Mercurio Conveyor Belt
Steel Cord

MERCURIO
CONVEYOR BELT

Steel Cord Conveyor Belt - Mercúrio ST is designated for applications, which require high impact resistance, high tension capabilities, low-stretch applications, movement over long distances, and low elongation with broad aplications in the Mining, Steel, Cement Industries, among others.

Due to its exclusive design, the **Steel Cord Conveyor Belt - Mercúrio ST** is much more flexible when compared to the textile belts with the same resistance. This permits the use of smaller pulley and consequently guarantees equipment cost reduction.

In order to maximize its performance, the **Steel Cord Conveyor Belt Mercurio ST** is provided with different optional items:

RIP STOP®	Metal coating, included in the top and/or bottom cover of steel cord conveyor belts with the objective to impede cutting propagation. It reduces the length of the conveyor belt loss due to accident.
RIP PROOF®	Metal or polyester coating included in the top cover of the conveyor belt (textile or steel cord), which maximizes the resistance to tear and increases the belt service life.
RIP SCANNER	Sensors included in the bottom cover of the conveyor belt with the objective to impede cutting propagation by means of detection of electromagnetic impulses. It reduces the length of the conveyor.

For adequate specification of the **Steel Cord Conveyor Belt - Mercurio ST**, contact our highly specialized Application Engineering and Technical Assistance teams.

*Data subject to change without notice.

The Largest Steel Cord Conveyor Belt Manufacturer in South America

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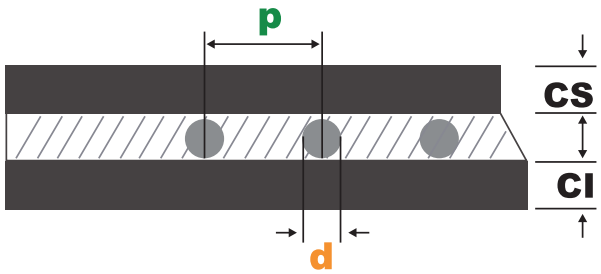
Technical Data | Metric Units



p = Pitch
d = Diameter
cs = Top Cover
cl = Bottom Cover

Mercurio ST	Basic Dimensions		Minimum Cover	Weight Carcass	Minimum breaking strenght	Operating Tension	Elastic Modulus
	Cord Diameter d	Cord Pitch p					
Type	mm	mm	mm	Kg/m²	kN/m	kN/m	kN/m
ST 800	3,8	17,5	4	7,2	800	120	57.600
ST 1000	3,8	13,9	4	7,8	1.000	150	72.000
ST 1250	5,2	21,7	4	10,4	1.250	187	90.000
ST 1600	5,2	16,9	4	11,6	1.600	240	115.200
ST 2000	5,2	13,5	4	12,9	2.000	300	144.000
ST 2500	5,2	11,4	4	14,6	2.500	375	180.000
ST 3150	6,7	12,9	5	21,9	3.150	472	226.800
ST 3500	8	17,5	6	21,8	3.500	525	252.000
ST 4000	9,2	20,0	6	25,0	4.000	600	288.000
ST 4500	10,6	20,4	8	28,3	4.500	675	324.000
ST 5000	12	23,5	9	33,9	5.000	750	360.000
ST 5400	12	21,0	9	35,0	5.400	810	388.800

Mercurio ST			ST 700 - ST 1150	ST 1200 - ST 2600	ST 2650 - ST 3150	ST 3200 - ST 3700	ST 3750 - ST 4300	ST 4350 - ST 4900	ST 4950 - ST 5400
			mm	mm	mm	mm	mm	mm	mm
Recommed minimum Pulley diamter	% operating tension	76 - 100	800	1.000	1.250	1.400	1.600	1.800	2.000
		50 - 75	600	800	1.000	1.250	1.250	1.400	1.600
		0 - 49	400	600	800	1.000	1.000	1.250	1.250

(1) Other configuration or cord diameter may be substituted according customer requeriments.
(2) Operating tension are based on a 6,67:1 safety factor. Pitch based on 72 in (1800mm) width belt.

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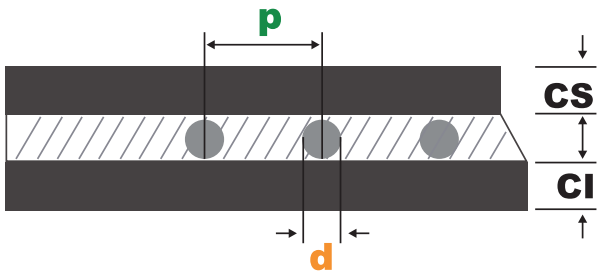
Technical Data | Imperial Units



p = Pitch
d = Diameter
cs = Top Cover
cl = Bottom Cover

Mercurio ST	Basic Dimensions		Minimum Cover	Weight Carcass	Minimum breaking strenght	Operating Tension	Elastic Modulus
	Cord Diameter d	Cord Pitch p					
Type	Inch	Inch	Inch	lb./sq, ft.	PIW	PIW	PIW
ST 800	0.149	0.689	0.157	1.5	4,568	685	328,896
ST 1000	0.149	0.547	0.157	1.6	5,710	857	411,120
ST 1250	0.204	0.854	0.157	2.1	7,138	1,071	513,900
ST 1600	0.204	0.665	0.157	2.4	9,136	1,370	657,792
ST 2000	0.204	0.531	0.157	2.7	11,420	1,713	822,240
ST 2500	0.204	0.448	0.157	3.0	14,275	2,141	1,027,800
ST 3150	0.263	0.508	0.197	4.4	17,987	2,698	1,295,028
ST 3500	0.315	0.689	0.236	4.5	19,985	2,998	1,438,920
ST 4000	0.362	0.787	0.236	5.1	22,840	3,426	1,644,480
ST 4500	0.417	0.803	0.315	5.8	25,695	3,854	1,850,040
ST 5000	0.472	0.925	0.354	7.0	28,550	4,283	2,055,600
ST 5400	0.472	0.826	0.354	7.2	30,834	4,625	2,220,048

Mercurio ST			ST 700 - ST 1150	ST 1200 - ST 2600	ST 2650 - ST 3150	ST 3200 - ST 3700	ST 3750 - ST 4300	ST 4350 - ST 4900	ST 4950 - ST 5400
			Inch	Inch	Inch	Inch	Inch	Inch	Inch
Recommed minimum Pulley diamter	% operating tension	76 - 100	30	42	48	54	60	72	84
		50 - 75	24	30	42	48	48	54	54
		0 - 49	16	24	30	42	42	48	48

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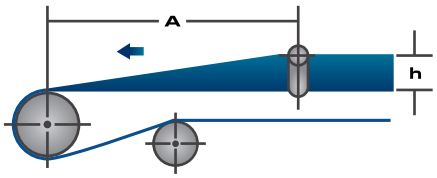
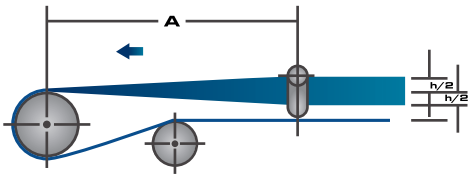
Recommended Minimum Transition Distance

The transition zone is the point on the conveyor where the belt changes plane. Defined as the distance from the last troughing idler to the centerline of the terminal pulley. Improper transition distances and geometry can cause irreparable damage to the belt.
There are two configurations, full and Half trough.

FULL TROUGHT:



HALF TROUGHT:



Trough Idler	% Working Tension	Minimum Transition Distance
20°	> 90	4.0 x W
	60 to 90	3.2 x W
	< 60	2.8 x W
35°	> 90	6.8 x W
	60 to 90	5.2 x W
	< 60	3.6 x W
45°	> 90	8.0 x W
	60 to 90	6.4 x W
	< 60	4.4 x W

W - Belt Width

Trough Idler	% Working Tension	Minimum Transition Distance
20°	> 90	2.0 x W
	60 to 90	1.6 x W
	< 60	1.0 x W
35°	> 90	3.4 x W
	60 to 90	2.6 x W
	< 60	1.8 x W
45°	> 90	4.0 x W
	60 to 90	3.2 x W
	< 60	2.3 x W

W - Belt Width