# Mercurio Conveyor Belt **PP Textile**



Composed of a nylon carcass in the warp and in the weft, the **Mercurio PP Textile Belt** presents higher resistance to high temperatures and important flexibility, providing excellent throughability and high resistance to wear.

**Mercurio PP Textile Belt** is used in situations where there is need of high impact resistance. It has excellent adhesion, excellent resistance to tension, great flexibility and mechanical splice.

The following are some of its practical use examples for different Industries:

Industry	Application
Cement Plants, and aggregates	Excellent operation in impact absorption.
Fertilizers	Reaction Conveyor Belt - incorporated in the belt cons- truction, which has excellent resistence to chemical reaction.
Mining	It is indicated for short-leng- th belts that have to absorb impacts.
Wood, Paper and Cellulose	Log Conveyor Belt - excellent impact resistance, and it can also have acessories in extreme and high severity situations.
Steelmaking	Blast Furnace Conveyor Belt - where use of conventional belt is not recommended due to the high temperature (>150°C).



For adequate specification of the **Mercurio PP Textile Belt,** contact our highly specialized Application Engineering and Technical Assistance teams.

# \*Data subject to change without notice.

## Mercurio Conveyor Belt **PP Textile**



# Technical Data | Metric Units

### MINIMUM AND MAXIMUM BELT WIDTH

Mercurio Working Carcass Carcass				Throughability Minimum Belt Width			0-800kg/m³			801 - 1600kg/m³			1601 - 2400kg/m³			Over 2400kg/m³		
Carcass DIN 22102	N [N/mm] [kg/m²]	Thickness [mm] +/-1	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	
										N	1ilimeter	s						
PP 630/2	52	3,2	3,0	450	450	600	1.400	1.200	1.000	1.200	1.000	900	1.000	900	800	900	800	600
PP 900/3	75	4,8	4,5	600	600	800	1.800	1.800	1.600	1.800	1.600	1.400	1.600	1.400	1.200	1.400	1.200	1.000
PP 1250/3	104	6,0	5,9	800	800	900	2.200	1.800	1.800	2.000	1.800	1.600	1.800	1.600	1.400	1.600	1.400	1.200
PP 1250/4	104	6,5	6,0	800	800	900	2.200	2.000	1.800	2.000	1.800	1.600	1.800	1.600	1.400	1.600	1.400	1.200
PP 1800/4	150	8,0	7,8	900	900	1.000	2.200	2.200	2.000	2.200	2.000	1.800	2.000	1.800	1.600	1.800	1.600	1.400
PP 2100/5	175	10,0	9,8	1.000	1.000	1.200	2.200	2.200	2.000	2.200	2.200	2.000	2.200	2.000	1.800	2.000	1.800	1.800
PP 2500/6	208	12,0	11,7	1.200	1.200	1.400	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.000	2.200	2.000	2.000

### MINIMUM PULLEY DIAMETERS

Carcass	PP 630/2	PP 900/3	PP 1250/3	PP 1250/4	PP 1800/4	PP 2100/5	PP 2500/6			
Working Tension	Milimeters									
Up to 40%	300	350	400	400	450	500	600			
Over 40% up to 60%	350	400	450	450	500	600	800			
Over 60% up to 80%	400	450	500	500	600	800	900			
Over 80%	450	500	600	600	800	900	1.000			

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## Mercurio Conveyor Belt **PP Textile**



# Technical Data | Imperial Units

### MINIMUM AND MAXIMUM BELT WIDTH

Mercurio Working Carcass C		Carcass	Minimum Be		Throughability inimum Belt Width 0 - 50 lb/		- 50 lb/fi	t <sup>3</sup>	51 - 100 lb/ft³		101 - 150 lb/ft³			Over 150 lb/ft³				
Carcass DIN 22102	Tension Weigt [PIW] [lb/ft <sup>2</sup> +/-2,59		Thickness [in] +/-0,04	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg	20 deg	35 deg	45 deg
											Inches							
PP 630/2	297	0.7	0.12	18	18	24	54	48	42	48	42	36	42	36	30	36	30	24
PP 900/3	429	1.0	0.18	24	24	30	72	72	60	72	60	54	60	54	48	54	48	42
PP 1250/3	594	1.3	0.24	30	30	36	86	72	72	84	72	60	72	60	54	60	54	48
PP 1250/4	594	1.4	0.24	30	30	36	86	84	72	84	72	60	72	60	54	60	54	48
PP 1800/4	857	1.7	0.31	36	36	42	86	86	84	86	84	72	84	72	60	72	60	54
PP 2100/5	1,000	2.1	0.39	42	42	48	86	86	84	86	86	84	86	84	72	84	72	72
PP 2500/6	1,188	2.5	0.47	48	48	54	86	86	86	86	86	86	86	86	84	86	84	84

### MINIMUM PULLEY DIAMETERS

Carcass	PP 630/2	PP 900/3	PP 1250/3	PP 1250/4	PP 1800/4	PP 2100/5	PP 2500/6
Working Tension				Inches			
Up to 40%	12	14	16	16	18	20	24
Over 40% up to 60%	14	16	18	18	20	24	30
Over 60% up to 80%	16	18	20	20	24	30	36
Over 80%	18	20	24	24	30	36	42

# Mercurio Conveyor Belt **PP Textile**

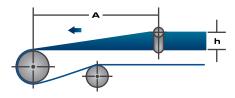


### Recommended Minimum Transition Distance

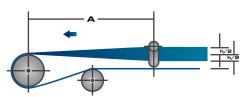
The transition zone is the point on the conveyor where the belt changes plane. Defined as the distance from the last troughing idler to the centerline of the terminal pulley. Improper transition distances and geometry can cause irreparable damage to the belt.

There are two configurations, full and Half trough.









Trough Idler	% Working Tension	Minimum Transition Distance				
	>90	1.8×W				
20°	60 to 90	1.6×W				
	< 60	1.2×W				
	> 90	3.2×W				
35°	60 to 90	2.4×W				
	< 60	1.8×W				
	> 90	4.□×W				
45°	60 to 90	3.2×W				
	< 60	2.4×W				
		(W) Belt Width				

Trough Idler	% Working Tension	Minimum Transition Distance				
	>90	0.9×W				
20°	60 to 90	0.8×W				
	<60	0.6×W				
	>90	1.6×W				
35°	60 to 90	1.3×W				
	< 60	1.□×W				
	>90	2.0×W				
45°	60 to 90	1.6×W				
	<60	1.3×W				

(W) Belt Width