



## Conveyor Belting Catalogue







## C O N T E N T S

<b>Selection Chart</b>	<b>4</b>
<b>POWERPLY Multi-ply Conveyor Belt</b>	<b>6</b>
<b>POWERCORD Steel Cord Conveyor Belt</b>	<b>7</b>
<b>WEARTEC Wear Resistant Conveyor Belt</b>	<b>8</b>
<b>HEATTEC Heat Resistant Conveyor Belt</b>	<b>9</b>
<b>FLAMETEC Flame Retardant Conveyor Belt</b>	<b>10</b>
<b>OILTEC Oil Resistant Conveyor Belt</b>	<b>11</b>





Purpose	General Use			
Type	WEARTEC			
Grade of Belt	W	X	Y	Z
<b>Main Characteristic</b>	Superior anti-abrasive covers with good mechanical properties.	Abrasion and cut resistant cover for sharp-edged or lumpy material, High abrasion resistance.	Cover with good mechanical properties for heavy-duty applications.	Cover for normal service application.
				
<b>Abrasion Loss (mm<sup>3</sup>)</b>	90	120	150	250
<b>Tensile Strength (Kgf/cm<sup>2</sup>)</b>	180	250	250	150
<b>Elongation at Break (% min)</b>	400	450	450	350
<b>Constant Material Temperature (°C)</b>	80	80	80	80

The usual EP/Designation is as shown in the example below:

**Belt Width (mm)**

**Carcass (Polyester and Polyamide in Warp and Weft)**




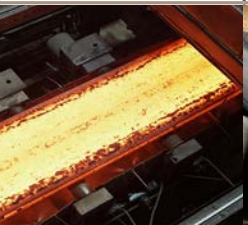


**Per Ply Strength (N/mm)**

**Number of Plies**

**Thickness Top & Bottom Cover (mm)**

**Cover Rubber Grade**

*Note: Other types of conveyor belt available upon request.*

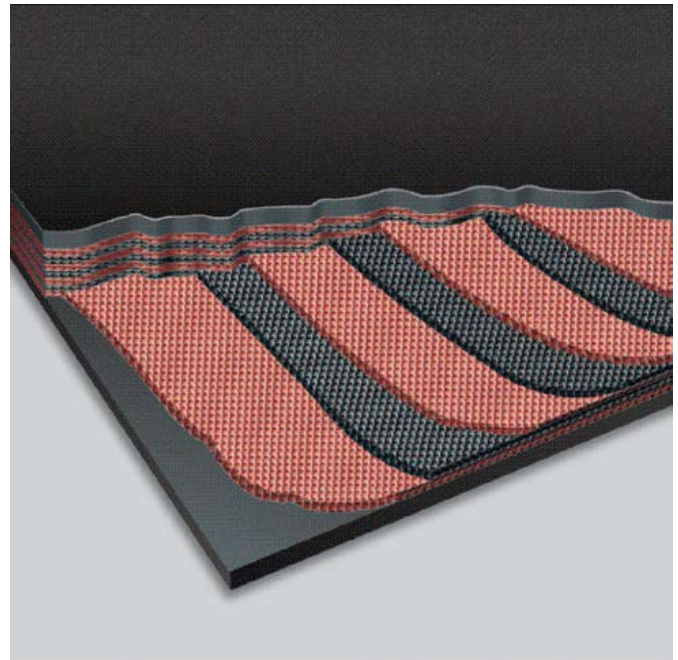
Special Use					
HEATTEC			FLAMETEC	OILTEC	
HR200	HR300	HR400	K	MOR	OR
It is designed for continuous service at temperature of 125 °C with peaks of 200 °C for short period.	It is designed for continuous service at temperature of 150 °C with peaks of 300 °C for short period.	It is designed for continuous service at temperature of 175 °C with peaks of 400 °C for short period.	Self-extinguishing properties, with good tear, cut, impact and abrasion resistance.	Medium Oil resistance. For conveying materials with moderate oil presence.	Superior Oil Resistance. For conveying materials immersed with mineral oils.
					
200	200	200	200	300	150
100	100	90	150	120	150
350	350	350	400	300	300
125	150	175	80	50	60
900	EP	200	4 Ply	6.0 + 2.0	X

JACKS POWERPLY Multi-Ply Fabric Conveyor Belt is an all synthetic multiply construction available in a very wide range of strengths and number of plies, utilising a polyester fibre for warp and a polyamide fibre for weft.

**Features & Benefits:**

- The low-elongation polyester fibres are used in the warp direction to reduce the length of the tension travels;
- The more elastic polyamide fibres are used in the weft, to ensure good troughing;
- Exceptional fatigue and impact resistance;

JACKS POWERPLY Multi-Ply Fabric Conveyor Belt can be offered with a wide range of rubber covers to suit a diverse range of applications from extreme abrasion, cutting and gouging to light duty conveying of non-abrasive materials.



*Fabric construction*

**Specification and Technical Parameter**

Fabric Type	Fabric Texture		Fabric Size	Fabric Thickness (mm/ply)	Strength Series (N/mm)			Thickness of Cover Rubber		Width Range (mm)
	Warp	Weft			2 ply	3 ply	4 ply	Top Cover Rubber	Bottom Cover Rubber	
Polyester (EP)	Polyester (EP)	Polyamide (P)	EP-100	1	200	300	400	0 - 12mm	0 - 10mm	300 - 3000mm
			EP-150	1.1	300	450	600			
			EP-200	1.2	400	600	800			
			EP-250	1.4	500	750	1000			
			EP-300	1.6	600	900	1200			
			EP-350	1.7		1050	1400			
			EP-400	1.9			1600			
EP-500	2.1			2000						





*Steel cord construction*

JACKS POWERCORD Steel Cord Conveyor Belt is developed by incorporating the most current technology with years of refinement to attain this technological precision. Every belt is designed to provide maximum performance and maximum life.

**Features & Benefits:**

- Steel cord construction embedded with high performance rubber
- The bonder rubber in the core is formulated to penetrate deep into the cords providing high cohesive and adhesive bond for long lasting protection and extreme joint efficiency.
- Combination of ultimate carcass breaking strength and lowest elongation

JACKS POWERCORD Steel Cord Conveyor Belt can be offered with a variety of rubber covers to suit different applications from extreme abrasion, cutting and gouging to less arduous conveying of non-abrasive materials.

**Specifications - Main Technical Data**

Belt class	Tensile Strength (N/mm)	Cord Diameter (mm)	Top Cover (mm)	Bottom Cover (mm)	Min. Pulley Diameter (mm)
ST 630	630	3.00	5	5	500
ST 800	800	3.50	5	5	500
ST 1000	1000	4.00	6	6	630
ST 1250	1250	4.50	6	6	800
ST 1600	1600	5.00	6	6	1000
ST 2000	2000	6.00	6	6	1000
ST 2500	2500	7.20	6	6	1250
ST 3150	3150	8.10	8	8	1400
ST 3500	3500	8.60	8	8	1600
ST 4000	4000	8.90	8	8	1600
ST 4500	4500	9.70	8	8	1600
ST 5000	5000	10.9	8	8	1800
ST 5400	5400	11.3	8	8	1800





JACKS WEARTEC Wear Resistant Conveyor Belt offers the optimal cover meeting wear and tear requirements for every type of material. A combination of tensile strength, abrasion resistance and elasticity of the conveyor belt cover are chosen to suit various applications in a range of cover types.

### Classification of Cover Rubber

Cover Grade	Tensile Strength		Elongation at Break (%)	Abrasion Loss (mm <sup>3</sup> )
	Mpa	Kgf/cm <sup>2</sup>		
W	18	180	400	90
X	25	250	450	120
Y	20	200	400	150
Z	15	350	350	250

Grade	Application
Belts with defined mechanical parameters	
W	anti-abrasive cover with good mechanical properties
X	abrasion and cut resistant cover for sharp-edged or lumpy material, highest requirements
Y	cover with good mechanical properties for standard applications
Z	cover for minor applications







JACKS HEATTEC Heat Resistant Conveyor Belt is specially designed for conveying high temperature materials, has excellent heat resistance, and can retain its ageing resistance under the most severe environment. We have developed 3 types of belt covers that corresponds to different operating temperature conditions so as to optimise heat requirement with optimal abrasion and tensile properties.

### Specifications - Main Technical Data

Properties	Carcass	Min - Breaking Strength	Cover
Heat Resistant 125 - 175°C	EP	2400	HR200, HR300 and HR400
	ST	5400	

Belt class	Constant Temperature (°C)	Max material Temperature For Short Period (°C)	Elongation at Break (%)	Abrasion Loss (mm <sup>3</sup> )
HR200	125	200	350	200
HR300	150	300	350	200
HR400	175	400	350	200





JACKS FLAMETEC Flame Retardant Conveyor belt has rubber covers that provide good tear, cut, impact and abrasion resistance and is also fire retardant. This is best suit in environments with fire hazards – Self ignition of either conveyed materials or the conveyor belt itself.

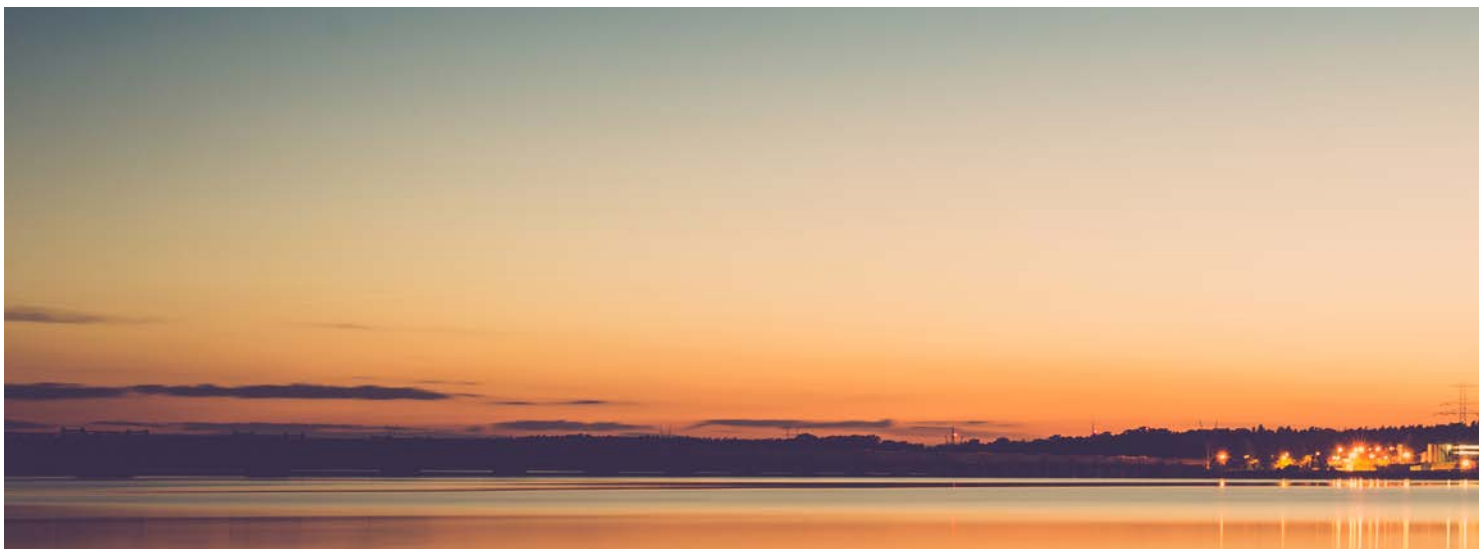
Tests carried out on JACKS FLAMETEC Flame Retardant Conveyor Belt for determining fire retardant properties;

- Electrical conductivity of the belt surface - ISO 284:2012 test method
- Fire propagation test - EN 12881-1 test method
- Flame test - ISO 340:2013 test method

Flame test - ISO 340:2013	Electrical Conductivity	Fire propagation - EN 12881 - 1 Method C
Total of 6 samples extinguish within 45 seconds. Maximum duration of flame or glow for any single sample is 15 seconds.	ISO 284: 2012 < 300 Megaohm	a. the length of the test piece that remains undamaged across the whole width of the test piece shall be not less than 600 mm; or b. the maximum average temperature rise shall no exceed 140 °C, the length of belting consumed by mass shall no exceed 1250 and the length of the test piece that remains undamaged shall be not less than 50 mm across the whole width of the conveyor belt.

### Classification of Cover Rubber

Cover Grade	Cover Classification		Elongation at Break (%)	Abrasion Loss (mm <sup>3</sup> )
	Mpa	Kgf/cm <sup>2</sup>		
K	18	180	400	200



JACKS OILTEC Oil Resistant Conveyor Belt provide good tear, cut and abrasion resistance and also are resistant to swelling when caused by absorption of oils and grease.

The presence of oil in the transported material can have detrimental defects on standard rubber covers:

- It will degrade the physical properties such as abrasion resistance, tensile strength and tear strength;
- The belt covers will absorb the oil causing them to swell and loose adhesion with the carcass.



**Specifications**

Belt class	Tensile Strength (Mpa)	Elongation at Break (% min)	Maximum Abrasion Loss (mm <sup>3</sup> )	Polymer Rubber	Working Temperature (°C)	Application
MOR	12	300%	300	NBR Blended	-30°C - 70°C	For materials with moderate amount of oil like grain, refuse, recycling waste, wood pulp, pinewood etc.
OR	15	300%	150	NBR Blended	-30°C - 70°C	For materials like grains, refuse, woodchips, fertilizers coated with oil, coated coal / coke, etc

- MOR - Medium Oil Resistance. For conveying materials with moderate oil presence.  
 OR - Superior Oil Resistance. For conveying materials immersed with mineral oils



Find out more at [www.jacksindustries.com](http://www.jacksindustries.com)

or

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