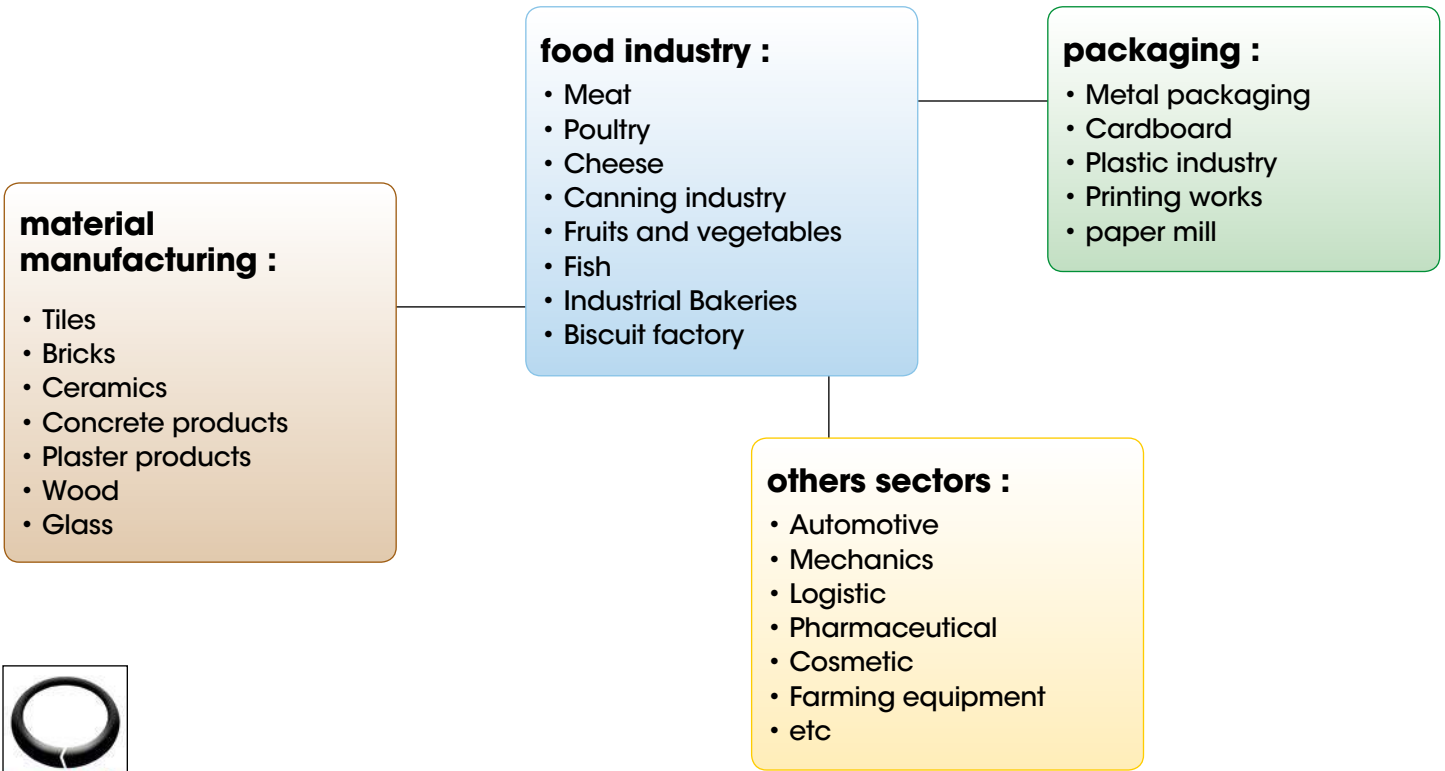


**Comparison of advantages of different conveying solutions :**

	<b>MAFDEL belts</b>	<b>Rubber belts</b>	<b>Conveying chains</b>
Easiness of installation	+	-	-
Chemicals & hydrocarbons resistance	+	-	+
Abrasion resistance	+	-	-
Easiness of maintenance	+	-	-
Coatings / surfaces	+	+	-
Easy cleaning	+	-	-
Simplicity of stock control	+	-	+
Low noise working	+	+	-
Food quality	+	-	-

application range

**Our belts are suitable to a wide range of applications in many industries, such as :**





∅ mm

mafdel			2	3	4	5	6	7	8	9	9.5	10	12	12.5	15	18	
Standard	Rough	POLY/FLEX Rough	85 ShA	●	●	●	●	●	●	●		●	●		●	●	
		POLY/FLEX Rough	85 ShA		●	●	●	●		●			●	●			
	Smooth	SOUPLEX	85 ShA		●	●	●	●		●		●			●	●	●
		SOUPLEX	85 ShA		○	○	○	○		○							
		SOUPLEX Antistatic	85 ShA			●	●	●									
		DEL/FLEX	90 ShA	●	●	●	●	●	●	●		●			●	●	●
		DEL/FLEX	90 ShA		●	●	●	●		●							
		DEL/ROC	100 ShA 55 ShD			●	●	●		●		○	●				
	Frosted	SOUPLEX Frosted	85 ShA					●		●		●			●	●	●
		DEL/FLEX Frosted	90 ShA					●	●	●		●			●	●	●
		DEL/FLEX Frosted	90 ShA					●		●							
	Reinforced	Smooth	POLY/FLEX Aramid Reinforced	85 ShA				●		●			●	●		●	●
DEL/SAN Aramid Reinforced			95 ShA									●		●	●	●	
DEL/ROC Polyester Reinforced			100 ShA 55 ShD									○	○		○	○	○
DEL/ROC «DRW» Polyester Reinforced			63 ShD									○		○			
Frosted		POLY/FLEX Aramid Reinforced - Frosted	85 ShA				●		●			●	●		●	●	
		DEL/SAN Aramid Reinforced - Frosted	95 ShA									●		●	●	●	
Tubular	SOUPLEX Tubular	85 ShA										○					
	DEL/FLEX Tubular	90 ShA				○	○		○			○	○		○		

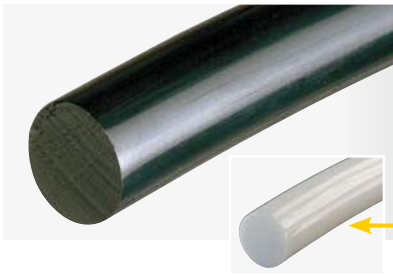


All our 6 to 18mm diameter round belts can be frosted. Frothing improves belt sliding on its support and makes products accumulation easier.



Patent nb 9912595

## DEL/ROC black



Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
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

Hardness <b>100 ShA/55 ShD</b>
Pretension <b>1 - 2%</b>
Temperature range <b>-30°C/+90°C</b>
Friction coefficient HDPE : <b>0.15 - 0.2</b> Steel : <b>0.35 - 0.4</b> Stainless steel : <b>0.5</b>
Roll length <b>30 m</b>

## DEL/ROC ivory polyester reinforced



Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
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

Hardness <b>100 ShA/55 ShD</b>
Pretension <b>1 - 2%</b>
Temperature range <b>-30°C/+90°C</b>
Friction coefficient HDPE : <b>0.15 - 0.2</b> Steel : <b>0.35 - 0.4</b> Stainless steel : <b>0.5</b>
Roll length <b>100 m</b>

## DEL/ROC DRW ivory polyester reinforced



Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
DRWRIAP9.5	9.5	67	2%	180	160
DRWRIAP12	12	120	2%	260	220

Hardness <b>63 ShD</b>
Pretension <b>1 - 2%</b>
Temperature range <b>-30°C/+90°C</b>
Friction coefficient HDPE : <b>0.15 - 0.2</b> Steel : <b>0.35 - 0.4</b> Stainless steel : <b>0.5</b>
Roll length <b>100 m</b>

## DEL/ROC blue steel reinforced\*

Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
DRRBST9.5/1.8	9.5	166	-	250	
DRRBST9.5/2.36	9.5	200	-	270	

Hardness <b>100 ShA/55 ShD</b>
Pretension <b>0%</b>
Temperature range <b>-30°C/+90°C</b>
Friction coefficient HDPE : <b>0.15 - 0.2</b> Steel : <b>0.35 - 0.4</b> Stainless steel : <b>0.5</b>
Roll length <b>X m</b>



\*Stainless steel reinforcement on request.



# DEL/FLEX and DEL/SAN round belts

## DEL/FLEX red



Hardness <b>90 ShA</b>
Pretension <b>3 - 6%</b>
Temperature range <b>-20°C/+70°C</b>
Friction coefficient HDPE : <b>0.25</b> Steel : <b>0.5</b> Stainless steel : <b>0.6</b>
Roll length <b>30 m</b>

Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
DFRR02	2	0.77	5%	20	12
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

\*Manufactured on request depending on quantities.

## DEL/FLEX blue



Hardness <b>90 ShA</b>
Pretension <b>3 - 6%</b>
Temperature range <b>-20°C/+70°C</b>
Friction coefficient HDPE : <b>0.25</b> Steel : <b>0.5</b> Stainless steel : <b>0.6</b>
Roll length <b>30 m</b>

Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
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

## DEL/SAN blue Aramid reinforced



Hardness <b>95 ShA</b>
Pretension <b>see table</b>
Temperature range <b>-20°C/+70°C</b>
Friction coefficient HDPE : <b>0.2</b> Steel : <b>0.4</b> Stainless steel : <b>0.5</b>
Roll length <b>50 m</b>

Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
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

All our 6 to 18 mm diameter round belts can be frosted.

Frosting improves belt sliding on its support and makes products accumulation easier :

- reduction of friction coeff on steel and stainless steel : **0.1**
- reduction of friction coeff on HDPE : **0.05**.

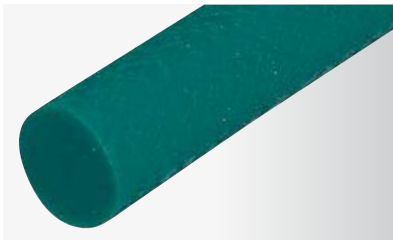
Reference : complete the belt reference with **DE**.



Patent nb 9912595



## POLY/FLEX green rough



Hardness <b>85 ShA</b>
Pretension <b>5 - 8%</b>
Temperature range <b>-20°C/+60°C</b>
Friction coefficient HDPE : <b>0.25</b> Steel : <b>0.45</b> Stainless steel : <b>0.55</b>
Roll length ø 2 to 10 mm : <b>100 m</b> ø 12 to 18 mm : <b>50 m</b>

Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
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

## POLY/FLEX blue rough



Hardness <b>85 ShA</b>
Pretension <b>5 - 8%</b>
Temperature range <b>-20°C/+60°C</b>
Friction coefficient HDPE : <b>0.25</b> Steel : <b>0.45</b> Stainless steel : <b>0.55</b>
Roll length <b>100 m</b>

Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
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

## POLY/FLEX green Aramid reinforced



Hardness <b>85 ShA</b>
Pretension <b>see table</b>
Temperature range <b>-20°C/+60°C</b>
Friction coefficient HDPE : <b>0.35</b> Steel : <b>0.6</b> Stainless steel : <b>0.7</b>
Roll length <b>30 m</b>

Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
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

All our 6 to 18 mm diameter round belts can be frosted.

Frosting improves belt sliding on its support and makes products accumulation easier :

- reduction of friction coeff on steel and stainless steel : **0.1**
- reduction of friction coeff on HDPE : **0.05**.

**Reference** : complete the belt reference with **DE**.



Patent nb 9912595



# SOUPLEX round belts

## SOUPLEX brown



Hardness <b>85 ShA</b>
Pretension <b>5 - 8%</b>
Temperature range <b>-20°C/+60°C</b>
Friction coefficient HDPE : <b>0.35</b> Steel : <b>0.6</b> Stainless steel : <b>0.7</b>
Roll length <b>30 m</b>

Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
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

\*Manufactured on request depending on quantities.

## SOUPLEX translucent



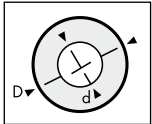
Reference	Diameter (mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
SXRT03	3	0.9	8%	20	15
SXRT04	4	1.5	8%	35	25
SXRT05	5	2.5	8%	40	30
SXRT06	6	4	8%	50	40
SXRT08	8	7	8%	70	55



## SOUPLEX black antistatic

Reference	Diameter (mm)	Traction force (daN)	Pretension	ø Pulley diameter (mm)	
				recommended	mini
SXRN04AS	4	1.5	8%	45	35
SXRN05AS	5	2.5	8%	50	40
SXRN06AS	6	4	8%	60	50

# tubular fastening belts



**Fast on-site fastening without welding tools.**

## DEL/FLEX red tubular



Hardness <b>90 ShA</b>
Pretension <b>3 - 6%</b>
Temperature range <b>-20°C/+70°C</b>
Friction coefficient HDPE : <b>0.25</b> Steel : <b>0.5</b> Stainless steel : <b>0.6</b>
Roll length <b>30 m</b>

Reference	Diameter (D/d mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
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

\*Manufactured on request depending on quantities.

## SOUPLEX brown tubular



Hardness <b>85 ShA</b>
Pretension <b>5 - 8%</b>
Temperature range <b>-20°C/+60°C</b>
Friction coefficient HDPE : <b>0.35</b> Steel : <b>0.6</b> Stainless steel : <b>0.7</b>
Roll length <b>30 m</b>

Reference	Diameter (D/d mm)	Traction force (daN)	Pretension	Pulley diameter (mm)	
				recommended	mini
SXTM10	10/4	9	8%	80	70

## Aluminium fasteners

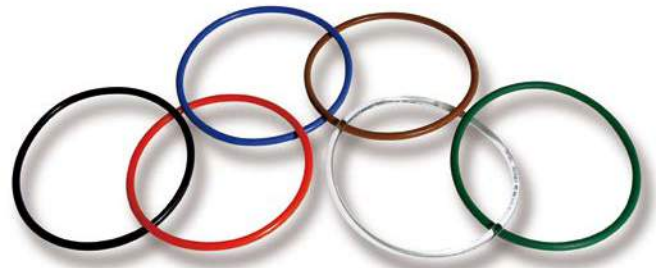
N°	Belt dia.		N°	Belt dia.
4	5 & 6 mm		7	10 & 12 mm
6	8 mm		9	15 & 18 mm

Supplied in pack of 10.

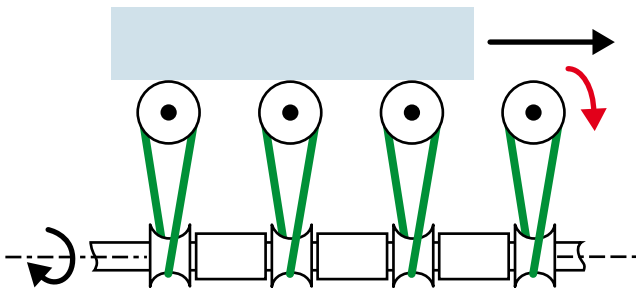
**Manufacturing on demand of small round endless belts in small, medium or large series, in qualities**

**SOUPLEX POLY/FLEX DEL/FLEX DEL/ROC**

- Wide choice in length.
- Possibility to produce moulded belts for very large series (consult us for moulds quotation).



## rollers driven by semi-crossed round belts



- Direct transmission from a perpendicular drive shaft to each roller with SOUPLEX, POLY/FLEX or DEL/FLEX round belts.
- Noiseless and maintenance-free system.

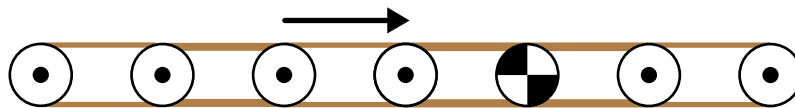


- Accumulation and full load start possible, due to resistance of tensioned belts. Instant restart of rollers.
- Easy welding of belt on site with **J15 clamp**.
- We recommend to keep diabolos and rollers set in line.

## roller - to - roller driving

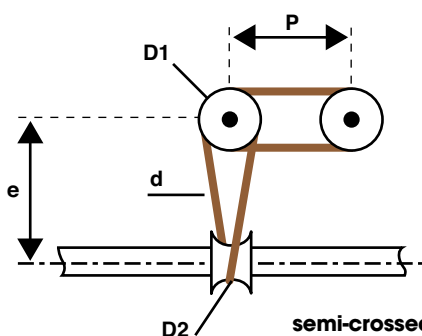


- Set of several rollers driven by round belts from a drive roller.



- It is recommended to drive a maximum of 6 rollers : 4 pulled and 2 pushed by the drive roller.
- Recommended minimum pretension : SOUPLEX or POLY/FLEX : 8%, DEL/FLEX : 6%.

## belt length calculation



**D1** : roller bottom groove diameter  
**D2** : diablo bottom groove diameter  
**d** : belt diameter  
**e** : center distance  
**p** : rollers step

**roller-to-roller driving**  
 $L_{th.} = (D1 + d) \times \pi + 2 \times p$   
 $L_{belt} = L_{th.} - \text{pretension}$

**semi-crossed belt driving**  
 $L_{th.} = [(D1 + d) + (D2 + d)] \times \pi / 2 + 2 \times \sqrt{[(D1 + d)^2 / 4 + e^2]}$   
 $L_{belt} = L_{th.} - \text{pretension}$

**EXAMPLE :**  
**SOUPLEX round belt dia. 5 mm**

**D1** = 38 mm  
**D2** = 28 mm  
**d** = 5 mm  
**e** = 120 mm  
**p** = 100 mm

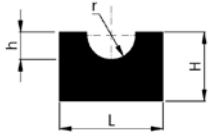
$L_{th.} = (38 + 5) \times 3.14 + 2 \times 100 = 335$  mm  
 $L_{belt} = 335 - 8\% = 308$  mm

$L_{th.} = [(38+5)+(28+5)] \times 3.14 / 2 + 2 \times \sqrt{[(38+5)^2 / 4 + 120^2]} = 363$  mm  
 $L_{belt} = 363 - 8\% = 334$  mm



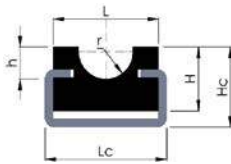
# VIT/GLISS runner for round belts

Manufactured out of High Density Polyethylene (H.D.P.E), our VIT/GLISS runners will both perfectly guide your belts and improve the load capacity of each belt by reducing its friction on its runner.



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

Delivered in bars of 3 m.



Type	Réf.	Belt $\varnothing$	L	H	r	h	Hc	Lc
RC6	GRC06	$\varnothing 6$	20	15	4	4	18	20
RC8	GRC08	$\varnothing 8$	20	15	5	5	18	20
RC10	GRC10	$\varnothing 9.5 - 10$	20	15	6	6	20	20
RC12	GRC12	$\varnothing 12 - 12.5$	28	15	7	8	20	28
RC15	GRC15	$\varnothing 15$	33	20	8.5	10	25	38
RC18	GRC18	$\varnothing 18$	38	20	10	12	25	38

Delivered in bars of 3 m.

• White or blue HDPE runners for food industry.



• C-shape stainless steel rail.

• Special runners following our customers schemes.

• Consult us.

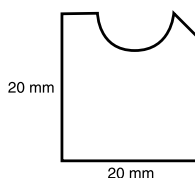
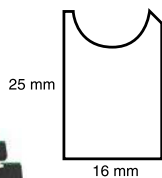
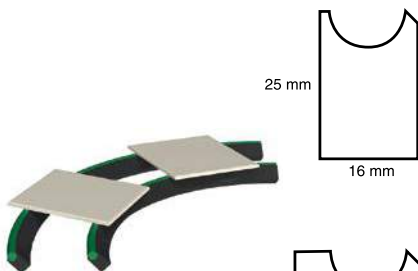
## Advantages :

- Perfect guiding of the belts.
- Low friction coefficient.
- Excellent resistance against abrasion.
- Shock-proof.
- Good resistance against corrosion and many chemical agents.
- Maximum continuous working temperature : +70°C.
- Extreme temperature limits : -40°C to +100°C.

## Attention :

Take care of the HDPE longitudinal dilatation : 2 mm per metre for a 10°C increase in temperature.

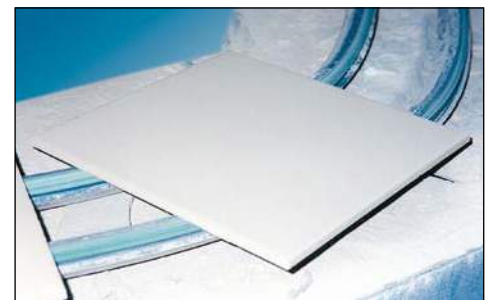
# runners for curved conveyors



These runners can be bent without any special tool to be fixed on curved conveyors, thanks to their flexibility.

2 standard sizes for  $\varnothing 12$  mm round belts :  
**25 x 16 mm** and **20 x 20 mm**.

Recommended belts :  
**POLY/FLEX** or any other frosted belt.





mafdel		w x h 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)	
Standard	Non-reinforced	<b>DEL/ROC</b> 100 ShA 55 ShD										
		<b>DEL/FLEX</b> 90 ShA										
		<b>DEL/FLEX</b> 90 ShA										
		<b>SOUPLEX</b> 85 ShA										
		<b>SUPERFLEX</b> 70 ShA										
	Reinforced	<b>DEL/SAN</b> Aramid reinforced 95 ShA										
		<b>H15 / H16</b> Aramid reinforced 92 ShA										
		<b>SOUPLEX</b> Aramid reinforced 85 ShA										
	Ridge-Top	Standard	<b>DEL/FLEX</b> 90 ShA									
<b>SOUPLEX</b> Aramid reinforced 85 ShA												
TOPGRIP		<b>DEL/FLEX</b> 90 ShA										
		<b>SOUPLEX</b> 85 ShA										
		<b>DEL/SAN</b> Aramid reinforced 95 ShA										
		<b>H15 / H16</b> Aramid reinforced 92 ShA										
		<b>SOUPLEX</b> Aramid reinforced 85 ShA										



All V belts from 10 x 6 mm (Z) section can be cogged. Cogging reduces minimum pulley diameter.



17 x 11  
22 x 14  
32 x 19



Coatings : from 10 x 6mm (Z) section  
Wide range of smooth or textured coatings made of PU, PVC, felt, rubber.

Hardness <b>100 ShA - 55 ShD</b>
Pretension <b>0.5 - 2%</b>
Temperature range <b>-30°C/+90°C</b>
Friction coefficient HDPE : <b>0.15 - 0.2</b> Steel : <b>0.35 - 0.4</b> Stainless steel : <b>0.5</b>
Roll length <b>30 m</b>



solid

## DEL/ROC black

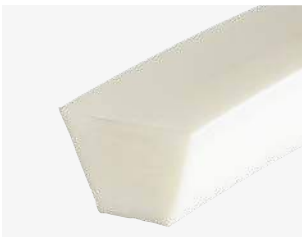


cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DRVN10	22	120	100
DRVN13	40	160	140
DRVN17	74	220	200
DRVN22	122	280	250

Dimension (mm)	Pretension
10x6 (Z)	2%
13x8 (A)	2%
17x11 (B)	2%
22x14 (C)	2%

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DRVNCR10	15	100	80
DRVNCR13	28	120	100
DRVNCR17	51	160	140
DRVNCR22	85	240	190



solid

## DEL/ROC white



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DRVW10	22	120	100
DRVW13	40	160	140
DRVW17	74	220	200
DRVW22	122	280	250

Dimension (mm)	Pretension
10x6 (Z)	2%
13x8 (A)	2%
17x11 (B)	2%
22x14 (C)	2%

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DRVWCR10	15	100	80
DRVWCR13	28	120	100
DRVWCR17	51	160	140
DRVWCR22	85	240	190



solid

## SUPERGRIP coating



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DRVN10NA	22	120	100
DRVN13NA	40	160	140
DRVN17NA	74	220	200
DRVN22NA	122	280	250

Dimension (mm)	Pretension
10x6 (Z)	2%
13x8 (A)	2%
17x11 (B)	2%
22x14 (C)	2%

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DRVNCR10NA	15	100	80
DRVNCR13NA	28	120	100
DRVNCR17NA	51	160	140
DRVNCR22NA	85	240	190



# DEL/SAN reinforced V belts

Hardness <b>95 ShA</b>
Pretension <b>see table</b>
Temperature range <b>-20°C/+70°C</b>
Friction coefficient HDPE : <b>0.20</b> Steel : <b>0.4</b> Stainless steel : <b>0.5</b>
Roll length <b>30 m</b>



solid

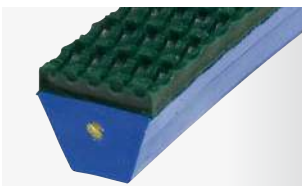
Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DSVBAR13	35	150	130
DSVBAR17	60	180	160
DSVBAR22	95	260	240



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DSVBAC13	35	120	100
DSVBAC17	60	150	130
DSVBAC22	95	210	180

## DEL/SAN blue Aramid reinforced



solid

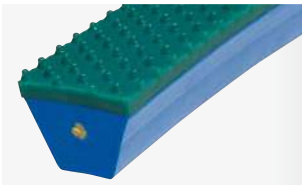
Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DSVBAR13NA	35	150	130
DSVBAR17NA	60	180	160
DSVBAR22NA	95	260	240



cogged

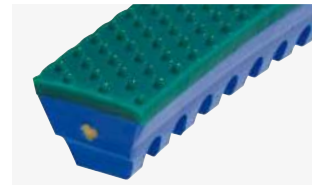
Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DSVBAC13NA	35	120	100
DSVBAC17NA	60	150	130
DSVBAC22NA	95	210	180

## SUPERGRIP coating



solid

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DSVBAR13SPI	35	170	150
DSVBAR17SPI	60	200	180
DSVBAR22SPI	95	280	260



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DSVBAC13SPI	35	140	120
DSVBAC17SPI	60	170	150
DSVBAC22SPI	95	230	200

## SOUPLEX 85 Sha surface



solid

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DSVBAR13TPI	35	160	140
DSVBAR17TPI	60	190	170
DSVBAR22TPI	95	270	250



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DSVBAC13TPI	35	130	110
DSVBAC17TPI	60	160	140
DSVBAC22TPI	95	220	190

## TOTALGRIP 70 Sha surface



# H15/H16 reinforced V belts

Hardness <b>92 ShA</b>
Prefension <b>see table</b>
Temperature range <b>-20°C/+70°C</b>
Friction coefficient HDPE : <b>0.25</b> Steel : <b>0.45</b> Stainless steel : <b>0.55</b>
Roll length <b>30 m</b>



H15  
solid



H16  
cogged

## green Aramid reinforced

Reference	Traction force (daN)	Primitive pulley ø (mm) recommended	mini
H15GAR10	15	110	90
H15GAR13	30	140	110
H15GAR17	50	170	140
H15GAR22	75	250	230
H15GAR32	140	350	300

Dimension (mm)	Prefension
10x6 (Z)	1%
13x8 (A)	1%
17x11 (B)	1.5%
22x14 (C)	1.5%
32x19 (D)	1.5%

Reference	Traction force (daN)	Primitive pulley ø (mm) recommended	mini
H16GAC10	15	80	65
H16GAC13	30	100	70
H16GAC17	50	130	110
H16GAC22	75	180	150
H16GAC32	140	300	250



H15  
solid



H16  
cogged

## SUPERGRIP coating

Reference	Traction force (daN)	Primitive pulley ø (mm) recommended	mini
H15GAR10NA	15	110	90
H15GAR13NA	30	140	110
H15GAR17NA	50	170	140
H15GAR22NA	75	250	230
H15GAR32NA	140	350	300

Dimension (mm)	Prefension
10x6 (Z)	1%
13x8 (A)	1%
17x11 (B)	1.5%
22x14 (C)	1.5%
32x19 (D)	1.5%

Reference	Traction force (daN)	Primitive pulley ø (mm) recommended	mini
H16GAC10NA	15	80	65
H16GAC13NA	30	100	70
H16GAC17NA	50	130	110
H16GAC22NA	75	180	150
H16GAC32NA	140	300	250



# H15/H16 reinforced V belts



H15  
solid

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
H15GAR10SPI	15	130	110
H15GAR13SPI	30	160	130
H15GAR17SPI	50	190	170
H15GAR22SPI	75	270	250
H15GAR32SPI	140	370	320

## SOUPLEX 85 Sha surface

Dimension (mm)	Pretension
10x6 (Z)	1%
13x8 (A)	1%
17x11 (B)	1.5%
22x14 (C)	1.5%
32x19 (D)	1.5%



H16  
cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
H16GAC10SPI	15	100	80
H16GAC13SPI	30	120	100
H16GAC17SPI	50	150	130
H16GAC22SPI	75	200	170
H16GAC32SPI	140	320	270



H15  
solid

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
H15GAR10TPI	15	120	100
H15GAR13TPI	30	150	120
H15GAR17TPI	50	180	160
H15GAR22TPI	75	260	240
H15GAR32TPI	140	360	310

## TOTALGRIP 70 Sha surface

Dimension (mm)	Pretension
10x6 (Z)	1%
13x8 (A)	1%
17x11 (B)	1.5%
22x14 (C)	1.5%
32x19 (D)	1.5%



H16  
cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
H16GAC10TPI	15	90	75
H16GAC13TPI	30	110	80
H16GAC17TPI	50	140	120
H16GAC22TPI	75	190	160
H16GAC32TPI	140	310	260





solid

Hardness <b>90 ShA</b>
Pretension <b>3 - 6%</b>
Temperature range <b>-20°C/+70°C</b>
Friction coefficient HDPE : <b>0.25</b> Steel : <b>0.5</b> Stainless steel : <b>0.6</b>
Roll length <b>30 m</b>

## DEL/FLEX red

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DFVR08	7	55	50
DFVR10	11	80	65
DFVR13	20	100	80
DFVR17	36	150	130
DFVR22	60	220	180
DFVR32	118	300	250

Dimension (mm)	Pretension
8x5 (M)	5%
10x6 (Z)	5%
13x8 (A)	5%
17x11 (B)	5%
22x14 (C)	5%
32x19 (D)	5%



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
-	-	-	-
DFVRCR10	7	60	50
DFVRCR13	14	80	60
DFVRCR17	25	110	90
DFVRCR22	42	150	120
DFVRCR32	82	220	180



solid

## DEL/FLEX blue

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DFVB06	4.5	45	40
DFVB08	7	55	50
DFVB10	11	80	65
DFVB13	20	100	80
DFVB17	36	150	130

Dimension (mm)	Pretension
6x4 (Y)	5%
8x5 (M)	5%
10x6 (Z)	5%
13x8 (A)	5%
17x11 (B)	5%



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
-	-	-	-
-	-	-	-
DFVBCR10	7	60	50
DFVBCR13	14	80	60
DFVBCR17	25	110	90

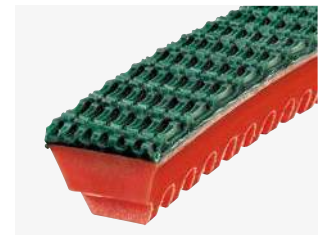


solid

## SUPERGRIP coating

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DFVR10NA	11	80	65
DFVR13NA	20	100	80
DFVR17NA	36	150	130
DFVR22NA	60	220	180
DFVR32NA	118	300	250

Dimension (mm)	Pretension
10x6 (Z)	5%
13x8 (A)	5%
17x11 (B)	5%
22x14 (C)	5%
32x19 (D)	5%



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	mini
DFVRCR10NA	7	60	50
DFVRCR13NA	14	80	60
DFVRCR17NA	25	110	90
DFVRCR22NA	42	150	120
DFVRCR32NA	82	220	180



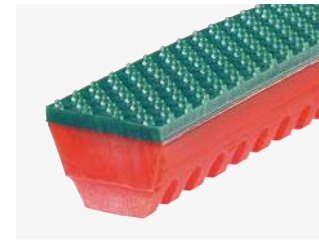




solid

## SOUPLEX 85 Sha surface

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DFVR10SPI	15	90	80
DFVR13SPI	25	120	100
DFVR17SPI	43	170	150
DFVR22SPI	69	240	210
DFVR32SPI	132	340	260



cogged

Dimension (mm)	Pretension
10x6 (Z)	5%
13x8 (A)	5%
17x11 (B)	5%
22x14 (C)	5%
32x19 (D)	5%

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DFVRCR10SPI	11	80	70
DFVRCR13SPI	19	100	80
DFVRCR17SPI	32	130	110
DFVRCR22SPI	51	170	140
DFVRCR32SPI	96	240	200



solid

## TOTALGRIP 70 Sha surface

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DFVR10TPI	11	85	75
DFVR13TPI	20	110	90
DFVR17TPI	36	160	140
DFVR22TPI	60	230	200
DFVR32TPI	118	310	260



cogged

Dimension (mm)	Pretension
10x6 (Z)	5%
13x8 (A)	5%
17x11 (B)	5%
22x14 (C)	5%
32x19 (D)	5%

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
DFVRCR10TPI	7	70	60
DFVRCR13TPI	14	90	75
DFVRCR17TPI	25	120	100
DFVRCR22TPI	42	160	130
DFVRCR32TPI	82	230	190



Hardness <b>85 ShA</b>
Pretension <b>see table</b>
Temperature range <b>-20°C/+60°C</b>
Friction coefficient HDPE : <b>0.35</b> Steel : <b>0.6</b> Stainless steel : <b>0.7</b>
Roll length <b>30 m</b>



solid



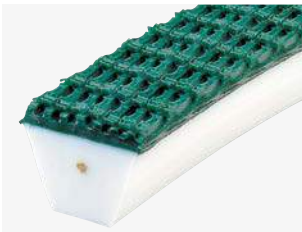
cogged

## SOUPLEX white Aramid reinforced

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVWAR10	10	90	75
SXVWAR13	25	100	80
SXVWAR17	40	150	130
SXVWAR22	60	220	200
SXVWAR32	120	280	250

Dimension (mm)	Pretension
10x6 (Z)	0.5%
13x8 (A)	0.5%
17x11 (B)	1%
22x14 (C)	1.5%
32x19 (D)	1.5%

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVWAC10	10	60	50
SXVWAC13	25	80	60
SXVWAC17	40	110	90
SXVWAC22	60	160	130
SXVWAC32	120	220	180



solid



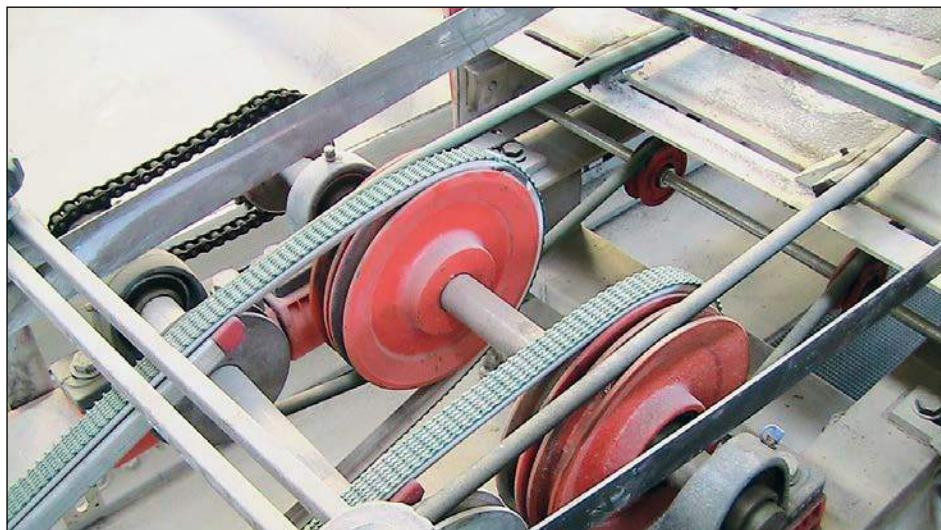
cogged

## SUPERGRIP coating

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVWAR10NA	10	90	75
SXVWAR13NA	25	100	80
SXVWAR17NA	40	150	130
SXVWAR22NA	60	220	200
SXVWAR32NA	120	280	250

Dimension (mm)	Pretension
10x6 (Z)	0.5%
13x8 (A)	0.5%
17x11 (B)	1%
22x14 (C)	1.5%
32x19 (D)	1.5%

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVWAC10NA	10	60	50
SXVWAC13NA	25	80	60
SXVWAC17NA	40	110	90
SXVWAC22NA	60	160	130
SXVWAC32NA	120	220	180





solid

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
-	-	-	-
SXVWAR13SPI	25	120	100
SXVWAR17SPI	40	170	150
SXVWAR22SPI	60	240	210
SXVWAR32SPI	120	330	280

## SOUPLEX 85 Sha surface

Dimension (mm)	Pretension
10x6 (Z)	0.5%
13x8 (A)	0.5%
17x11 (B)	1%
22x14 (C)	1.5%
32x19 (D)	1.5%



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVWAC10SPI	10	90	75
SXVWAC13SPI	25	100	80
SXVWAC17SPI	40	130	110
SXVWAC22SPI	60	180	150
SXVWAC32SPI	120	240	200



solid

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
-	-	-	-
SXVWAR13TPI	25	110	90
SXVWAR17TPI	40	160	140
SXVWAR22TPI	60	230	200
SXVWAR32TPI	120	300	250

## TOTALGRIP 70 Sha surface

Dimension (mm)	Pretension
10x6 (Z)	0.5%
13x8 (A)	0.5%
17x11 (B)	1%
22x14 (C)	1.5%
32x19 (D)	1.5%



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVWAC10TPI	10	80	70
SXVWAC13TPI	25	90	75
SXVWAC17TPI	40	120	100
SXVWAC22TPI	60	170	140
SXVWAC32TPI	120	230	190



Hardness <b>85 ShA</b>
Pretension <b>5 - 8%</b>
Temperature range <b>-20°C/+60°C</b>
Friction coefficient HDPE : <b>0.35</b> Steel : <b>0.6</b> Stainless steel : <b>0.7</b>
Roll length <b>30 m</b>



solid

## SOUPLEX brown

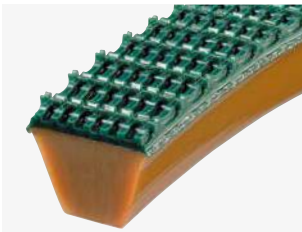


cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVM08	4	50	40
SXVM10	6	70	55
SXVM13	12	80	70
SXVM17	22	130	110
SXVM22	36	170	130
SXVM32	71	250	220

Dimension (mm)	Pretension
8x5 (M)	8%
10x6 (Z)	8%
13x8 (A)	8%
17x11 (B)	8%
22x14 (C)	8%
32x19 (D)	8%

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
-	-	-	-
SXVMCR10	4	50	40
SXVMCR13	8	60	50
SXVMCR17	15	90	70
SXVMCR22	25	130	110
SXVMCR32	50	180	150



solid

## SUPERGRIP coating

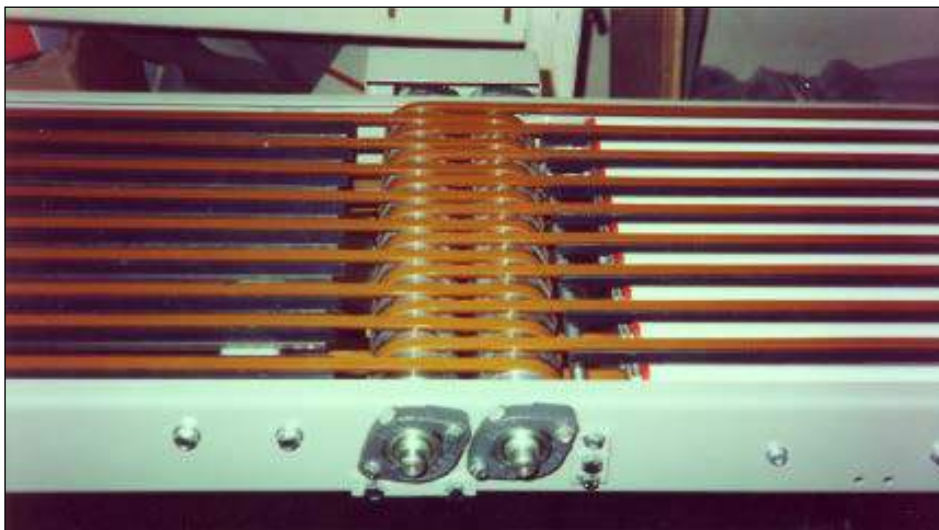


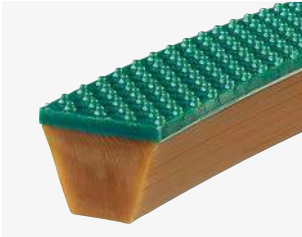
cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVM08NA	4	50	40
SXVM10NA	6	70	55
SXVM13NA	12	80	70
SXVM17NA	22	130	110
SXVM22NA	36	170	130
SXVM32NA	71	250	220

Dimension (mm)	Pretension
8x5 (M)	8%
10x6 (Z)	8%
13x8 (A)	8%
17x11 (B)	8%
22x14 (C)	8%
32x19 (D)	8%

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
-	-	-	-
SXVMCR10NA	4	50	40
SXVMCR13NA	8	60	50
SXVMCR17NA	15	90	70
SXVMCR22NA	25	130	110
SXVMCR32NA	50	180	150





solid

## SOUPLEX 85 Sha surface

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVM10SPI	10	80	70
SXVM13SPI	17	100	90
SXVM17SPI	29	150	130
SXVM22SPI	45	190	150
SXVM32SPI	85	280	240



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVMCR10SPI	8	70	60
SXVMCR13SPI	13	80	70
SXVMCR17SPI	22	110	90
SXVMCR22SPI	34	150	130
SXVMCR32SPI	64	200	170

## TOTALGRIP 70 Sha surface



solid

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVM10TPI	6	75	65
SXVM13TPI	12	90	80
SXVM17TPI	22	140	120
SXVM22TPI	36	180	140
SXVM32TPI	71	260	230



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SXVMCR10TPI	4	60	50
SXVMCR13TPI	8	70	60
SXVMCR17TPI	15	100	80
SXVMCR22TPI	25	140	120
SXVMCR32TPI	50	190	160

Hardness <b>70 Sha</b>
Pretension <b>10 to 15%</b>
Temperature range <b>-20°C/+40°C</b>
Friction coefficient HDPE : <b>0.5</b> Steel : <b>0.7</b> Stainless steel : <b>0.8</b>
Roll length <b>30 m</b>

## SUPERFLEX translucent



solid

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
SFVT06	1.8	25	20
SFVT08	3	35	30
SFVT10	4.5	55	45
SFVT13	8	70	60
SFVT17	13	110	90



cogged

Reference	Traction force (daN)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
-	-	-	-
-	-	-	-
SFVTCR10	3	40	30
SFVTCR13	5	50	40
SFVTCR17	10	75	60



## SOUPLEX 85 ShA or TOTALGRIP translucent 70 ShA PU surfaces

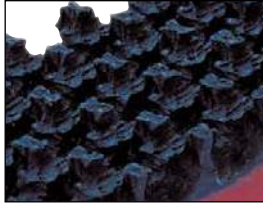


Reference	Colour	SMOOTH	STUDED	SAW-TOOTH	SG3	TRELLIS
Souplex	green/white	SLI	SPI	SUS	SSG	SLO
Totalgrip	translucent	TLI	TPI	TUS	TSG	TLO

## Supergrip coatings



GREEN PVC 40 ShA



BLACK RUBBER 60ShA

Reference	NA	NC
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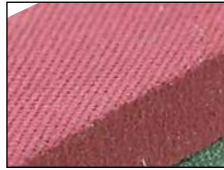
## Other surfaces



POLYESTER FELT



ARAMID FELT



LINATECH 40 ShA



PARABLOND 45 ShA

Reference	FP	FA	LI	PA
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CELLULAR FOAM 20 ShA



SYLOMER FOAM 40 ShA



RUBBER 30 ShA

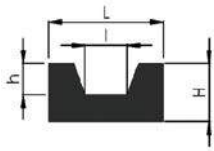


LYCRA 25 ShA

Reference	MC	MS	CA	LY
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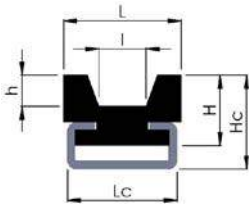


Manufactured out of High Density Polyethylene (H.D.P.E), our VIT/GLISS runners will both perfectly guide your belts and improve the load capacity of each belt by reducing its friction on its runner.



Type	Réf.	Dimensions courroie	L	H	l	h
T10	GT10	10 x 6	20	10	7	4
T13	GT13	13 x 8	20	12	9	5
T17	GT17	17 x 11	30	15	11	8
T22	GT22	22 x 14	35	20	14	10
T32	GT32	32 x 19	50	30	21	13

Delivered in bars of 3 m.



Type	Réf.	Dimensions courroie	L	H	l	h	Hc	Lc
TC10	GTC10	10 x 6	20	15	7	4	18	20
TC13	GTC13	13 x 8	20	18	9	5	22	20
TC17	GTC17	17 x 11	30	18	11	8	24	28
TC22	GTC22	22 x 14	35	25	14	10	30	38
TC32	GTC32	32 x 19	50	30	21	13	38	38

Delivered in bars of 3 m.



• White or blue HDPE runners for food industry.



• C-shape stainless steel rail.

• Special runners following our customers chemes.

• Consult us.

### Advantages :

- Perfect guiding of the belts.
- Low friction coefficient.
- Excellent resistance against abrasion.
- Shock-proof.
- Good resistance against corrosion and many chemical agents.
- Maximum continuous working temperature : +70°C.
- Extreme temperature limits : -40°C to +100°C.

### Attention :

Take care of the HDPE longitudinal dilatation, which is of 2 mm per metre for a 10°C increase in temperature.

## special runners for V belts



Out-of-center grooves and chamfer.



Thin edges.



Double grooves - multi grooves.

SPECIAL PROFILES ON DEMAND.





solid

Hardness <b>90 ShA</b>
Pretension <b>3 to 6%</b>
Temperature range <b>-20°C/+70°C</b>
Friction coefficient HDPE : <b>0.25</b> Steel : <b>0.5</b> Stainless steel : <b>0.6</b>
Roll length <b>30 m</b>

**DEL/FLEX red**



cogged

Reference	Traction force (daN)	Primitive pulley ø (mm) recommended	mini
DFVR13F2	28	160	140
DFVR17F2	50	240	200
DFVR22F2	81	300	240

Dimension (mm)	Pretension
13x15 (A)	5%
17x20 (B)	5%
22x25 (C)	5%

Reference	Traction force (daN)	Primitive pulley ø (mm) recommended	mini
DFVRCR13F2	22	120	100
DFVRCR17F2	35	170	140
DFVRCR22F2	56	220	190



solid

Hardness <b>85 ShA</b>
Pretension <b>1 to 1.5%</b>
Temperature range <b>-20°C/+60°C</b>
Friction coefficient HDPE : <b>0.35</b> Steel : <b>0.6</b> Stainless steel : <b>0.7</b>
Roll length <b>30 m</b>

**SOUPLEX white aramid reinforced**



cogged

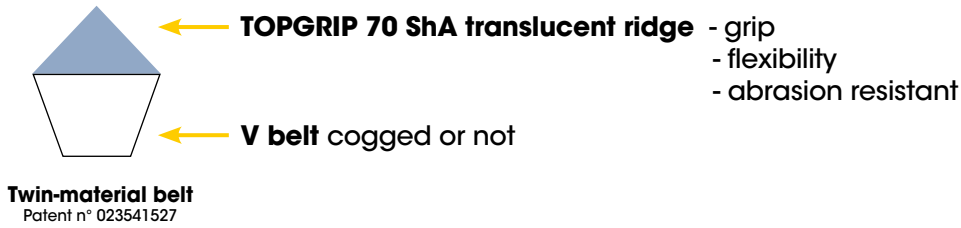
Reference	Traction force (daN)	Primitive pulley ø (mm) recommended	mini
SXVWAR13F2	-	-	-
SXVWAR17F2	50	200	170
SXVWAR22F2	64	250	220

Dimension (mm)	Pretension
13x15 (A)	-
17x20 (B)	1.5%
22x25 (C)	1.5%

Reference	Traction force (daN)	Primitive pulley ø (mm) recommended	mini
SXVWAC13F2	-	-	-
SXVWAC17F2	50	160	130
SXVWAC22F2	64	200	170







The TOPGRIP ridge can be welded on top of all our V belts, except DEL/ROC quality, resulting in a wide range of ridge-top V belts adapted to various conveying problems.

The technical characteristics (Traction force, elongation, friction coefficient...) of our TOPGRIP belts are similar to the characteristics of the base belts. Only the pulley diameter changes :

Roll length **30 m**

**DEL/SAN reinforced**



**H15 reinforced**



**SOUPLEX reinforced**



**DEL/FLEX**



**SOUPLEX**



Reference :	DSVBAR-TO		H15GAR-TO		SXVWAR-TO		DFVR-TO		SXVM-TO	
Diameter (mm)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
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	250	220	260	230	240	220

**DEL/SAN reinforced cogged**



**H16 reinforced cogged**



**SOUPLEX reinforced cogged**



**DEL/FLEX cogged**



**SOUPLEX cogged**



Reference :	DSVBAC-TO		H16GAC-TO		SXVWAC-TO		DFVRCR-TO		SXVMCR-TO	
Diameter (mm)	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini	Primitive pulley $\varnothing$ (mm) recommended	Primitive pulley $\varnothing$ (mm) mini
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	170	190	170	180	160





CONTINUOUS  
DYNAMIC  
BRUSHING.



**SOUPLEX or DEL/FLEX brush belts**



Quality	Reference	Dimension (mm)	Mini pulley ø (mm)	Height of bristles	Number of rows	Pitch of bristles (mm)	Cross section of bristle (mm)	Nylon bristles
DEL/FLEX	DFVR13BR	13 x 8 (A)	120	27	1	8	40/100	
SOUPLEX	SXVM17BR	17 x 11 (B)	180	60	2	8	40/100	
SOUPLEX	SXVM22BR	22 x 14 (C)	240	60	3	8	40/100	

**Special brush belts :**

- Height
- cross section
- pitch
- special brushing

*On demand.*



V belts with flights



High flights.



Flexible flights.



Flat welded triangles, for a minimum contact with the transported products.



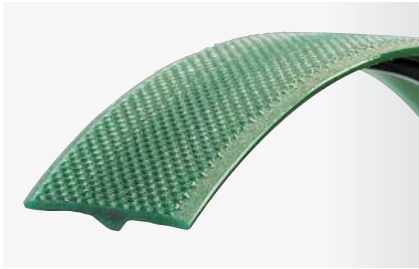
Tough welded flights (several heights possible).



SF7 flights.



# special profiles



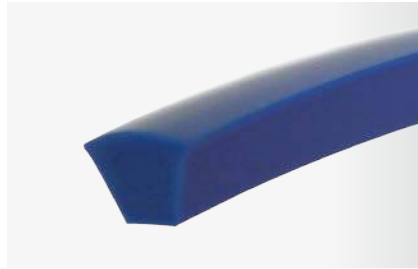
**ATC 63**

Smooth or embossed surface,  
25x2.3mm with guide 4x2.5mm.  
Colour : green, white or blue  
Hardness : 90 ShA



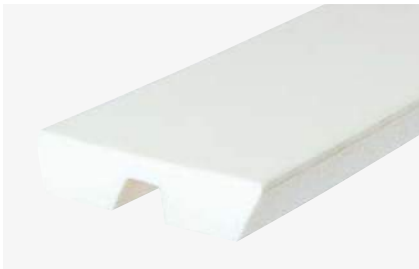
**ATC 12**

Smooth or embossed surface,  
12x2.1mm with guide 4.8x3mm.  
Colour : green, white or blue  
Hardness : 90 ShA

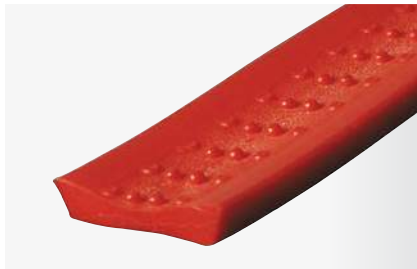


**SXVB08DO**

V belt,  
SOUPLEX blue 8 x 6.5mm with dome.  
Hardness : 87 ShA



Double V belt,  
30 x 8mm.  
Hardness : 85 or 90 ShA



**E238**

Corn belt, smooth or embossed,  
32 x 28 x 8mm.  
Hardness : 90 ShA



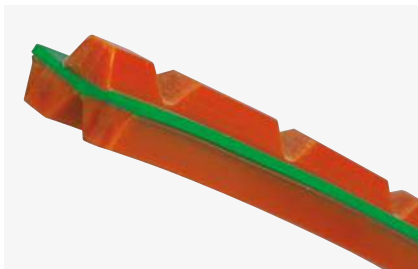
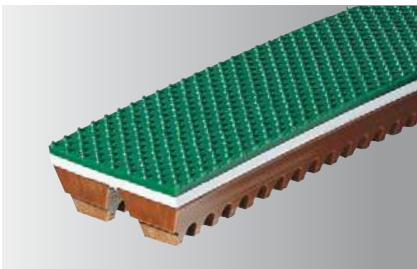
**U shape**

Covering profiles for  
wheels of steel wire saws  
Hardness : 85 ShA

# multiples V belts



Cross section,width, thickness, lengths and hardness on demand.



Other coatings.



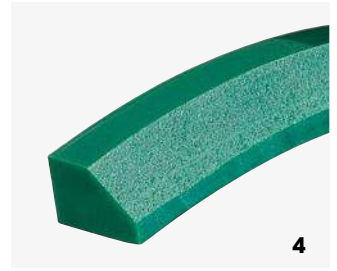
1  
Asymmetric ridge-top V belt.



2  
Machined ridge-top V belt.



3  
Machined V belt, to make it thinner and more flexible.



4  
Special machined profiles on demand.



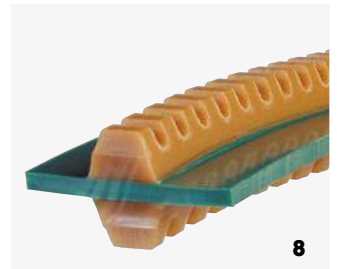
5  
V belt with rectangular groove.



6  
Rectangular belt with V groove.



7  
V belt with machined surface.



8  
DEL/FLEX flat belt with two opposite V guides for alternate operation.



9  
V belt with machined V groove (several depth possible).



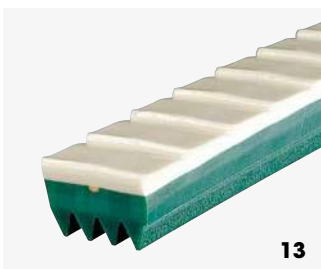
10  
Dome-shaped V belt.



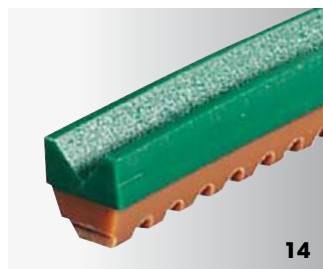
11  
V belt with round groove (several depth possible).



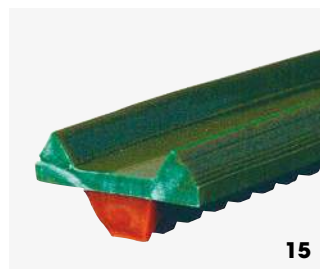
12  
V belt machined on demand.



13  
Special belt with sawtooth surface and machined POLY-V bottom grooves.



14  
V belt with V shape machine surface.



15  
V belt with welded surface and V hold-in edges.



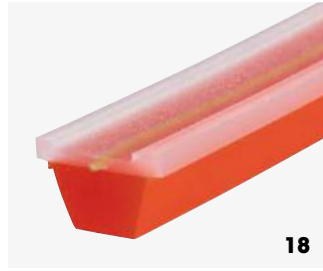
16  
V belt with welded surface and round hold-in edges.





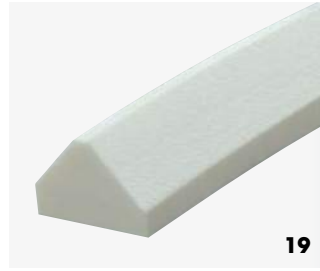
17

V belt with welded half round belt.



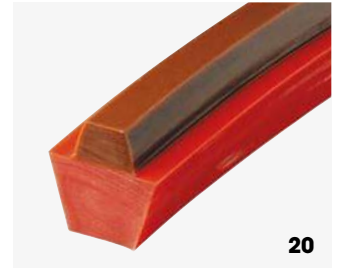
18

V belt with machined surface and aramid reinforcement.



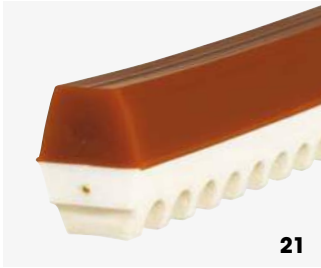
19

Asymmetric triangle belt.



20

Hexagonal asymmetric SOUPLEX belt.



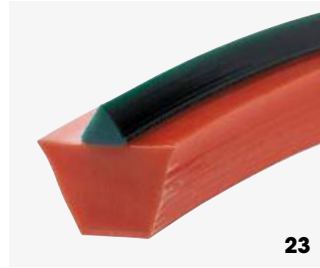
21

Cogged hexagonal belt.



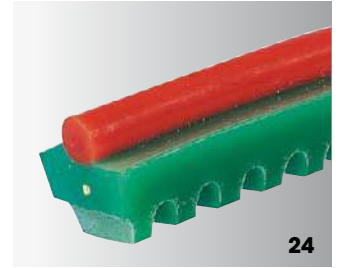
22

Flat belt with SR5 guide welded apex down.



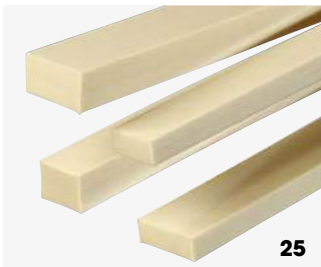
23

V belt with welded SF7 ridge.



24

Round belt welded on top of a V belt.



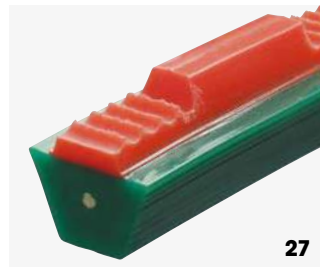
25

Rectified belt for mobile moulding.



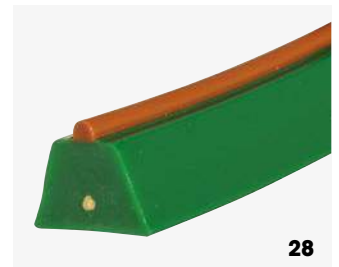
26

V belt with surface and machined hold-in edges.



27

Hexagonal asymmetric belt with special cogging.



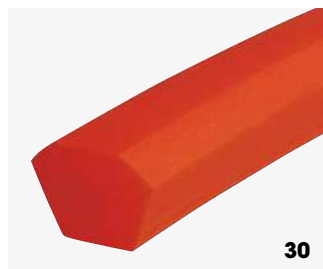
28

Round belt welded on the small base of a V belt.



29

V belt with round edges.



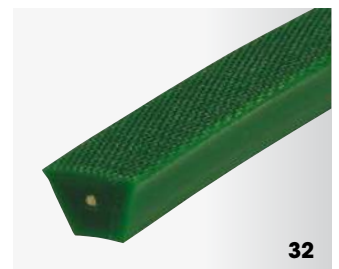
30

Chamfered V belt.



31

V belt with out-of-center surface.



32

Embossed V belt.



standard welding tools



**M50 welding iron**

Thermostated, for round, V and flat belts up to 50 mm wide. 200 W.



standard weld



**J60 welding clamp**

For round and V belts up to 22 x 14 mm.



For round and V belts



**J25 welding clamp**

For V belts up to 25 x 16 mm.



**Tensioning tools**

For round and V belts. Includes 2 clamping dies and 1 winch with lever.



## standard welding tools



### M 51 welding iron with teflon-covered blade

Thermostated, for round and V belts up to 22 x 14 mm. 200 W.



## ing tool case



### J50 welding clamp

For round and flat belts up to 50 mm wide.



### J15 welding clamp

Small clamp for round belts up to diam. 10 mm.

### P10 cutting clamp

To clean weldings.



### S135 cutter

For 90° and 45° cuttings.

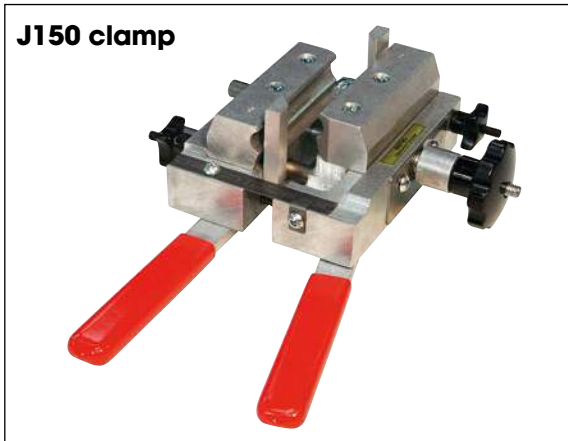


Includes :

- 1 **M51** welding iron
- 1 **J50, J60** or **J15** welding clamp
- 1 **S135** cutter
- 1 **P10** cutting clamp

## OVERLAP welding tools

**J150 clamp**

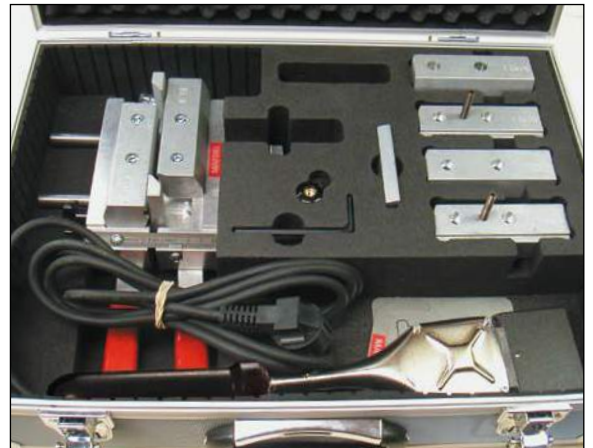


+ pairs of dies for round and V belts

**M150 iron**



With Teflon blade



### OVERLAP tool case

For OVERLAP welding

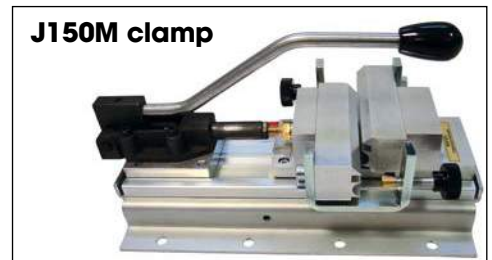
Includes :

- 1 **M150** welding iron
- 1 **J150** welding clamp
- 1 pair of dies of your choice
- 1 **S135** cutter
- 1 double-side adhesive tape

**Special tool case including J150M welding clamp and M150SN iron with electronic temperature regulation**

Recommended for round and reinforced DEL/ROC d. 9.5 - 10 mm and d.12 - 12.5 mm

**J150M clamp**

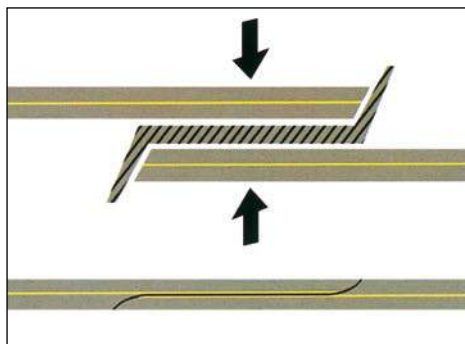


## OVERLAP welding

**Welding that overlaps both ends of the belt.**

**Can be adapted to any MAFDEL belt :**

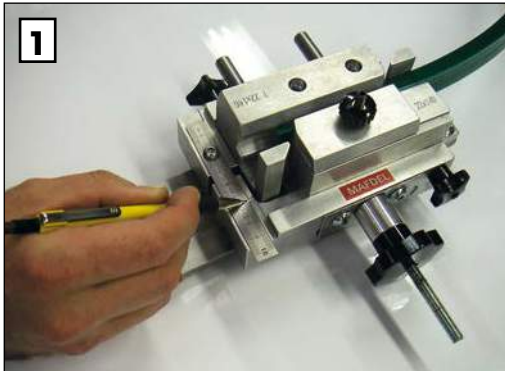
- **ROUND** belts.
- **V belts, cogged or not, with or without a coating, ridge-top and above all reinforced.**



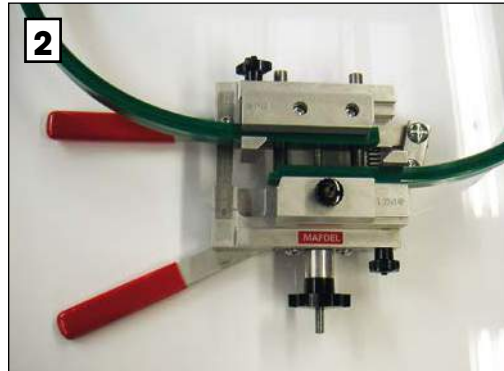
- Stronger joining
- Overlapping of both ends of the reinforcement
- Simple and fast
- No previous special cutting
- Higher traction resistance
- Increased load capacity
- Homogeneity of the welding
- Safe process
- Welding on site without dismantling the conveyor



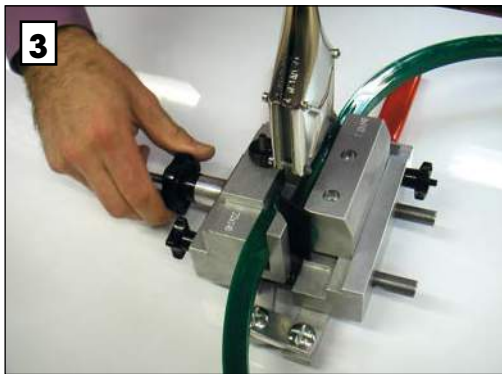
## OVERLAP welding process



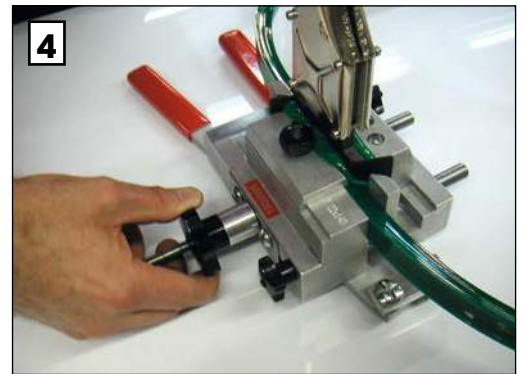
**1**  
Cut the belt 70 mm longer than its theoretical length. Put the top end of the belt into the corresponding die of the clamp and close it. Read the X measure at the right of the reference pin, on the small side ruler.



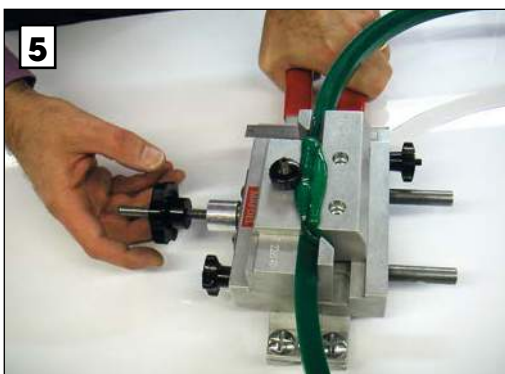
**2**  
Open the clamp and place the second end in.



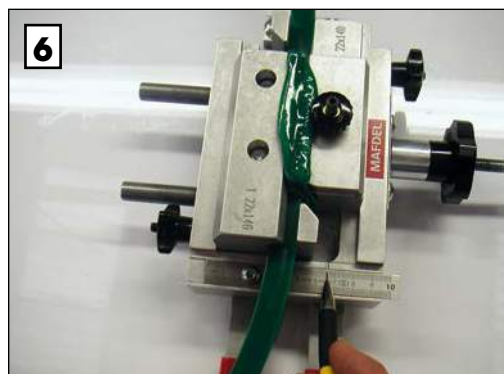
**3**  
When the M150 iron is warm enough, insert it between both ends of the belt.



**4**  
Tighten little by little the side screw, until the previously noted X measure gets to the left of the reference pin.



**5**  
Loosen the side screw with your right hand, keeping the clamp closed with your left hand. Then, quickly, open the clamp, remove the welding iron, and close the clamp again. Both fused ends will get in contact and weld.

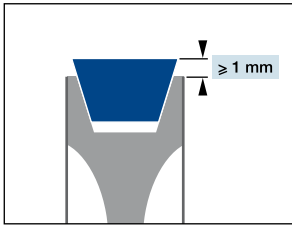


**6**  
Keep the clamp closed with the side screw, and let the belt cool 5 to 10 mn. The right side of the reference pin should then show the X measure on the small ruler.



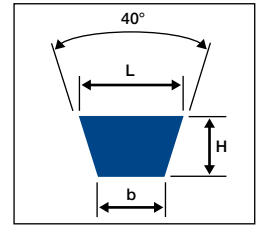
**7**  
Remove the belt and clean the welding point.

## advice / recommendations

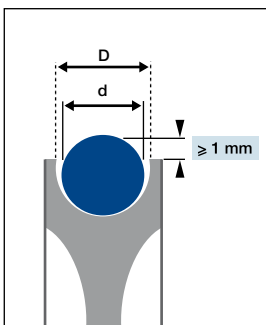


Belt section	Z	A	B	C	D
L x H (mm)	10 x 6	13 x 8	17 x 11	22 x 14	32 x 19
b (mm)	5.6	7.2	9	11.8	18.2

A V belt is driven by its sides. The belt must come off its pulley by 1mm, so that the product conveyed may not touch the pulley.



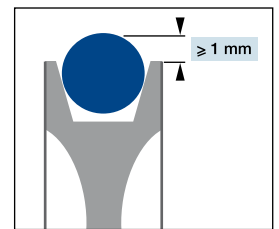
## driving round belts



A round belt is driven by a round-groove pulley. The diameter of this round groove should be 1mm greater than the diameter of the belt for smaller round belts, and 2mm greater for round belts from diam. 12 mm on.

$d < 12 \text{ mm}$      $D = d + 1 \text{ mm}$   
 $d \geq 12 \text{ mm}$      $D = d + 2 \text{ mm}$

If the belt runs in wet or greasy conditions, we recommend that the round belt be driven by a V-groove pulley. It will substantially improve the efficiency of the driving and will prevent the belt from slipping.



Diameter of the round belt d (mm)	3 to 6	8	10	12	15	18
V groove of the driving pulley L x H (mm)	-	10 x 6 (Z)	13 x 8 (A)	17 x 11 (B)	17 x 11 (B)	22 x 14 (C)

## guiding round and V belts

We recommend the using of HDPE runners. They will improve the load capacity of your belts, thanks to a very low friction coefficient. For example, the friction coefficient on a HDPE runner is twice as low as on a steel runner. The belt would thus bear twice as much weight on a HDPE runner than on a steel runner.



The diameter of the round groove should be 1 to 2 mm greater than the diameter of the belt.

V belts slip on their small base. The V groove of the runner should be 1 mm wider than the belt. This will prevent the V belt from being blocked into its runner.

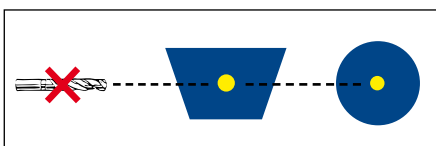


We recommend that the extremities of the runner be chamfered. This avoids any risk of fits and starts as the belt arrives on its runner. This recommendation is even more important if your belt is cogged.

## parallel belts

For belts mounted in parallel, it is strongly recommended that the return pulleys run independently. This compensates for differences in linear speed between the belts, thus avoiding abnormal tension which might cause jerky operation.

## welding reinforced belts



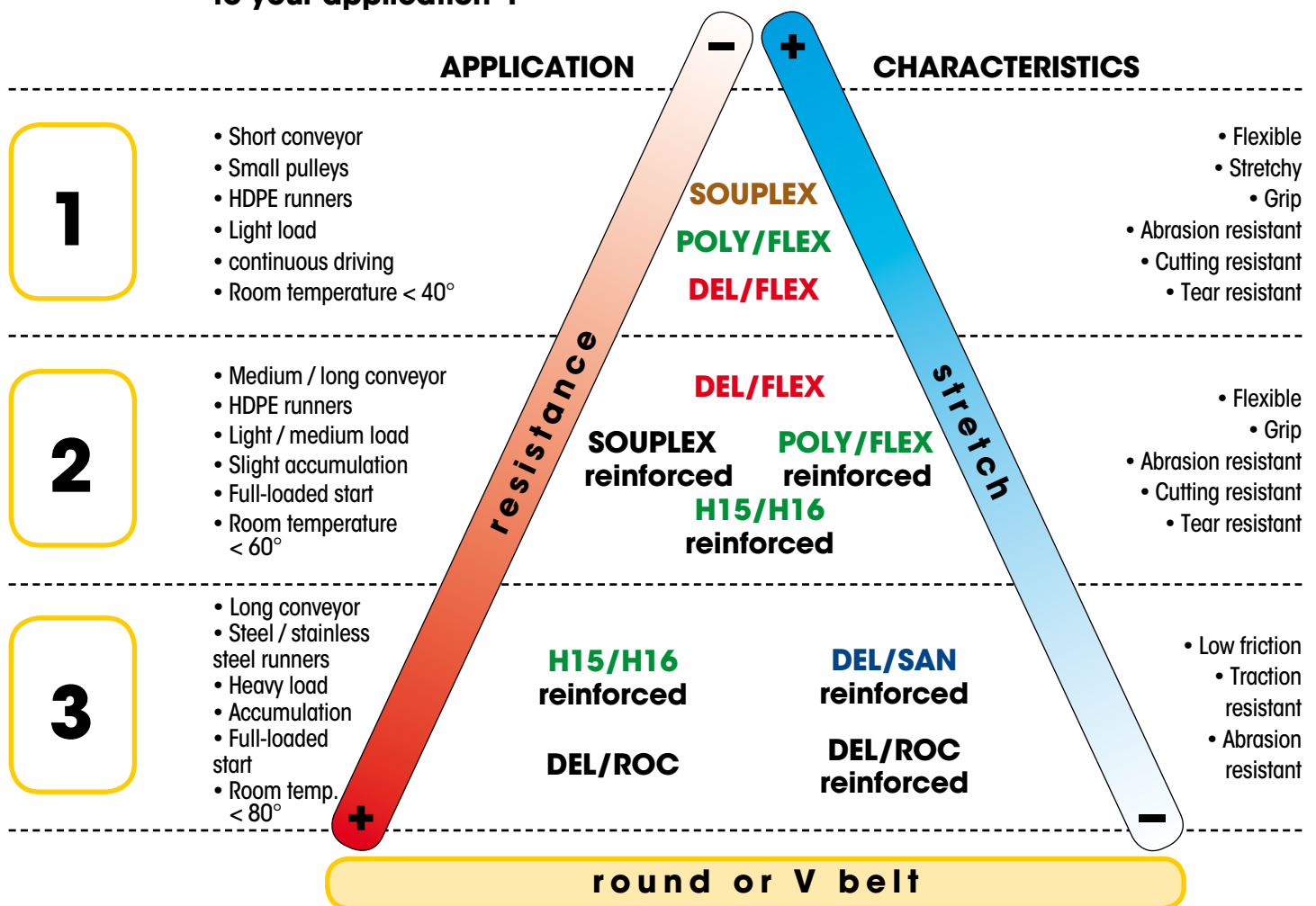
Our reinforced belts are welded in the same way as the other non-reinforced belts, **WITHOUT REMOVING THE REINFORCEMENT**. This avoids all the problems associated with drilling. Our special reinforcement does not fuse at the welding temperature of our thermostated irons (260°C). There is therefore no danger of contaminating the weld.



To choose the right belt, you need to know the characteristics of the conveyor on which it will run, its working conditions and the product it will convey.

CONVEYOR	PRODUCT TRANSPORTED	WORKING CONDITIONS
length of the conveyor	maximum transported weight	continuous or stop-and-go driving
diameter of the pulleys	nature of the product	accumulation
type of support	spreading of the weight along the conveyor	other efforts, pressure, etc.
length of the tensioning system	temperature of the product	room temperature
number of belts		
inclination		

Choose up, amongst the 3 following categories, which one best matches to your application :



Into the selected category, choose the quality of belt whose general characteristics, such as : **resistance, hardness, friction coefficient, stretch, operating temperature...** are the closest to the ones your are looking for.

Exemples :

- In case of accumulation of the products transported on the belt, choose the quality with the lowest friction coefficient.
- To convey heavy loads, choose the strongest and less stretchy quality.

*NB : The stretch of low-hardness belts (85 and 90 shA), such as SOUPLEX, POLY/FLEX and DEL/FLEX, allows you to mount them with pretension (shortened of a length that corresponds to the elongation that the belt would need to work properly), and in some cases to avoid the using of a tensioning system.*

*The mounting of the hardest belts (95 and 100 shA) and/or reinforced belts requires the using of a tensioning system or tensioning tools (page 36).*



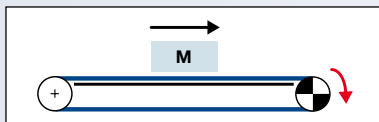
# conveying / simplified calculations

SYMBOLE	MEASURES	DESIGNATION	BELT CHARACTERISTIC (in catalogue)
M	Kg	Transported load	
Mmax	Kg	Maximum load limit per belt	
Mtotal	Kg	Maximum load limit on all the belts	
Mr	Kg	Weight of all the tangentially driven rollers	
L	m	Conveyor length	
H	m	Conveyor height	
F	daN	Minimum traction force for the continuous driving of the load <b>M</b>	
F'	daN	Minimum traction force for full-loaded starts with the load <b>M</b>	
Ft	daN	Traction force of the chosen belt	X
i	%	Stretch corresponding to the traction force of the belt <b>Ft</b>	X
Cfp		Friction coefficient on the transported product on the belt	
Cf		Friction coefficient of the belt on its runner	X
Cr		Rolling coefficient of the belt on its support ( 0.05 to 0.1 according to the conditions: smooth support, bearings ...)	
Cs		Safety coefficient	

## type of conveyor

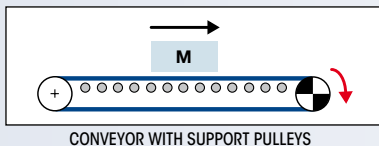
## simplified calculation of the needed traction force to drive a specific load

## simplified calculation of the maximum load limit per belt



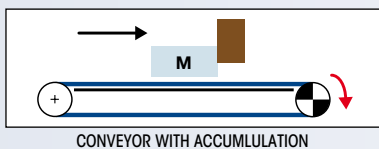
$$F = M \times Cf$$

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



$$F = M \times Cr$$

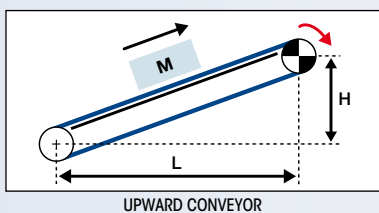
$$M_{max} = Ft / Cr$$



In case of accumulation, take into account the friction coefficient of the product to convey on the belt. You will add this data to the friction coefficient of the belt on its runner :

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

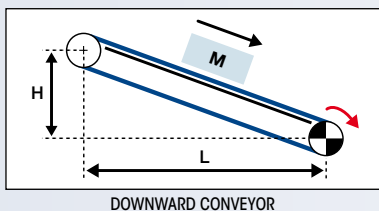
$$M_{max} = Ft / (Cf + Cfp)$$



If your conveyor is inclined, consider the difference in height :

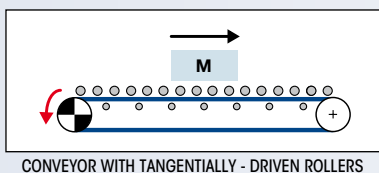
$$F = M \times Cf + M \times (H / L)$$

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



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

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



Always take into account the weight of all the tangentially driven rollers in your calculations.

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

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

For all type of conveyors, in case of **STOP-AND-GO DRIVING** (full-loaded starts) :

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

$$F' = F \times 2$$

As you calculate **Mmax**, only take into account half the traction force of the selected belt.

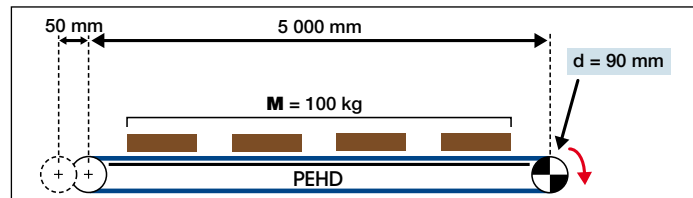
Replace **Ft** by **Ft/2**

## 1/ EXISTING MACHINE

CONSIDER THE CHARACTERISTICS OF THE CONVEYOR, OF THE TRANSPORTED PRODUCT, AS WELL AS THE GENERAL WORKING CONDITIONS.

CHOOSING THE MOST ADEQUATE BELT.

Continuous conveying of wood boards on two parallel 17 x 11 mm V belts sliding on HDPE runners.



### Choosing the belt category (page 41)



### Choosing the quality of the belt



### Calculating the maximum load limit

We strongly recommend to respect the recommended pulley diameter. Too small pulleys would damage the belt and reduce its life time.

d = 90 mm

	SOUPLEX reinforced & cogged 17 x 11 mm	H16 reinforced & cogged 17 x 11 mm
Ø recommended (mm)	110	130
Ø mini (mm)	<b>90</b>	110



### Calculating the maximum load limit

Total load on the conveyor (kgs)      M = 100 kgs

Traction force of the selected belt  
Corresponding elongation  
Friction coefficient on HDPE  
Maximum load limit per belt  
Maximum load limit on 2 belts  
Safety factor

	SOUPLEX reinforced & cogged 17 x 11 mm	H16 reinforced & cogged 17 x 11 mm
Ft (daN)	40	50
f (%)	1	1.5
Cf	0.35	0.25
Mmax (Kg) = Ft / Cf	114	200
Mtotal (Kg) = 2 x Mmax	<b>228</b>	<b>400</b>
Cs = Mtotal / M	<b>2.3</b>	<b>4</b>



## SOLUTIONS

Both selected belts could easily convey this load of 100 kg. Nevertheless, the H16 17 x 11 mm V belt requires much bigger pulleys than the 90 mm of the described conveyor. On the other hand, the reinforced and cogged 17 x 11 mm SOUPLEX can bend around pulleys down to 85 mm diameter.

The most appropriate belt for this application is our **reinforced and cogged 17x11mm SOUPLEX, mounted with 1% pretension.**

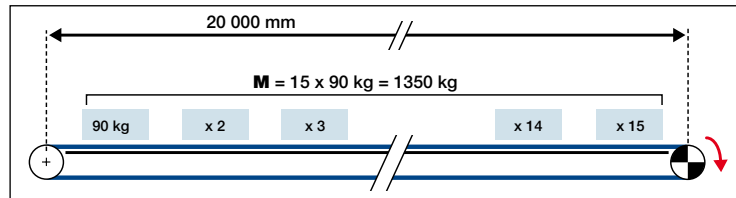


## 2/ PROTOTYPE

CHOOSING THE RIGHT BELT ACCORDING TO CONVEYOR DESIGNER'S SPECIFICATIONS.

DESIGNING A CONVEYOR IN ACCORDANCE WITH THE CHARACTERISTICS OF A PARTICULAR BELT.

**Conveyor for an industrial cheese-dairy conveying 15 round cheeses of 90 kg each along 20m. Stop-and-go driving.**



### choosing the belt category (page 41)

Long conveyor  
Heavy load  
Full-Loaded starts

**CATEGORY 3**

### choosing the quality of the belt

High traction force  
Low friction coefficient  
Easy to clean

**reinforced belt  
DEL/ROC or DEL/SAN  
round belt**

### calculating the traction force to drive this load

**Total load (kg)  
on the conveyor**

**M = 1350 kg**

	reinforced & round DEL/ROC			reinforced & round DEL/SAN		
	on runner stain.steel	HDPE	on support pulleys	on runner stain.steel	HDPE	on support pulleys
Friction coefficient of the belt <b>Cf</b>	0.5	0.15	0.1	0.55	0.2	0.1
Continuous traction force <b>F (daN) = M x Cf</b>	675	203	135	743	270	135
Traction force for full-Loaded start <b>F' (daN) = F x 2</b>	<b>1350</b>	<b>405</b>	<b>270</b>	<b>1486</b>	<b>540</b>	<b>270</b>

### choosing the section and the number of belt(s)

Choosing, among the selected category, how many belts and of which section are necessary to reach the necessary traction force, taking into account safety factor of about **1.5**.

	reinforced & round DEL/ROC ø 18 mm			reinforced & round DEL/SAN ø 18 mm		
	Traction force : Ft = 200 daN			Traction force : Ft = 125 daN		
traction force for full-Loaded starts <b>F' (daN)</b>	1350	<b>405</b>	<b>270</b>	1486	540	<b>270</b>
Necessary number of belts <b>Nbre = F' / Ft</b>	7	<b>3</b>	<b>2</b>	12	5	<b>3</b>
Total traction force <b>Ftotal (daN) = Nbre x Ft</b>	1400	<b>600</b>	<b>400</b>	1500	625	<b>375</b>
Safety coefficient <b>Cs = Ftotal / F'</b>	1.04	<b>1.5</b>	<b>1.5</b>	1.01	1.16	<b>1.4</b>

### SOLUTIONS

Several options are possible

**3 reinforced DEL/ROC round belts d.18mm on HDPE runner  
2 reinforced DEL/ROC round belts d.18mm on support pulleys  
3 reinforced DEL/SAN round belts d.18mm on support pulleys**

Consider the recommended pulley diameters :

Reinforced DEL/ROC D.18 mm	Reinforced DEL/SAN D. 18 mm
ø 360 mm	ø 250 mm

The traction forces of the belts selected through our example (200 daN for reinforced DEL/ROC diam. 18mm and 125 daN for reinforced DEL/FLEX diam. 18mm) are indicated in our catalogue at the following respective elongations: 2% and 1.5%. We strongly recommend to consider these tensions while mounting the belts on the machine, for the conveyor to work properly.



