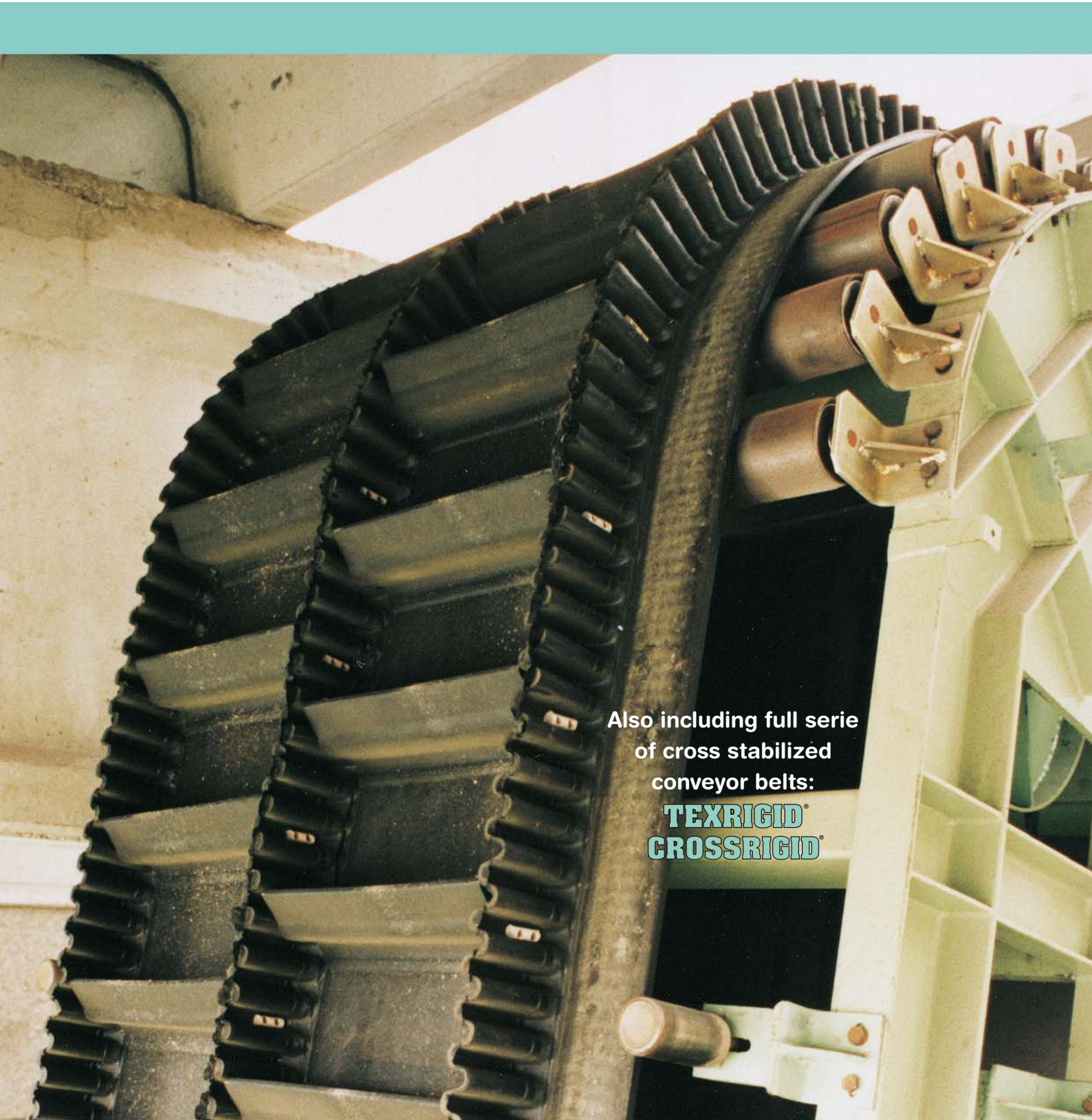


FLEXOBORD[®]



The sidewall conveyor belting



Also including full serie
of cross stabilized
conveyor belts:

TEXRIGID[®]
CROSSRIGID[®]

PRODUCT PRESENTATION

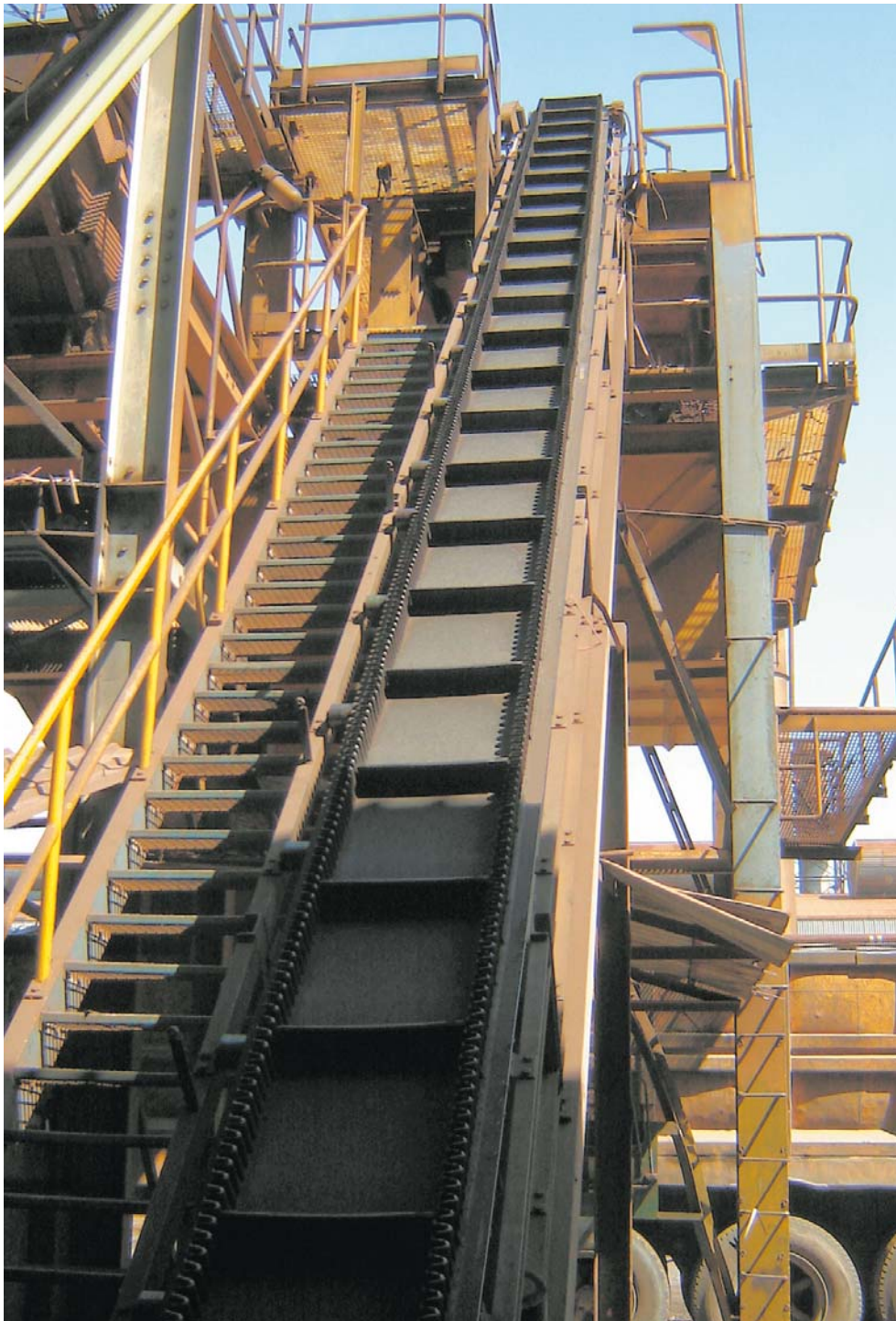
Flexobord belts are based on the following main components:

- 1) Base belt
- 2) Sidewalls
- 3) Cleats

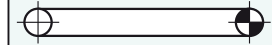
The correct choice of each component in relation to the final use is one of the most important contribution to the overall plant performances.

The complete range of SIG belts is produced according to the international standards; therefore the cross reinforcement of the carcass ensures the necessary transversal stiffness and prevents from hitting the full width return idlers.

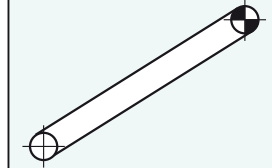
Sketches on the right show typical but not exhaustive Flexobord layouts; the belt designer must take into consideration these alternatives to guarantee correct plant performances.



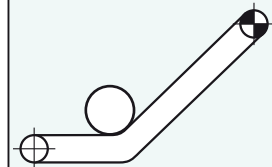
1. Horizontal



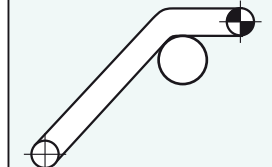
2. Straight inclined



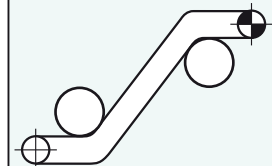
3. L'inverted



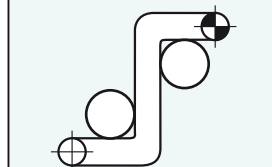
4. Inclined + horizontal



5. 'S' shape



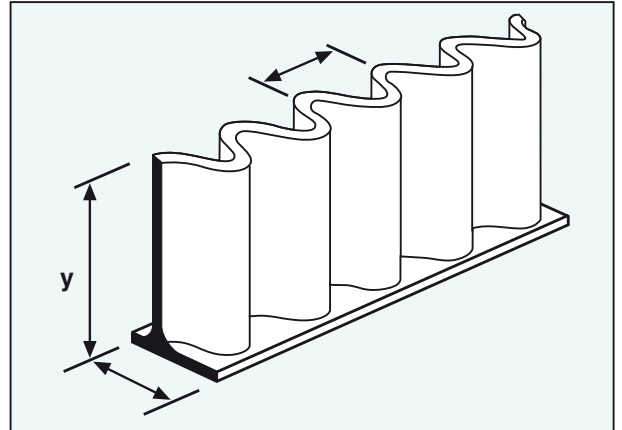
6. 'S' vertical shape



SIDEWALLS

DIMENSIONS approx. (mm)

TYPE	Width W	Height H	Pitch p	Weight [Kg/m]
60	50	60	50	1,4
80	50	80	50	1,6
120	50	120	50	2,0
160	75	160	58	3,6
200	80	200	65	5,6
240	90	240	65	7,5
300	90	300	65	9,4
400	90	400	65	12,6

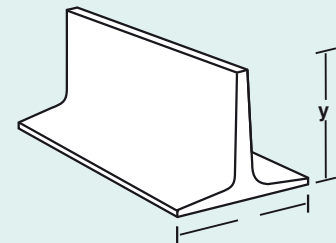


CLEATS

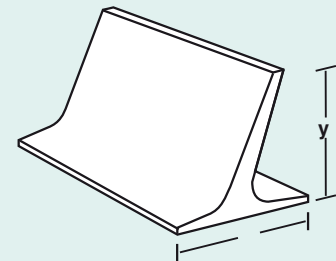
DIMENSIONS approx. (mm)

TYPE	Width W	Height H	Section S	Weight [Kg/m]
D110	110	110	-	3,0
N50	42	50	0,02	0,6
N70	70	70	0,05	1,4
N105	110	105	0,18	2,7
C70	70	70	0,12	1,9
C110	110	110	0,32	3,5
C140	150	140	0,43	5,2
C180	160	180	0,92	7,2
U220	200	200	1,29	11,7
U280	200	280	1,65	13,4
U380	200	380	2,25	16,2

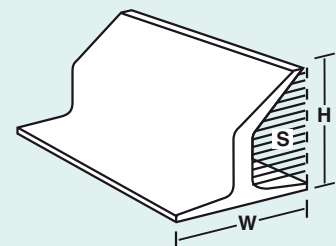
Cleats and sidewalls dimensions are only approximate
For different typologies, please ask our commercial dept



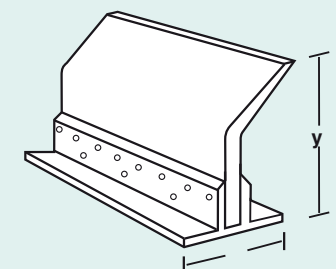
D



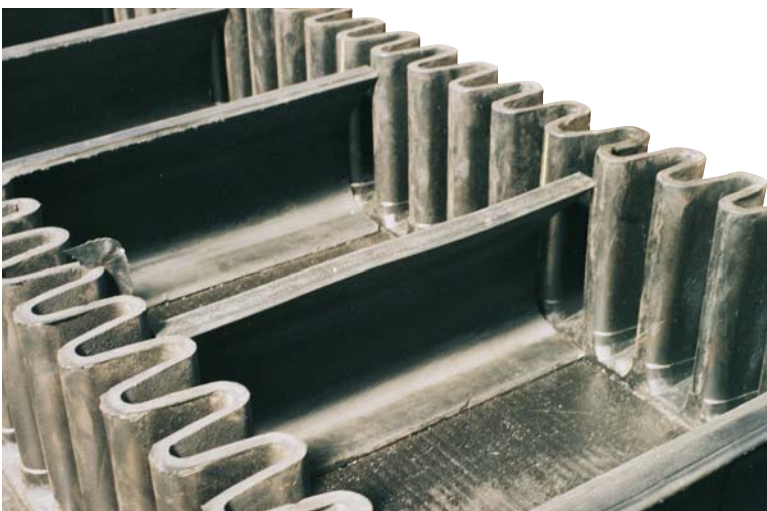
N



C



U

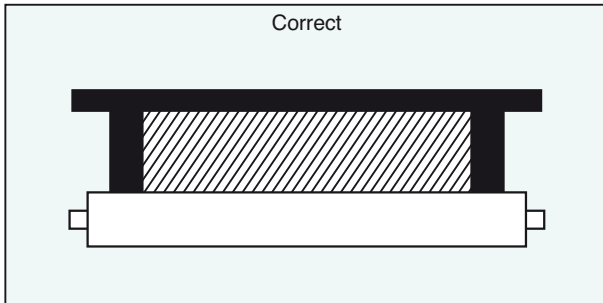


BASE BELT - THE CROSS STABILIZED CONSTRUCTION

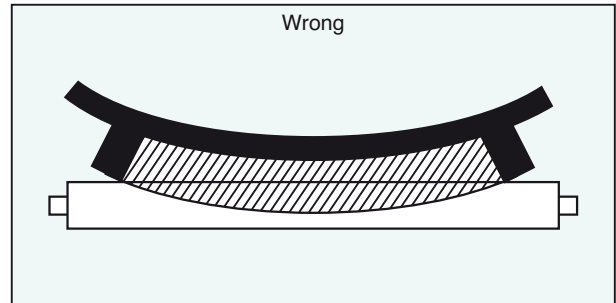
BASE BELT SELECTION

The main required characteristic of a base belt suitable for Flexobord applications is the controlled transversal stiffness, also named cross stabilized construction.

The following sketches indicate the consequences due to a wrong choice of the base belt:



Correct cross stabilized base belt

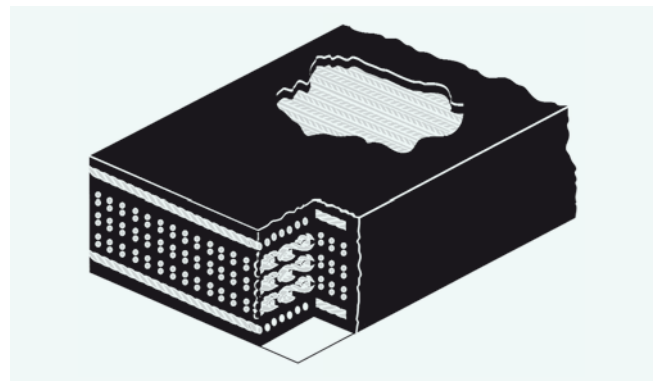


Common quality base belt

Standard base belt without any particular transversal stiffness are usable only for horizontal flat belts made with only corrugated sidewalls without transversal cleats.

According to the heaviness of the application, the following base belt typologies are available:

XR Composed by only textile fabrics with high transversal stiffness; two special synthetic layers assure the correct cross stabilizing properties. They are provided with cut edges for light and medium applications. This base construction can be sold as independent product with the brand name **TEXRIGID®**. The sketch on the right shows the cross stabilized construction



Belt width (mm)	TEXRIGID® styles (kN/m) Standard covers 4 + 2 MM			
	400	500	630	800
RECOMMENDED BELT WIDTHS (mm)				
400	X			
500	X	X		
600	X	X	X	X
650	X	X	X	X
800		X	X	X
1000		X	X	X
1200			X	X
MINIMUM SUGGESTED PULLEY DIAMETER (mm)				
Drive	500	630	630	800
Return	400	500	500	630
Snub	315	400	400	500

Standard production length: 200 m;

Typical production widths as slab: 1200, 1300 and 1600 mm

Unless specifically designed, TEXRIGID are not suitable for sealing applications.

SR Composed by a mix of multi-ply synthetic carcass and suitable steel reinforcement to ensure high transversal stiffness for any kind of Fleobord applications, up to the heaviest. They are provided only with moulded edges. This cross stabilized base belt can be sold as independent product with the brand name **CROSSRIGID®**. The sketch on the left shows the cross stabilized construction.

Belt width (mm)	CROSSRIGID® styles (kN/m) Standard covers 4 + 2 MM				
	500/3	630/4	800/4	1000/5	1250/5
INDICATIVE BELT THICKNESS (mm)					
800	14,0	15,0	16,0	-	-
1000	14,0	15,0	16,0	17,5	18,5
1200	15,0	16,0	17,0	18,5	19,5
1400	16,5	17,0	18,0	19,5	20,5
1600	17,0	18,0	19,0	20,5	21,5
1800	19,0	20,0	20,5	22,0	23,5
MINIMUM SUGGESTED PULLEY DIAMETER (mm)					
Drive	400	500	630	800	1000
Return	315	400	500	630	800
Snub	250	315	400	500	630

Standard production length: 200 m;

The transversal stiffness of CROSSRIGID is not suitable for sealing applications unless supported over the whole belt width with a suitable rigid structure; specific constructions are necessary for these special products to assure the static stability when rest only along the edges: SIG SpA designs and produces such a products with the brand name SEALTEX.

ST Designed for the heaviest applications where high elevation and/or conveying capacity are involved, it is composed by longitudinal steel cords with a special transversal steel reinforcement to assure the required stiffness. Full range is available from 1250 to 3500 KN/m; for the correct belt selection, please contact our technical dept.

COVER SELECTION

Base belt can be provided with alternative rubber covers with reference to the specific application. On request, special productions with cleats and edges of the same rubber of base belt can be realized; please ask our sales dept to verify all details.

CL: Standard abrasion resistant

EC: Extra abrasion and tear resistant

OM: Vegetable oil and animal greases resistant

OH: Mineral oil resistant

BS: Self-extinguish and antistatic

AG: Vegetable oil and animal greases resistant, self-extinguish and antistatic

CX: Heat resistant up to 130 °C with peaks of 150 °C

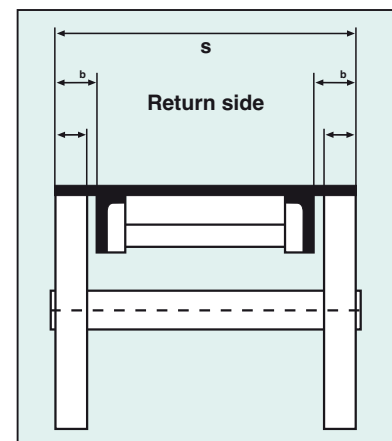
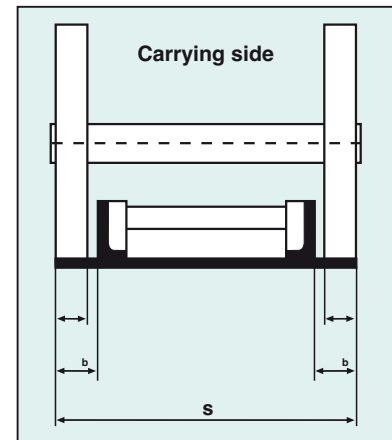
ELEMENTS FOR PLANT DESIGN

MINIMUM SUGGESTED PULLEY DIAMETERS (mm)

SIDEWALL TYPE	DRIVE PULLEY	TAKE-UP PULLEY	DEFLECTION WHEEL
60	200	200	315
80	200	200	315
120	315	315	500
160	400	400	630
200	500	500	800
240	630	630	1000
300	800	800	1200
400	1000	1000	1600



DEFLECTION WHEELS



FREE LATERAL SPACE WIDTH (mm)

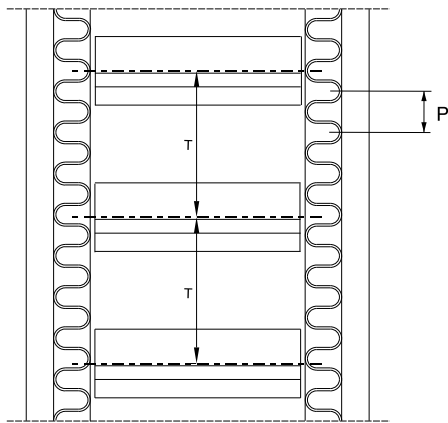
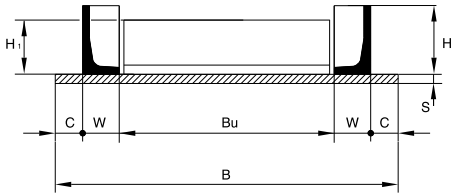
Belt width B (mm)	400	500	650	800	1000	1200	1400	1600	1800	2000
Free lateral space b_2 (mm)	60	60	75	100	125	150	175	200	225	250
Wheel min width (mm)	48	48	60	80	100	120	140	160	185	210

OTHER USEFULL INFORMATIONS for PLANT DESIGN

- Minimum cleat pitch = 1,5 x Max lump size
- Minimum cleat height = (1,5 to 2) x Max lump size
- Width of support idlers (mm) = Belt width (mm) + 100 mm
- Idler pitch - carrying side ≤ 1 m max
- Pitch of full width return idlers ≤ 2 m
- Pitch of short return idlers ≤ 1 m
- Lateral idlers for alignment: min 4 for each straight section; max distance = 12 m

DATA SHEET

Our customer service is always at Your disposal to suggest the best choice for tensile strength calculation and cleat / edges geometrical selection.
 In order to supply us all the necessary information for a careful calculation, please fill in the following data sheet as completely as possible.



B [mm]	Center distance [m]
S [mm]	Elevation [m]
B _u [mm]	Max belt slope [deg]
C [mm]	Speed [m/sec]
W [mm]	Motor power [kW]
H [mm]	Capacity [Ton/h]
P [mm]	Conveyed material
T [mm]	Lump size [mm]
H ₁ [mm]	Density [Ton/m ³]
	Angle of repose [deg]
	Tensile strength [KN/m]
Cleat type (pag 3) D <input type="radio"/> N <input type="radio"/> C <input type="radio"/> U <input type="radio"/>	
Plant profile (pag 2) 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/>	

DATA for ORDERING

To avoid errors or misunderstanding in the order, we suggest to use the following belt designation:

150 m	Flexobord	120	XR	500 / 4	4 + 2	CL	1000
Belt length (m)	Brand name	Sidewall height (mm)	Base belt designation	Tensile strength of base belt (N/mm)	Number of plies	Top + Bottom cover thickness (mm)	Cover quality
							Belt width (mm)

Please also indicate the following information:

Cleat pitch (mm) and type (D, N, C, U)

Transversal sketch (for example: 120 + 50 + 700 + 50 + 120 = 1000 mm)

or enclose the above sketch filled in with all relevant elements.



THE MATTER OF THIS PUBLICATION IS ONLY FOR INFORMATION; THEREFORE IT CAN NOT INVOLVE S.I.G. FOR ANY CONSEQUENCE DUE TO POSSIBLE ERRORS.

S.I.G. RESERVS THE RIGHT TO INTRODUCE AT ANY TIME SUCH MODIFICATION AS COULD BE JUSTIFIED BY CONTINUOUS DEVELOPEMENT AND IMPROVEMENT.



ISO 9001:2000 QUALITY SYSTEM CERTIFICATION

21055 Gorla Minore (Italy)
Via Colombo, 144
Phone +39 0331 36.51.35
Fax +39 0331 36.52.15
www.sig.it - E-Mail: sig@sig.it

FINANCIAL DEPT
20152 Milano - Italy
Via Brogгинi, 10
Phone +39 02 48.91.53.00
Fax +39 02 48.91.52.00

