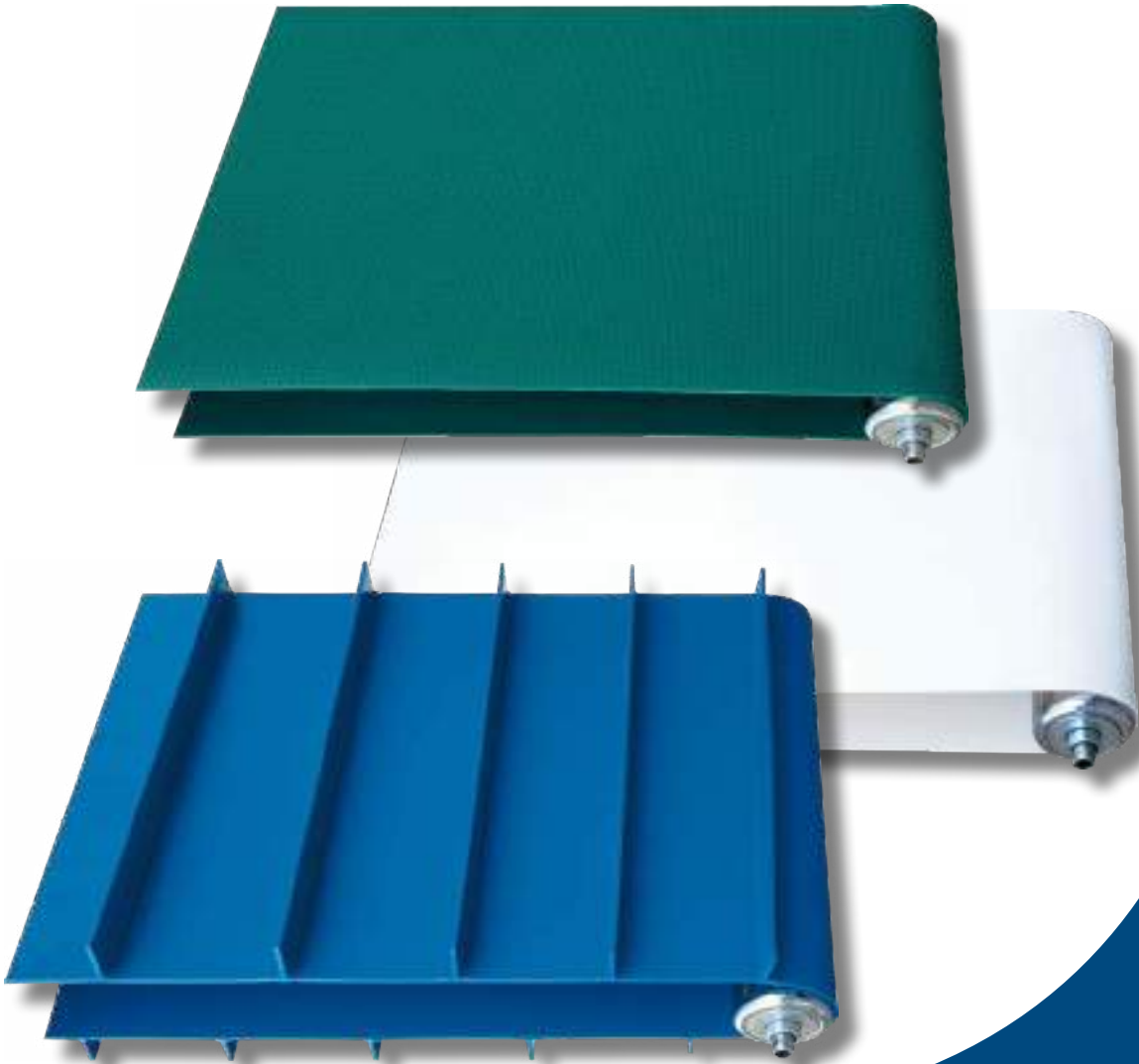
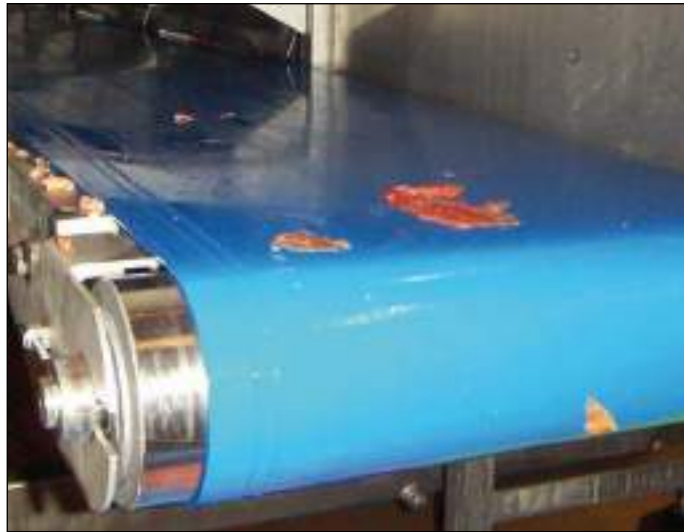


**thermoweldable** CONVEYOR BELTS



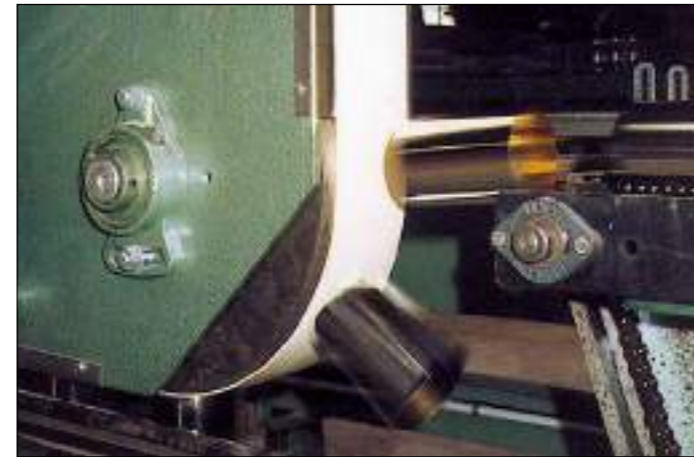
food industry



tile works • brick works

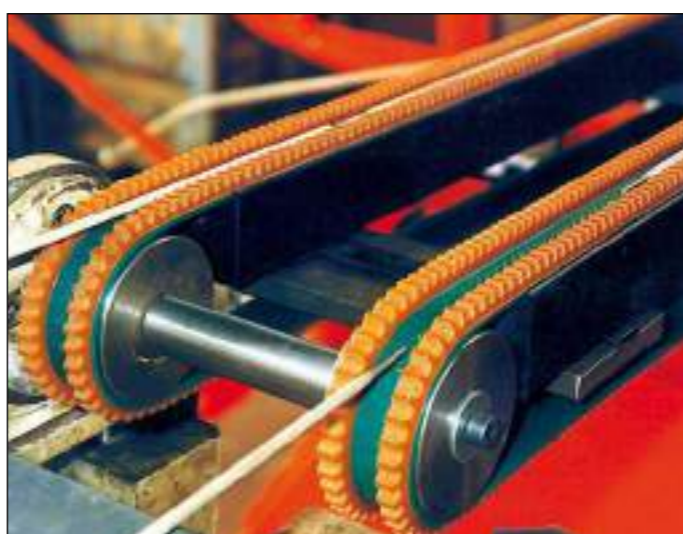


metal packaging manufacturer



wood industry





overview



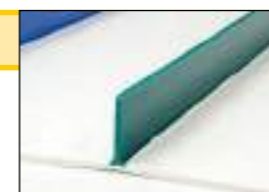
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conveyor belting



<b>The Mafdel range of conveyor belts</b>	<b>6</b>
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profiles



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special belts



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flat belting



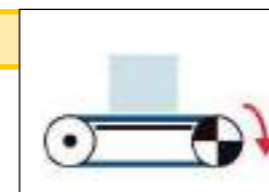
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Our conveyor and flat thermoweldable belts provide many advantages in a wide range of applications:



**ease of use**

- Easy on-site welds without machinery dismantling.
- Fast repairs with minimised down-time.
- Convenient length adjustment by lengthening or shortening.
- Easy repair of damaged belts.

**main characteristics**



- High resistance to abrasion.
- High resistance to tearing, wear and cutting.
- High resistance to oil, fat and solvents.
- Increased durability compared to plied conveyor belts.

**food quality range**



- Mono-material products, hydrolysis and rot-resistant.
- Smooth surfaces for reduced bacteria propagation.
- Non-fraying.
- Excellent oil, animal and vegetable fat resistance.
- Suitable for use in conjunction with the latest cleaning and sanitation protocols.
- Extremely quick and easy to clean.

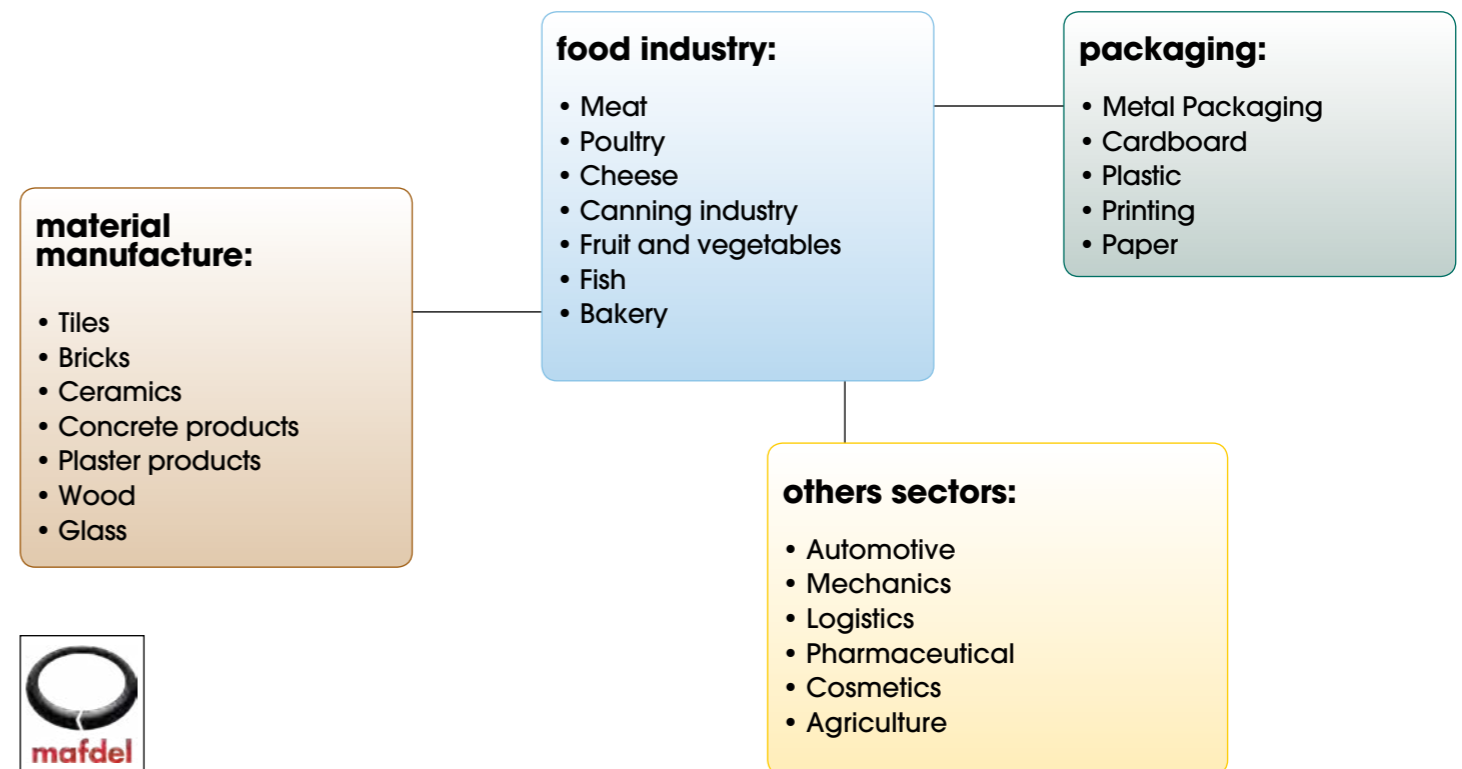


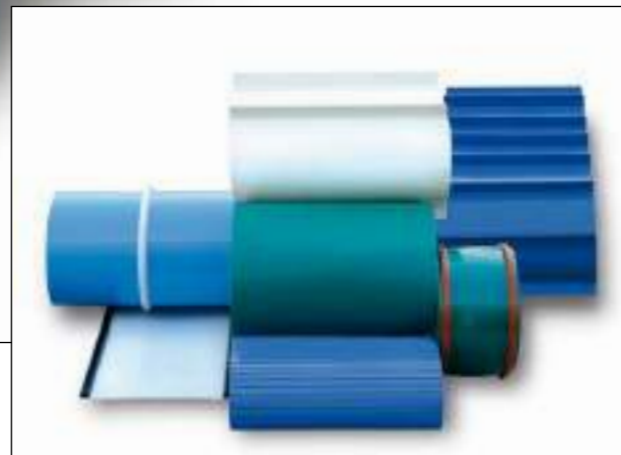
Comparison of different generic belt types:

	MAFDEL belts	Regular plied belts	Modular belts
Ease of installation	+	-	+
Chemical and hydrocarbon resistance	+	-	+
Abrasion and cut resistance	+	-	-
Ease of maintenance	+	-	-
Possibility of embossed surfaces	+	+	-
Ease of cleaning	+	-	-
Low noise operation	+	+	-
Compliant with the food standards	+	-	+

applications

Mafdel belts are suitable for a wide range of applications in many industries, such as:





From time to time, MAFDEL may add, modify or delete one or several products from its range without notice. All information within this catalogue is given as an indication of the range and shall in no way represent a contract or MAFDEL's liability.

mafdel	Bottom side	Top side	Embossing on top side	Maximum width (mm)	Thickness (mm)							
					1	1.5	2	2.5	3	4	5	
<b>DEL/ROC</b>	100 ShA 55 ShD	Smooth	Smooth	No	650							
<b>DEL/ROC</b>	100 ShA 55 ShD	Smooth	Smooth	No	1000							
<b>DEL/ROC</b>	100 ShA 55 ShD	Diamond-embossed	Smooth	No	1000							
<b>DEL/FLEX</b>	93 ShA	Smooth	Smooth	Yes	650							
<b>DEL/FLEX</b>	93 ShA	Smooth	Smooth	Yes	650							
<b>DEL/FLEX</b>	93 ShA	Smooth	Smooth	Yes	1000							
<b>DEL/FLEX</b>	93 ShA	Diamond-embossed	Smooth	Yes	1000							
<b>DEL/FLEX</b>	93 ShA	Reinforcement ply	Smooth	Yes	650							
<b>SOUPLEX</b>	85 ShA	Smooth	Smooth	Yes	650							
<b>SOUPLEX</b>	85 ShA	Smooth	Smooth	Yes	650							
<b>SOUPLEX</b>	85 ShA	Smooth	Smooth	Yes	650							
<b>TOTALGRIP Surface</b>	70 ShA	Smooth	Smooth	Yes	380							
<b>Special PRIMAFLEX</b>	90 ShA	Smooth or Brushed	Smooth	Yes	380							

All DEL/ROC, DEL/FLEX and SOUPLEX conveyor belts are available with guides. Please, contact us with your requirement.



Available embossing on DEL/FLEX and SOUPLEX conveyor and flat belts: non-slip studded, saw-tooth, SG3 or diamond. Maximum width: 380mm.



non-slip studded (PI)



sawtooth (US)



SG3 (SG)



diamond (LO)

**DEL/ROC ivory**



**Characteristics**

- Food quality.
- Easy to clean.
- Resistant to abrasion.
- Resistant to chemicals.
- High traction rating.
- Low friction coefficient on conveyor bed supports.

**Applications**

- Medium or heavy loads.
- Possible accumulation.
- Full-load start.
- Suitable for long conveyor centres.

**Compatible welding processes**

- Butt welded with Mafdel tools.
- Welded with hot air gun.
- With mechanical fasteners.

**Guides, profiles, holes... on demand.**



**DEL/ROC ivory**

Material	<b>polyester elastomer</b>
Colour	<b>ivory</b>
Bottom side	<b>smooth</b>
Top side	<b>smooth</b>
Hardness	<b>100 ShA - 55 ShD</b>

Traction rating	
at 0.5% of tension	<b>9 daN/cm<sup>2</sup> of section</b>
at 1% of tension	<b>18 daN/cm<sup>2</sup> of section</b>
at 1.5% of tension	<b>27 daN/cm<sup>2</sup> of section</b>
Installation tension	<b>0.5 to 2% dependent upon conditions</b>
Extreme temperatures	<b>-30°C/+90°C</b>

Friction coefficient on	
HDPE	<b>0.15 - 0.2</b>
Steel	<b>0.35 - 0.4</b>
Stainless steel	<b>0.5</b>



Reference					
Flat belt width < 100mm	Conveyor belt width ≥ 100mm	Belt thickness (mm)	Maximum width (mm)	Minimum drum ø (mm)	Weight (kg/ m <sup>2</sup> )
<b>DRPI1.5</b>	<b>DRBI1.5</b>	1.5	<b>650</b>	<b>30</b>	<b>1.8</b>
<b>DRPI2</b>	<b>DRBI2</b>	2	<b>650</b>	<b>40</b>	<b>2.4</b>
<b>DRPI2.5</b>	<b>DRBI2.5</b>	2.5	<b>650</b>	<b>60</b>	<b>3</b>
<b>DRPI3</b>	<b>DRBI3</b>	3	<b>650</b>	<b>80</b>	<b>3.6</b>
<b>DRPI4</b>	<b>DRBI4</b>	4	<b>650</b>	<b>160</b>	<b>4.8</b>
<b>DRPI5</b>	<b>DRBI5</b>	5	<b>650</b>	<b>200</b>	<b>6</b>

**DEL/ROC belts with guide**  
minimum drum ø (mm)

Belt thickness (mm)	DEL/ROC guide (100 ShA)					DEL/ROC cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	-	180	220	-	-	-	140	180	-	-
2.5	-	190	240	280	-	-	160	190	230	-
3	-	210	260	310	400	-	180	200	270	330
4	-	240	280	360	420	-	200	220	310	350
5	-	270	310	420	480	-	230	260	370	410

Belt thickness (mm)	V/FLEX guide (PVC 60 ShA)					V/FLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	70	80	100	-	-	-	70	90	-	-
2.5	80	100	110	130	-	-	90	100	110	-
3	110	130	140	150	200	-	110	120	130	150
4	160	180	200	210	220	-	160	180	190	200
5	200	210	220	240	250	-	200	210	230	240



**DEL/ROC blue**



Reference:  
**DR-B2EM**  
**DR-B3EM**  
**DR-B4EM**

**Characteristics**

- Food quality.
- Easy to clean.
- Resistant to abrasion.
- Resistant to chemicals.
- High traction rating.
- Low friction coefficient on conveyor bed supports.

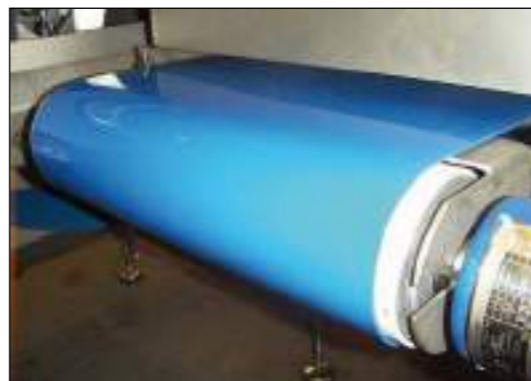
**Applications**

- Medium or heavy loads.
- Possible accumulation.
- Full-load start.
- Long conveyor centres.

**Compatible welding processes**

- Butt welded with Mafdel tools.
- Welded with hot air gun.
- With mechanical fasteners.

**Guides, profiles, holes... on demand.**



**Smooth or DIAMOND-EMBOSSED bottom side**

- Reduced friction in wet or fat conditions.
- Reduced traction efforts.



**DEL/ROC blue**

Material	<b>polyester elastomer</b>
Colour	<b>blue</b>
Bottom side	<b>smooth or diamond-embossed</b>
Top side	<b>smooth</b>
Hardness	<b>100 ShA - 55 ShD</b>
Traction rating	
at 0.5% of tension	<b>9 daN/cm<sup>2</sup> of section</b>
at 1% of tension	<b>18 daN/cm<sup>2</sup> of section</b>
at 1.5% of tension	<b>27 daN/cm<sup>2</sup> of section</b>
Installation tension	<b>0.5 to 2% dependent upon conditions</b>
Extreme temperatures	<b>-30°C / +90°C</b>
Friction coefficient on	
HDPE	<b>0.15 - 0.2</b>
Steel	<b>0.35 - 0.4</b>
Stainless steel	<b>0.5</b>



Reference					
Flat belt width < 100mm	Conveyor belt width ≥ 100mm	Belt thickness (mm)	Maximum width (mm)	Minimum drum ø (mm)	Weight (kg / m <sup>2</sup> )
<b>DRPB2</b>	<b>DRBB2</b>	2	<b>1000</b>	<b>40</b>	<b>2.4</b>
<b>DRPB3</b>	<b>DRBB3</b>	3	<b>1000</b>	<b>80</b>	<b>3.6</b>
<b>DRPB2EM</b>	<b>DRBB2EM</b>	2	<b>1000</b>	<b>40</b>	<b>2.4</b>
<b>DRPB3EM</b>	<b>DRBB3EM</b>	3	<b>1000</b>	<b>80</b>	<b>3.6</b>
<b>DRPB4EM</b>	<b>DRBB4EM</b>	4	<b>1000</b>	<b>160</b>	<b>4.8</b>



**DEL/ROC belts with guide**  
 minimum drum ø (mm)

Belt thickness (mm)	DEL/ROC guide (100 ShA)					DEL/ROC cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	-	180	220	-	-	-	140	180	-	-
3	-	210	260	310	400	-	180	200	270	330

Belt thickness (mm)	V/FLEX guide (PVC 60 ShA)					V/FLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	70	80	100	-	-	-	70	90	-	-
3	110	130	140	150	200	-	110	120	130	150



**DEL/FLEX green**



**Characteristics**

- Standard quality.
- Easy to clean.
- Resistant to abrasion.
- Resistant to cutting.
- Resistant to tearing.
- Resistant to chemicals.
- Flexible.



**Applications**

- Medium loads.
- Small drum Ø.
- Abrasive conditions.
- Troughed application.

**Suitable joining processes**

- Butt welded with Mafdel tools.
- Welded with hot air gun.
- With plied belt heat press.
- With mechanical fasteners.

**Guides, profiles, holes... on demand.**



**DEL/FLEX green**

Material	<b>polyurethane</b>
Colour	<b>green</b>
Bottom side	<b>smooth</b>
Top side	<b>smooth</b>
Hardness	<b>93 ShA</b>
Traction rating	
at 1% of tension	<b>10 daN/cm<sup>2</sup> of section</b>
at 2% of tension	<b>15 daN/cm<sup>2</sup> of section</b>
at 3% of tension	<b>20 daN/cm<sup>2</sup> of section</b>
Installation tension	<b>2 to 4% dependent upon conditions</b>
Extreme temperatures	<b>-20°C/+70°C</b>
Friction coefficient on	
HDPE	<b>0.25</b>
Steel	<b>0.5</b>
Stainless steel	<b>0.6</b>



Reference					
Flat belt width < 100mm	Conveyor belt width ≥ 100mm	Belt thickness (mm)	Maximum width (mm)	Minimum drum ø (mm)	Weight (kg/ m <sup>2</sup> )
<b>DFPG1.5</b>	<b>DFBG1.5</b>	1.5	<b>650</b>	<b>20</b>	<b>1.8</b>
<b>DFPG2</b>	<b>DFBG2</b>	2	<b>650</b>	<b>30</b>	<b>2.5</b>
<b>DFPG3</b>	<b>DFBG3</b>	3	<b>650</b>	<b>70</b>	<b>3.75</b>
<b>DFPG4</b>	<b>DFBG4</b>	4	<b>650</b>	<b>100</b>	<b>5</b>
<b>DFPG5</b>	<b>DFBG5</b>	5	<b>650</b>	<b>140</b>	<b>6.25</b>

**standard embossing**



non-slip studded (PI)



sawtooth (US)



SG3 (SG)



diamond (LO)

Maximum width: 380mm.

**DEL/FLEX belts with guide**  
minimum drum ø (mm)



Belt thickness (mm)	SOUPLEX guide (PU 85 ShA)					SOUPLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	90	100	140	-	-	-	70	80	-	-
3	110	130	180	220	280	-	85	100	140	200
4	130	170	220	260	350	-	100	120	160	220
5	160	200	250	300	400	-	140	150	180	240

Belt thickness (mm)	SUPERFLEX guide (PU 70 ShA)					SUPERFLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	60	65	90	135	-	-	-	65	90	-
3	80	85	100	150	-	-	-	80	110	-
4	100	100	115	165	-	-	-	100	120	-
5	140	140	140	185	-	-	-	140	150	-



**SUPERFLEX 6 x 4mm: consult us.**



**DEL/FLEX white**



**Characteristics**

- Food quality.
- Easy to clean.
- Resistant to abrasion.
- Resistant to cutting.
- Resistant to tearing.
- Resistant to chemicals.
- Flexible.

**Applications**

- Medium loads.
- Small drum Ø.
- Abrasive conditions.
- Troughed application.

**Suitable joining processes**

- Butt welded with Mafdel tools.
- Welded with hot air gun.
- With plied belt heat press.
- With mechanical fasteners.

**Guides, profiles, holes... on demand.**



**standard embossing**



non-slip studded (PI)



sawtooth (US)



SG3 (SG)



diamond (LO)

Maximum width: 380mm.

**DEL/FLEX white**

Material	<b>polyurethane</b>
Colour	<b>white</b>
Bottom side	<b>smooth</b>
Top side	<b>smooth</b>
Hardness	<b>93 ShA</b>
Traction rating	
at 1% of tension	<b>10 daN/cm<sup>2</sup> of section</b>
at 2% of tension	<b>15 daN/cm<sup>2</sup> of section</b>
at 3% of tension	<b>20 daN/cm<sup>2</sup> of section</b>
Installation tension	<b>2 to 4% dependent upon conditions</b>
Extreme temperatures	<b>-20°C / +70°C</b>
Friction coefficient on	
HDPE	<b>0.25</b>
Steel	<b>0.5</b>
Stainless steel	<b>0.6</b>



Reference					
Flat belt width < 100mm	Conveyor belt width ≥ 100mm	Belt thickness (mm)	Maximum width (mm)	Minimum drum ø (mm)	Weight (kg / m <sup>2</sup> )
<b>DFPW1.5</b>	<b>DFBW1.5</b>	1.5	<b>650</b>	<b>20</b>	<b>1.8</b>
<b>DFPW2</b>	<b>DFBW2</b>	2	<b>650</b>	<b>30</b>	<b>2.5</b>
<b>DFPW3</b>	<b>DFBW3</b>	3	<b>650</b>	<b>70</b>	<b>3.75</b>
<b>DFPW4</b>	<b>DFBW4</b>	4	<b>650</b>	<b>100</b>	<b>5</b>



**DEL/FLEX belts with guide**  
minimum drum ø (mm)

Belt thickness (mm)	SOUPLEX guide (PU 85 ShA)					SOUPLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	90	100	140	-	-	-	70	80	-	-
3	110	130	180	220	280	-	85	100	140	200
4	130	170	220	260	350	-	100	120	160	220

Belt thickness (mm)	SUPERFLEX guide (PU 70 ShA)					SUPERFLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	60	65	90	135	-	-	-	65	90	-
3	80	85	100	150	-	-	-	80	110	-
4	100	100	115	165	-	-	-	100	120	-



**SUPERFLEX 6 x 4mm: consult us.**

**DEL/FLEX blue**



Reference:  
**DF-B2EM**  
**DF-B3EM**

**Characteristics**

- Food quality.
- Easy to clean.
- Resistant to abrasion.
- Resistant to cutting.
- Resistant to tearing.
- Resistant to chemicals.
- Flexible.

**Applications**

- Medium loads.
- Small drum Ø.
- Abrasive conditions.
- Troughed application.

**Suitable joining processes**

- Butt welded with Mafdel tools.
- Welded with hot air gun.
- With plied belt heat press.
- With mechanical fasteners.

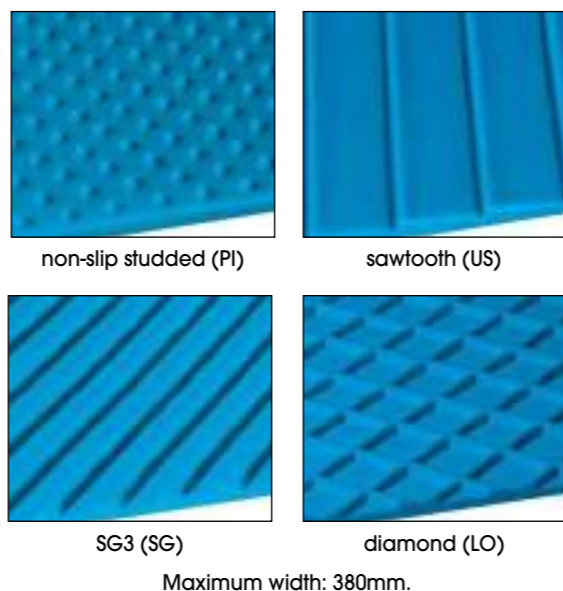
**Guides, profiles, holes... on demand.**



**Smooth or DIAMOND-EMBOSSED bottom side**

- Sliding improved on the belts' support in wet or fat conditions.
- Reduced traction efforts.

**standard embossing**



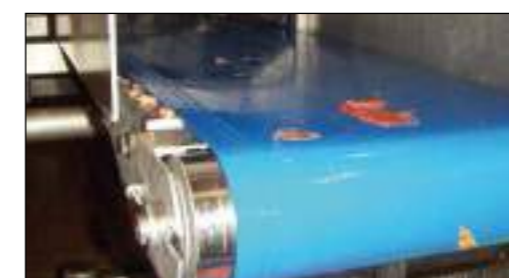
Maximum width: 380mm.

**DEL/FLEX blue**

Material	<b>polyurethane</b>
Colour	<b>blue</b>
Bottom side	<b>smooth or diamond-embossed</b>
Top side	<b>smooth</b>
Hardness	<b>93 ShA</b>
Traction rating	
at 1% of tension	<b>10 daN/cm<sup>2</sup> of section</b>
at 2% of tension	<b>15 daN/cm<sup>2</sup> of section</b>
at 3% of tension	<b>20 daN/cm<sup>2</sup> of section</b>
Installation tension	<b>2 to 4% dependent upon conditions</b>
Extreme temperatures	<b>-20°C / +70°C</b>
Friction coefficient on	
HDPE	<b>0.25</b>
Steel	<b>0.5</b>
Stainless steel	<b>0.6</b>



Reference					
Flat belt width < 100mm	Conveyor belt width ≥ 100mm	Belt thickness (mm)	Maximum width (mm)	Minimum drum ø (mm)	Weight (kg / m <sup>2</sup> )
<b>DFPB2</b>	<b>DFBB2</b>	<b>2</b>	<b>1000</b>	<b>30</b>	<b>2.5</b>
<b>DFPB3</b>	<b>DFBB3</b>	<b>3</b>	<b>1000</b>	<b>70</b>	<b>3.75</b>
<b>DFPB2EM</b>	<b>DFBB2EM</b>	<b>2</b>	<b>1000</b>	<b>30</b>	<b>2.5</b>
<b>DFPB3EM</b>	<b>DFBB3EM</b>	<b>3</b>	<b>1000</b>	<b>70</b>	<b>3.75</b>



**DEL/FLEX belts with guide**  
minimum drum ø (mm)

Belt thickness (mm)	SOUPLEX guide (PU 80 ShA)					SOUPLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	70	80	100	-	-	-	60	70	-	-
3	90	100	120	170	-	-	70	85	120	200

Belt thickness (mm)	SUPERFLEX guide (PU 70 ShA)					SUPERFLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	60	65	90	135	-	-	-	65	90	-
3	80	85	100	150	-	-	-	80	110	-



**SUPERFLEX 6 x 4mm: consult us.**

**DEL/FLEX white with reinforcement ply**



Bottom side with REINFORCEMENT ply

**Characteristics**

- Food quality.
- Low stretch.
- Low friction coefficient on conveyor bed supports.
- Resistant to abrasion.
- Resistant to cutting.
- Resistant to tearing.
- High traction rating.
- Flexible.

**Applications**

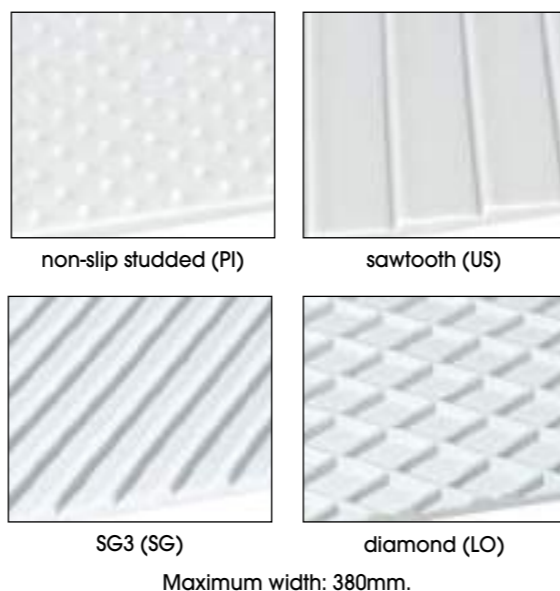
- Medium or heavy loads.
- Long conveyor centres.
- Shorter tensioning adjustment.

**Suitable joining processes**

- Butt welded with Mafdel tools.
- Welded with hot air gun.
- With mechanical fasteners.

**Guides, profiles, holes... on demand.**

**standard embossing**



**DEL/FLEX white with reinforcement ply**

Material	<b>polyurethane</b>
Colour	<b>white</b>
Bottom side	<b>polyester sheet</b>
Top side	<b>smooth</b>
Hardness	<b>93 ShA</b>
Traction rating	
at 1% of tension	<b>7 daN/cm of width</b>
at 2% of tension	<b>17.5 daN/cm of width</b>
Installation tension	<b>1 at 2% dependent upon conditions</b>
Extreme temperatures	<b>-20°C/+80°C</b>
Friction coefficient on	
HDPE	<b>0.25</b>
Steel	<b>0.35</b>
Stainless steel	<b>0.35</b>



Reference					
Flat belt width < 100mm	Conveyor belt width ≥ 100mm	Belt thickness (mm)	Maximum width (mm)	Minimum drum ø (mm)	Weight (kg/m <sup>2</sup> )
<b>DFPW3RF</b>	<b>DFBW3RF</b>	<b>3</b>	<b>650</b>	<b>80</b>	<b>3.6</b>



**DEL/FLEX belts** with reinforcement ply and guide  
minimum drum ø (mm)

Belt thickness (mm)	SUPERFLEX guide (PU 70 ShA)					SUPERFLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
<b>3</b>	90	100	120	160	-	-	-	100	130	-

Belt thickness (mm)	V/FLEX guide (PVC 60 ShA)					V/FLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
<b>3</b>	80	90	100	120	200	-	80	80	100	-



**SOUPLEX green**



**Characteristics**

- Standard quality.
- Easy to clean.
- Resistant to abrasion.
- Resistant to cutting.
- Resistant to tearing.
- Resistant to chemicals.
- High surface adhesion.
- Very flexible.
- Elastic.

**Applications**

- Light loads.
- Short conveyor centres.
- Small drum Ø.

**Suitable joining processes**

- Butt welded with Mafdel tools.
- With plied belt heat press.
- With mechanical fasteners.

**Guides, profiles, holes... on demand.**



**standard embossing**



non-slip studded (PI)



sawtooth (US)



SG3 (SG)



diamond (LO)

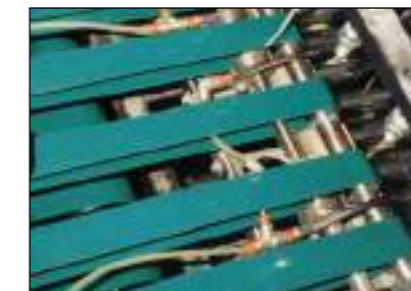
Maximum width: 380mm.

**SOUPLEX green**

Material	<b>polyurethane</b>
Colour	<b>green</b>
Bottom side	<b>smooth</b>
Top side	<b>smooth</b>
Hardness	<b>85 ShA</b>
Traction rating	
at 2% of tension	<b>4 daN/cm<sup>2</sup> of section</b>
at 3% of tension	<b>6 daN/cm<sup>2</sup> of section</b>
at 4% of tension	<b>8 daN/cm<sup>2</sup> of section</b>
Installation tension	<b>3 to 5% dependent upon conditions</b>
Extreme temperatures	<b>-20°C / +60°C</b>
Friction coefficient on	
HDPE	<b>0.35</b>
Steel	<b>0.6</b>
Stainless steel	<b>0.7</b>



Reference					
Flat belt width < 100mm	Conveyor belt width ≥ 100mm	Belt thickness (mm)	Maximum width (mm)	Minimum drum ø (mm)	Weight (kg / m <sup>2</sup> )
<b>SXPG2</b>	<b>SXBG2</b>	2	<b>650</b>	<b>20</b>	<b>2.5</b>
<b>SXPG3</b>	<b>SXBG3</b>	3	<b>650</b>	<b>40</b>	<b>3.75</b>
<b>SXPG4</b>	<b>SXBG4</b>	4	<b>650</b>	<b>60</b>	<b>5</b>



**SOUPLEX belts with guide**  
minimum drum ø (mm)

Belt thickness (mm)	SOUPLEX guide (PU 85 ShA)					SOUPLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	80	90	130	-	-	-	55	65	-	-
3	100	120	160	200	260	-	70	80	120	180
4	120	140	190	220	280	-	85	100	140	200

Belt thickness (mm)	SUPERFLEX guide (PU 70 ShA)					SUPERFLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	40	60	80	-	-	-	-	55	-	-
3	60	75	90	140	-	-	-	65	85	-
4	80	90	110	160	-	-	-	80	100	-



**SUPERFLEX 6 x 4mm: consult us.**

**SOUPLEX white/blue**



**Characteristics**

- Food quality.
- Easy to clean.
- Resistant to abrasion.
- Resistant to cutting.
- Resistant to tearing.
- Resistant to chemicals.
- High surface adhesion.
- Very flexible.
- Elastic.

**Applications**

- Light load.
- Short conveyor centres.
- Small drum Ø.

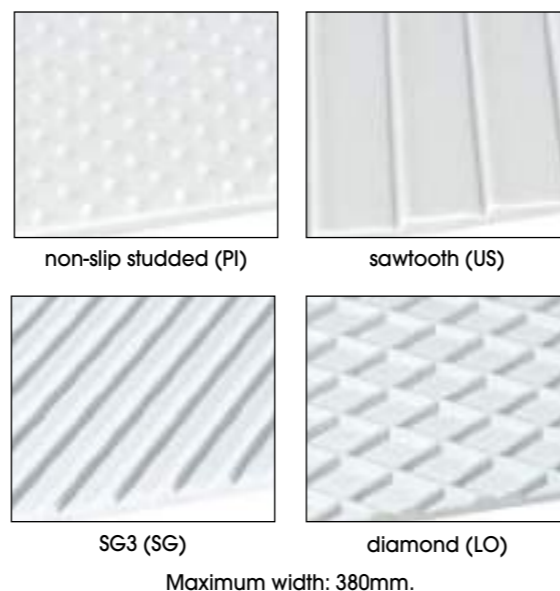
**Suitable joining processes**

- Butt welded with Mafdel tools.
- With plied belt heat press.
- With mechanical fasteners.

**Guides, profiles, holes... on demand.**



**standard embossing**



**SOUPLEX white/blue**

Material	<b>polyurethane</b>
Colour	<b>white/blue</b>
Bottom side	<b>smooth</b>
Top side	<b>smooth</b>
Hardness	<b>85 ShA</b>
Traction rating	
at 2% of tension	<b>4 daN/cm<sup>2</sup> of section</b>
at 3% of tension	<b>6 daN/cm<sup>2</sup> of section</b>
at 4% of tension	<b>8 daN/cm<sup>2</sup> of section</b>
Installation tension	<b>3 to 5% dependent upon conditions</b>
Extreme temperatures	<b>-20°C/+60°C</b>
Friction coefficient on	
HDPE	<b>0.35</b>
Steel	<b>0.6</b>
Stainless steel	<b>0.7</b>



Reference					
Flat belt width < 100mm	Conveyor belt width ≥ 100mm	Belt thickness (mm)	Maximum width (mm)	Minimum drum ø (mm)	Weight (kg/ m <sup>2</sup> )
<b>SXPW2</b>	<b>SXBW2</b>	2	<b>650</b>	<b>20</b>	<b>2.5</b>
<b>SXPW3</b>	<b>SXBW3</b>	3	<b>650</b>	<b>40</b>	<b>3.75</b>
<b>SXPW4</b>	<b>SXBW4</b>	4	<b>650</b>	<b>60</b>	<b>5</b>
<b>SXPB2</b>	<b>SXBB2</b>	2	<b>650</b>	<b>20</b>	<b>2.5</b>



**SOUPLEX belts with guide**  
minimum drum ø (mm)

Belt thickness (mm)	SOUPLEX guide (PU 85 ShA)					SOUPLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	80	90	130	-	-	-	55	65	-	-
3	100	120	160	200	260	-	70	80	120	180
4	120	140	190	220	280	-	85	100	140	200

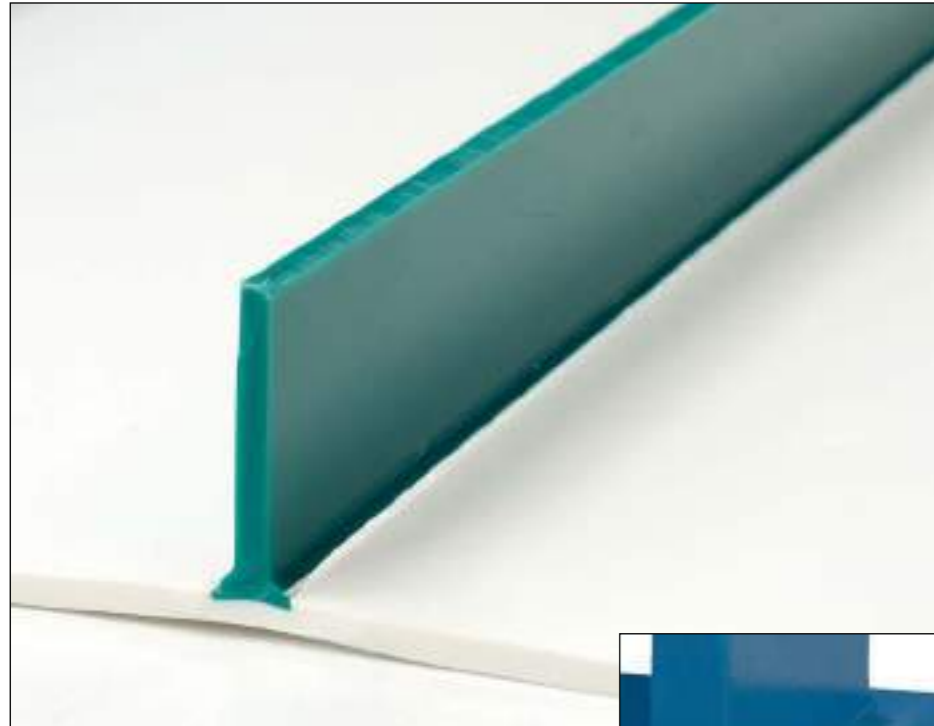
  

Belt thickness (mm)	SUPERFLEX guide (PU 70 ShA)					SUPERFLEX cogged guide				
	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14	8 x 5	10 x 6	13 x 8	17 x 11	22 x 14
2	40	60	80	-	-	-	-	55	-	-
3	60	75	90	140	-	-	-	65	85	-
4	80	90	110	160	-	-	-	80	100	-



**SUPERFLEX 6 x 4mm: consult us.**

**High Frequency welded profiles on DEL/FLEX and SOUPLEX belts**

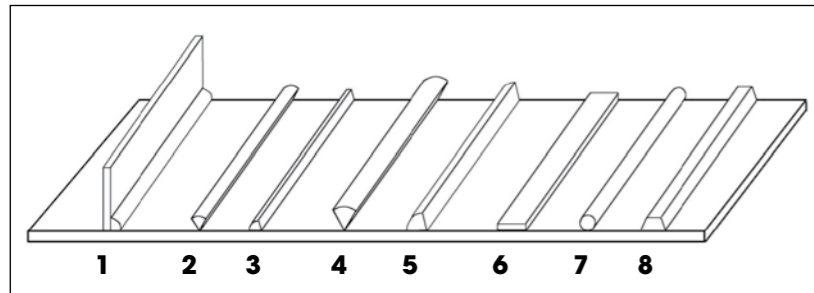


**Profiles**  
 Quality: **DEL/FLEX, SOUPLEX.**  
 Maximum width: 800mm.  
 Thickness: 3, 4, and 7mm.  
 Minimum height: 10mm.  
 Maximum height: 100mm.  
 Minimum pitch: 70mm.

- No glue, no added polyurethane (high frequency welded).
- Excellent resistance to tearing.
- Profile with radiussed base:  
 - easy to clean,  
 - reduces bacteria propagation.



**Hot air welded profiles on DEL/ROC, DEL/FLEX and SOUPLEX belts**



**Profiles**  
 Quality: **DEL/ROC, DEL/FLEX, SOUPLEX.**  
 Maximum width: As wide as the belt.  
 Thickness: 2, 3, 4, and 5mm.  
 Minimum height: 10mm.  
 Maximum height: Depends on thickness.  
 Minimum pitch: height of the profile.

- 1 - Vertical or inclined profiles welded with beading.
- 2 - 4 mm-high triangular profile, welded on its point.
- 3 - 4 mm-high triangular profile, welded on its side.
- 4 - 6 mm-high triangular profile, welded on its point.
- 5 - 6 mm-high triangular profile, welded on its side.
- 6 - Flat profile.
- 7 - Round profile.
- 8 - V profile.

Other profiles are available - please consult us.

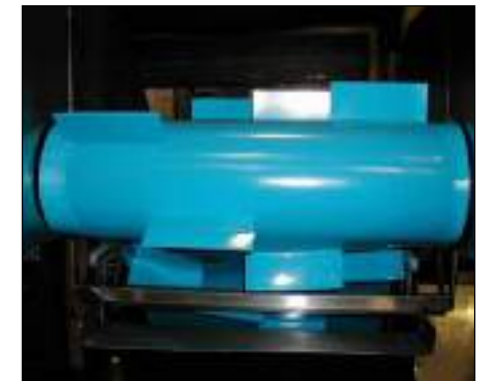
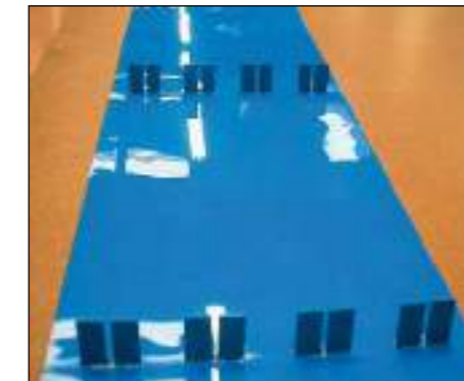


**belts with profiles**



Profiles ...short pitch

...very high



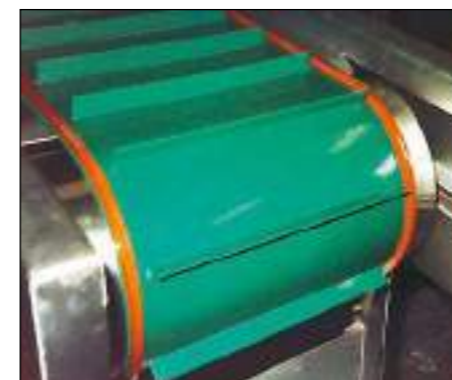
...inclined

...specials

**special belts**



...with holes on demand



...with V guides and profiles

...with sidewalls

...troughed

**TOTALGRIP translucent surface**

Material	polyurethane
Colour	translucent
Bottom surface	smooth or brushed
Top surface	smooth or embossed
Hardness	70 ShA



Standard embossing possible on top surface.

**Characteristics**

- Food quality.
- Excellent grip.
- Very flexible.
- Highly elastic.
- Good resistance to shock.
- Good resistance to wear.

**Applications**

- Pulley covering.
- Sleeves.
- Scraper, protection...
- Surfaces on flat belts and V belts.
- Transport of very light loads along very short distances.

Reference		Belt thickness (mm)	Maximum width (mm)	Weight (kg / m <sup>2</sup> )
width < 100mm	width ≥ 100mm			
<b>TLPT1.5</b>	<b>TLBT1.5</b>	1.5	380	1.88
<b>TLPT3</b>	<b>TLBT3</b>	3	380	3.75
<b>TLPT4</b>	<b>TLBT4</b>	4	380	5

**PRIMAFLEX black**

Material	polyurethane
Colour	black
Bottom surface	smooth or brushed
Top surface	smooth or embossed
Hardness	90 ShA



Standard embossing possible on top surface.

**Characteristics**

- Good resistance to shock.
- Good resistance to wear.
- Good resistance to cutting.
- Good resistance to tearing.

**Applications**

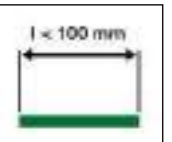
- Wheel saw covering.
- Scrapers, protection...

Reference		Belt thickness (mm)	Maximum width (mm)	Weight (kg / m <sup>2</sup> )
width < 100mm	width ≥ 100mm			
<b>PRPN3</b>	<b>PRBN3</b>	3	380	3.75
<b>PRPN4</b>	<b>PRBN4</b>	4	380	5

**flat belt**



- Small conveyor belt, width below 100mm.
- Types: **DEL/ROC**, **DEL/FLEX** and **SOUPLEX**.
- Non-slip studded, sawtooth, SG3 and diamond embossing possible (P7) on **DEL/FLEX** and **SOUPLEX** belts.



**flats belts with surfaces**

- Surfaces on **DEL/ROC**, **DEL/FLEX** and **SOUPLEX** (except Supergrip PVC on DEL/FLEX belts).
- Maximum width: 140mm.



PVC Supergrip 35 ShA (NA)



rubber Supergrip 50 ShA (NC)



polyester felt (FP)



Aramid felt (FA)



Lycra 25 ShA (LY)



Sylomer foam 40 ShA (MS)



cellular foam 20 ShA (MC)



rubber 30 ShA (CA)



Parablond 45 ShA (PA)



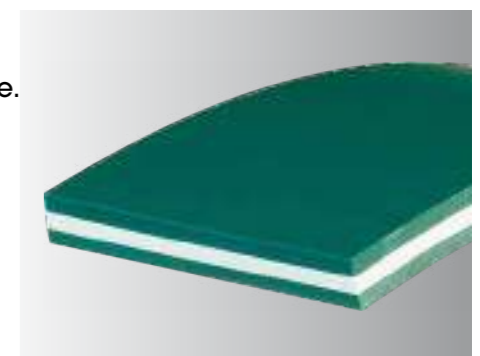
Linatech 40 ShA (LI)

Other surfaces, consult us.

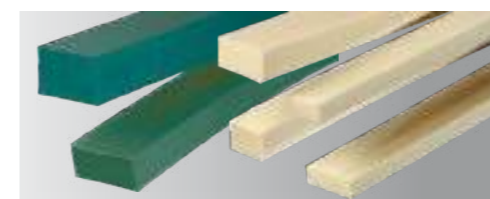
**multi-material flat belts**

- Alternated layers of polyurethane flat belts in standard thicknesses, welded one on top of the other.
- Insertion of aramid reinforcement between two polyurethane layers possible.
- Maximum width: 140mm. • Maximum thickness: 35mm.

Types:	DEL/FLEX	SOUPLEX	TOTALGRIP
Hardness:	93 ShA	85 ShA	70 ShA
Colour:	green blue white	green blue white	translucent
Thickness:	2 - 3 - 4 - 5mm	2 - 3 - 4 - 5mm	1.5 - 3 - 4mm



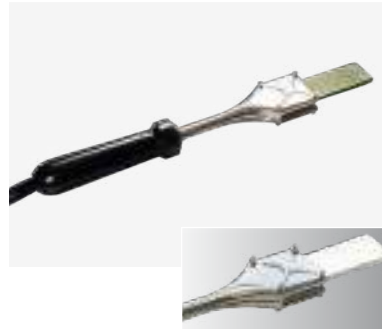
Embossing possible on top surfaces.



**bars**

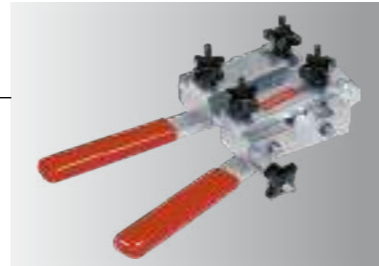
- Types: **DEL/ROC**, **DEL/FLEX**, **SOUPLEX**, **TOTALGRIP**.
- Maximum width: 140mm
- Maximum thickness: 35mm.

Flat belts up to 50mm wide

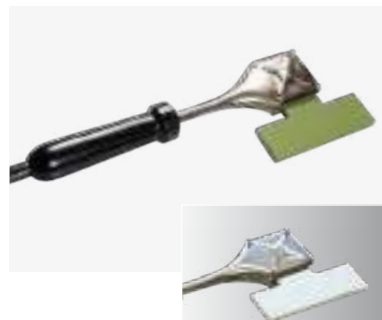


**M51 Welding iron**  
with a Teflon-covered blade  
Thermostat rating 200 W  
**M51**  
with chromed blade

**J50 Welding clamp**  
with channels for round belts

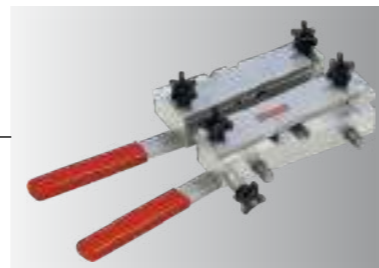


Flat and conveyor belts up to 120mm wide



**M101 Welding iron**  
with Teflon-covered blade  
Thermostat rating 300 W  
**M100 Welding iron**  
with chromed blade

**J100 B Welding clamp**  
with channels for 10 x 6mm and 13 x 8mm V guides



Conveyor belts



Welding tool



Welding table

up to 400mm wide

**MD400**

**JD400**

up to 650mm wide

**MD650**

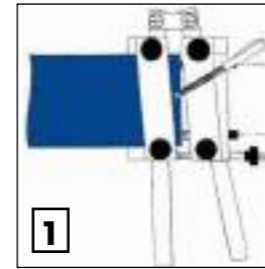
**JD650**

up to 1100mm wide

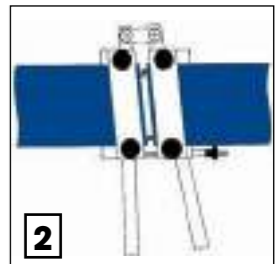
**MD1100**

**JD1100**

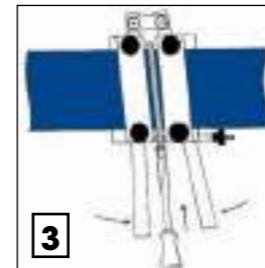
welding process for flat and conveyor belts



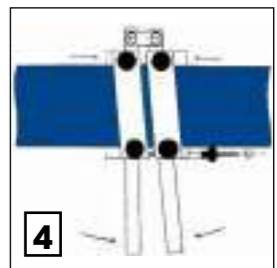
Connect the welding iron to a suitable power source (**M50/M51 to M100/M101**).  
As the welding iron is equipped with a thermostat, you should plug the iron in at least 8 minutes before attempting the welding process.  
With a suitable pen, draw and cut the belts ends following the angle of the clamp bars (**J50 to J100B** depending on the belt's width).



Insert the ends of the belt into the clamp (**J50 or J60**), allowing a 5 mm to protrude beyond the inside of the clamp bars (If the belt to weld is a DEL/ROC, strongly tighten the top screws of the clamp).



With the clamp still open, insert the blade in between both ends of the belt ensuring the length of the blade can cover the surfaces to be welded.  
Apply gentle pressure to the handles of the clamp allowing the belt ends to touch and melt against the heating blade.  
During the process, you will observe a growing bead of melted plastic against each side of the blade.



Once an adequate amount of melted plastic can be seen against the blade, quickly release the pressure on the handles and slightly open the clamp allowing the blade of the iron to be removed.

Once the welding blade is clear, quickly re-close the clamp and tighten the side screw to hold the clamp in a closed position whilst the melted plastic cools. Tighten the screw to suit the cross section of the belt (the bigger the belt, the tighter the clamp should be tightened).

Keep the clamp closed using the side screw until the weld has cooled sufficiently. Failure to do this may result in a weakened joint. (The process should take between 2 and 5 minutes, depending on the size of the belt).

**NB: DEL/ROC belts cool a lot quicker than the other MAFDEL types. If you are welding a DEL/ROC belt, the process will have to be completed more swiftly.**



Trim the excess bead from the joint top and bottom so the surface is completely smooth. Check the alignment of the finished joint making sure the joint is not 'dog-legged'. Also check the joint for voids and air bubbles.

A further check can be done by flexing the joint to make sure that it won't open up in operation. Fit the belt on the machine.

**NB: Cleanliness is vital for a perfect result. Make sure that the blade of the iron is perfectly clean with no burnt plastic from previous use. Both ends of the belt should also be perfectly clean.**

**CLEAN THE BLADE OF THE WELDING IRON IMMEDIATELY AFTER USE WHILST IT'S STILL HOT**

**M51 or M101 welding iron :**  
wipe the blade with a clean 100% cotton cloth.

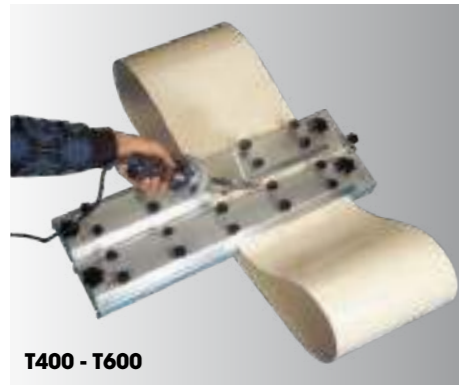
**Other irons :**  
remove most of the melted material with the blade of a knife (without scraping the iron), and wipe the rest out with a clean 100% cotton cloth.

Do not use any cloth that may contain synthetic materials, which would melt upon contact with the blade of the welding iron. Failing to observe this will result in a weakened joint through contamination.





hot air welding



T400 - T600

- Butt-welding with a triangular welding profile inserted and melted between the belt ends, previously cut with a 45° chamfer.

Required tools:

- **1/4 moon knife** for the ends chamfer and the welding point cleaning.
- **T400 or T600 welding table** to secure the belt while being both chamfered and welded.
- **TR600 Hot air gun** with a **BR5 or BR7 nozzle** for feeding the triangular welding profile into the chamfer.



This process can also be used to repair torn belts on site or to weld profiles onto our belts.

welding with a heat press

Process similar to the one for regular plied conveyor belts.

- **DEL/FLEX** and **SOUPLEX**: Cut at 90° and overlap belt ends by about 5mm.
- **DEL/FLEX** belts with a reinforcement ply: It is recommended that a finger or 'Z' joint is used.

The use of a plied belt heat press is **NOT compatible with DEL/ROC flat and conveyor belts.**



mechanical fasteners

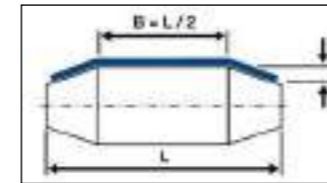


- Joining with mechanical fasteners with a stainless pin.
- Belt thickness: from 1.5mm to 5mm.
- No width limit.
- Insertion with hammer, no rivets should be used.
- Compatible with all Mafdel flat or conveyor belts such as **DEL/ROC**, **DEL/FLEX** and **SOUPLEX**.

This method is particularly suitable for belts frequently removed and re-installed.

conveyor belts driving

To ensure perfect belt tracking, Mafdel recommend the use of radiussed or crowned drums.



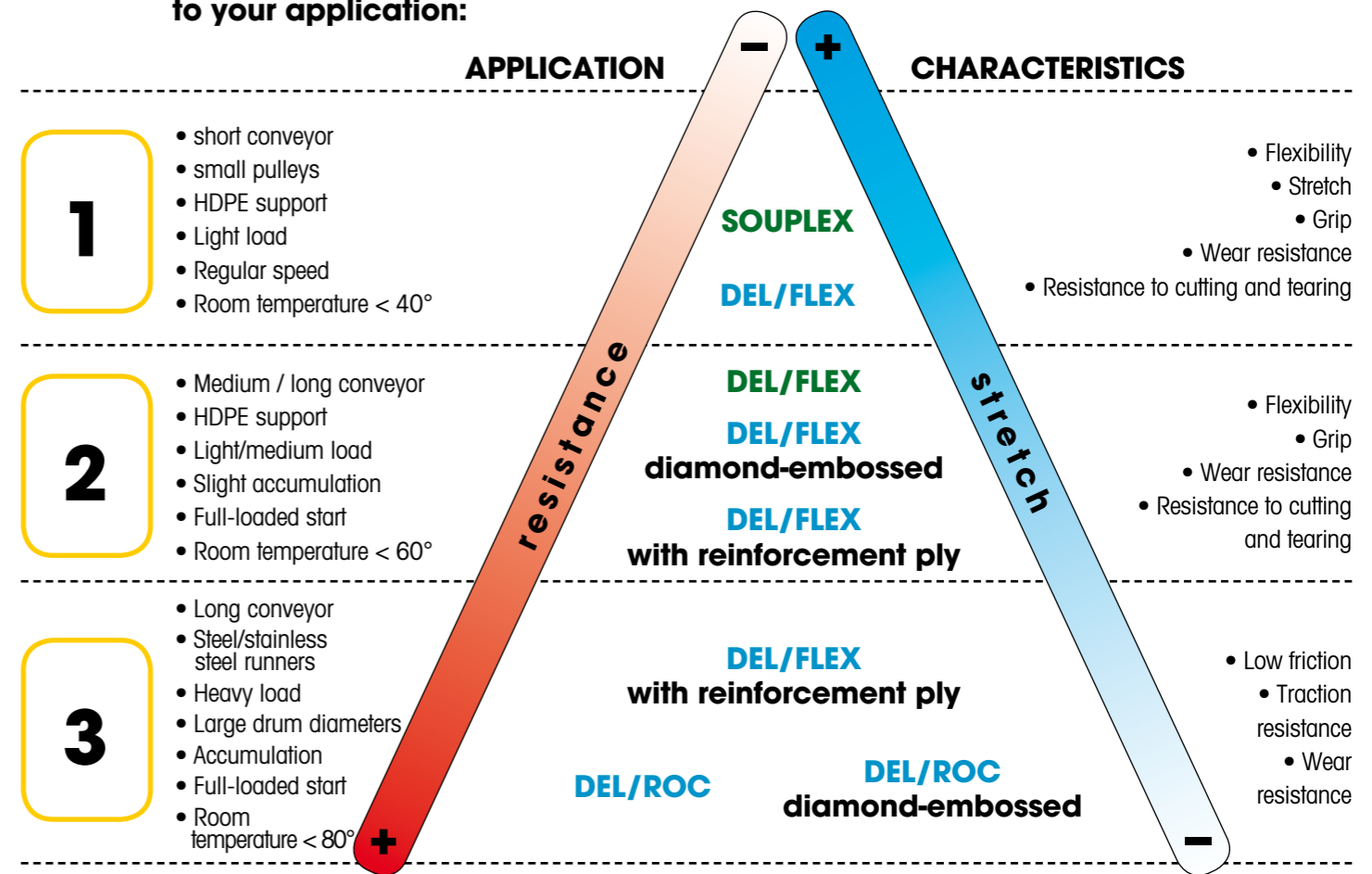
L	h
up to 200mm	0.25 to 0.5mm
200mm to 500mm	0.5 to 1mm
500mm to 1000mm	1 to 1.5mm

choosing a conveyor belt

To select the correct belt, you need to establish the characteristics and working conditions of the conveyor, and the nature of the product:

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 load along the conveyor	other efforts, pressure, etc...
length of the tensioning system	temperature of the product	room temperature

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



conveyor belts

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

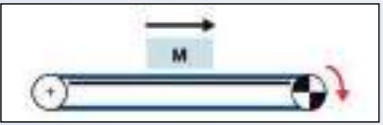
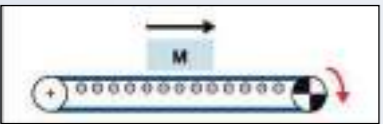

Examples :

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



# conveying / simplified calculations

SYMBOLE	MEASURES	DESIGNATION	BELT CHARACTERISTICS (in catalog)
<b>M</b>	Kg	Transported load	
<b>Mmax</b>	Kg	Maximum load limit per belt	
<b>F</b>	daN	Minimum traction force for the continuous driving of the load <b>M</b>	
<b>F'</b>	daN	Minimum traction force for full-loaded starts with the load <b>M</b>	
<b>Ft</b>	daN	Traction force of the chosen belt	<b>X</b>
<b>t</b>	%	Stretch corresponding to the traction force of the belt <b>Ft</b>	<b>X</b>
<b>Cf</b>		Friction coefficient of the belt on its runner	<b>X</b>
<b>Cr</b>		Rolling coefficient of the belt on its support (0.05 to 0.1 according to the conditions: smooth support, bearings,...)	
<b>Cfp</b>		Friction coefficient of the transported product on the belt	
<b>Cs</b>		Safety factor	

type of conveyor	simplified calculation of the required traction force to carry the specific load	simplified calculation of the maximum load limit per belt
 <p>CONVEYOR WITH SUPPORT BED</p>	$F = M \times Cf$	$M_{max} = Ft / Cf$
 <p>CONVEYOR WITH SUPPORT ROLLERS</p>	$F = M \times Cr$	$M_{max} = Ft / Cr$
 <p>CONVEYOR WITH ACCUMULATION</p>	In case of accumulation, take into account the friction coefficient of product to convey on the belt. Add this value to the friction coefficient of the belt on its support: $F = M \times (Cf + Cfp)$	$M_{max} = Ft / (Cf + Cfp)$
<p>For conveyors that operate, <b>STOP/START OPERATION</b> (full-loaded starts):</p>	The traction force <b>F</b> determined above must be multiplied by 2. $F' = F \times 2$	As you calculate <b>Mmax</b> , only take into account half the traction force of the selected belt. $Ft/2$

## example

Conveying a load of 100kg on a 300mm wide conveyor belt.  
Wet conditions - belt cleaned frequently.

Stainless steel bed.  
Conveyor drum centres: 10meters.  
Drum diameter: 150mm.  
Stop/Start operation.

### choice of a belt category (page 31)

Long drum centres  
Medium load  
Full-load start  
Stainless steel bed

CATEGORY 3

DEL/FLEX with reinforcement ply  
DEL/ROC smooth  
DEL/ROC diamond-embossed

### Calculation of the maximum load limit on the selected belts

	DEL/FLEX with reinforcement ply 3 mm thick	DEL/ROC 2 mm thick	DEL/ROC 3 mm thick
Friction coef. on stainless steel	<b>Cf</b> 0.35	0.5	0.5
Traction force of the belt at 1% tension	<b>Ft</b> (daN) 7 daN / cm width 210	18 daN / cm <sup>2</sup> section 108	18 daN / cm <sup>2</sup> section 162
Maximum load limit on the belt with full load start	<b>Mmax</b> (Kg) $(Ft/2) / Cf$ <b>300</b>	108	<b>162</b>
Safety factor	<b>Cs = Mmax / M</b> <b>3</b>	1.1	<b>1.6</b>

## solutions

The drum diameters of the belts previously selected being compatible with the application, 2 solutions can be considered, with a reasonable safety coefficient:

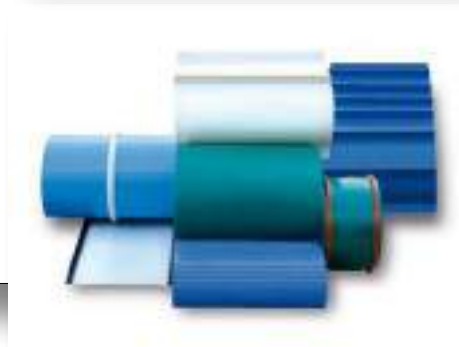
- **BT DEL/FLEX** with a reinforcement ply 300 x 3mm
- **BT DEL/ROC** 300 x 3mm

We would recommend the selection of a **DEL/ROC** type with diamond-embossed bottom surface:

- Better sliding on stainless steel plate than smooth **DEL/ROC** in wet conditions.
- Better resistance to cleaning than a **DEL/FLEX** with reinforcement ply.



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