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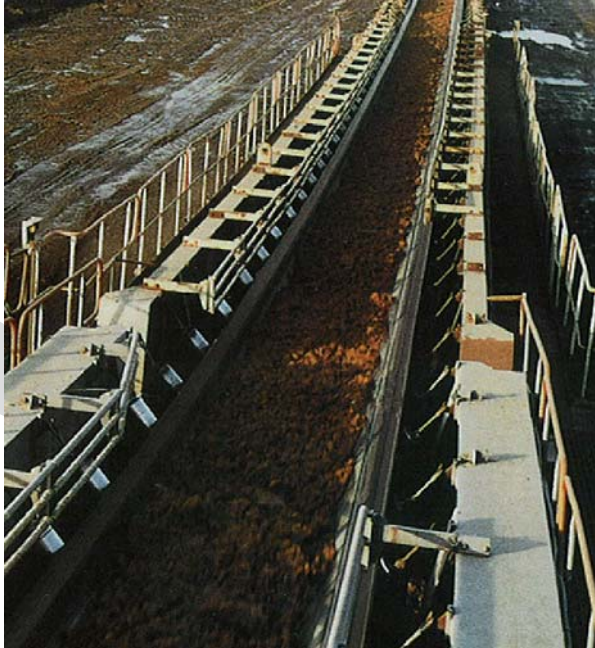# PP textile belts
POLYAMIDE / POLYAMIDE

These PP textile belts are generally used in extraction and transformation industries for conveying bulk material of large grain size at temperatures between -25°C and +60°C.
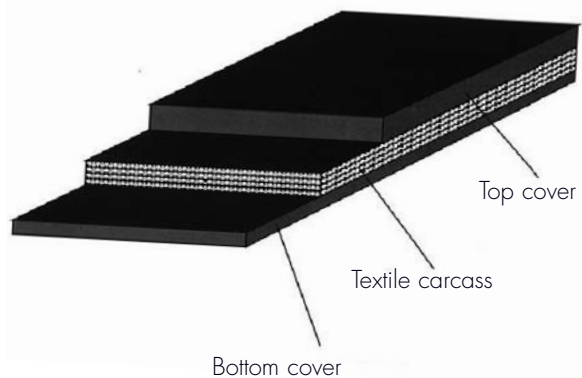

Our PP textile belt consists of rubber covers and moulded edges and a textile carcass.

The carcass has a multiply structure comprising 2 to 5 plies of PP (polyamide warp and weft) synthetic fabric. A layer of skim gum covers each ply.

The covers protect the carcass against damage, adverse weather conditions and biological and chemical aggressions.

The role of the carcass is to transmit the longitudinal forces and absorb the dynamic forces generated by the falling and conveying of the material.

These PP textile belts are produced with cover grades W, X, Y and Z complying with standard DIN 22102 or anti-abrasive cover grade D.

Areas of application

- Open-pit coal mines (conveying of overburden, coal and aggregates)
- Open-pit mineral mines (lime, phosphates, various ores)
- Treatment of minerals
- Iron and steel industries
- Cement works (quarry materials and transformation)
- Paper mills
- Port installations
- Public works
- Agriculture
- Sugar factories
- Thermal power plants
- Quarries and sand pits

Top cover

Textile carcass

Bottom cover

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Designation

• The usual designation of PP textile belts is as shown in the example below:

| | 1800 | P | 2000/ 4 | 10+5 | Y |

Rated width of belt (mm)
Carcass (P = polyamide fabric in warp and in weft)
Rated breaking strength in warp direction (N/mm)
Number of plies of fabric
Thickness of top cover and bottom cover (mm)
Cover grade: W, X, Y or Z as per standard DIN 22102
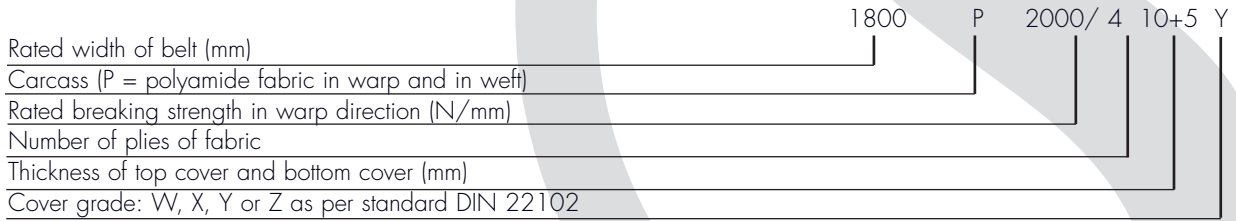
• The type of belt (rated breaking strength in N/mm) is obtained by superimposing plies of fabric:

TYPE N/mm	400	500	630	800	1000	1250	1400	1600	1800	2000	2500	3150	3500
Number of plies	2	2	2	2	2	2							
			3	3	3	3	3						
				4	4	4	4	4		4	4		
					5	5		5	5	5	5	5	5

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SEMPERTRANS® standard RANGE, cover of grade W, X, Y or Z (as per DIN 22102) or D (anti-abrasive).

Belt	Carcass construction	Carcass weight Kg/m²	Carcass thickness mm	RATED WIDTH (mm)														
				500	600	650	800	1000	1200	1400	1600	1800	2000	2200	2250	2400	2500	2800
P 400/2	2 P 200	3.1	2.6	o	o	o	o	o	o	o	o	o						
P 500/2	2 P 250	3.5	2.8	o	o	o	o	o	o	o	o	o						
P 630/2	2 P 315	4.2	3.6	o	o	o	o	o	o	o	o	o						
P 630/3	3 P 200	4.6	4.1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
P 800/2	2 P 400	4.0	3.2	o	o	o	o	o	o	o	o	o						
P 800/3	3 P 250	5.3	4.4	o	o			o	o	o	o	o	o	o	o	o	o	o
P 800/4	4 P 200	6.2	5.6	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
P 1000/2	2 P 500	5.3	4.6	o	o	o	o	o	o	o	o	o						
P 1000/3	3 P 315	6.2	5.6	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
P 1000/4	4 P 250	7.1	6.0	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
P 1000/5	5P 200	7.7	7.1					o	o	o	o	o	o	o	o	o	o	o
P 1250/2	2 P 630	6.1	5.4					o	o	o	o	o						
P 1250/3	3 P 400	6.1	5.0					o	o	o	o	o	o	o	o	o	o	o
P 1250/4	4 P 315	8.1	7.6					o	o	o	o	o	o	o	o	o	o	o
P 1250/5	5 P 250	8.8	7.6					o	o	o	o	o	o	o	o	o	o	o
P 1400/3	3 P 400	6.5	5.6					o	o	o	o	o	o	o	o	o	o	o
P 1400/4	4 P 315	8.6	7.6					o	o	o	o	o	o	o	o	o	o	o
P 1500/5	5 P 315	10.4	9.6					o	o	o	o	o	o	o	o	o	o	o
P 1600/4	4 P 400	8.1	6.8					o	o	o	o	o	o	o	o	o	o	o
P 1600/5	5 P 315	10.4	9.6					o	o	o	o	o	o	o	o	o	o	o
P 1800/4	4 P 400	8.1	6.8					o	o	o	o	o	o	o	o	o	o	o
P 1800/5	5 P 315	10.7	9.6					o	o	o	o	o	o	o	o	o	o	o
P 2000/4	4 P 500	10.5	9.6						o	o	o	o	o	o	o	o	o	o
P 2000/5	5 P 400	10.1	8.6						o	o	o	o	o	o	o	o	o	o
P 2500/4	4 P 630	12.2	11.2						o	o	o	o	o	o	o	o	o	o
P 2500/5	5 P 500	13.2	12.1						o	o	o	o	o	o	o	o	o	o
P 3150/5	5 P 630	15.3	14.1						o	o	o	o	o	o	o	o	o	o
P 3500/5	5 P 750	17.6	14.6						o	o	o	o	o	o	o	o	o	o

The thicknesses and weights of the carcasses are given for information.

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For the possible cover thicknesses, please consult our technical department.
Manufacturing is possible with other cover grades. See cover range on pages 66 and 67 or consult our technical department.

THICKNESS AND WEIGHT
The thicknesses and weights can be evaluated from the table below for the thickness and weight of the carcass and the table below gives the density of the standard covers.

Cover	W	X	Y	Z
Weight in Kg/m² for 1 mm of gum	1.12	1.11	1.12	1.12

Values given for information

TECHNICAL SPECIFICATIONS (see page 66)
- Cover grade / resistance of covers to products conveyed
- Pulley diameter
- Tension travel
- Trough transition lengths
- Radius of curvature
- Turnover
- Station spacing
- Roller skirt clearance
- Splicing

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