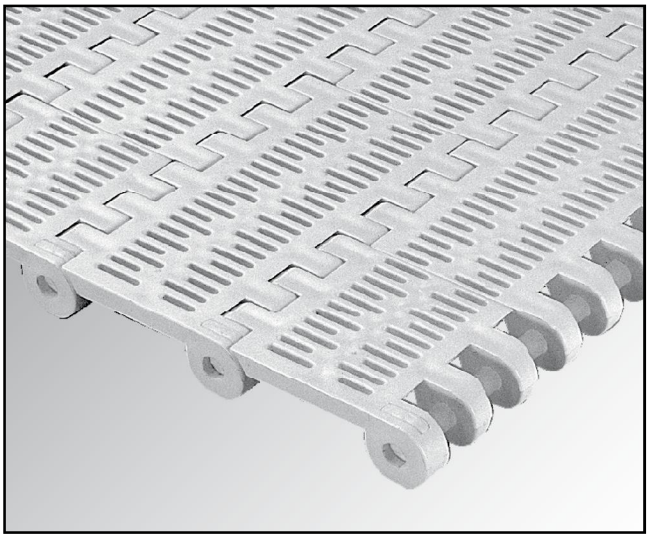
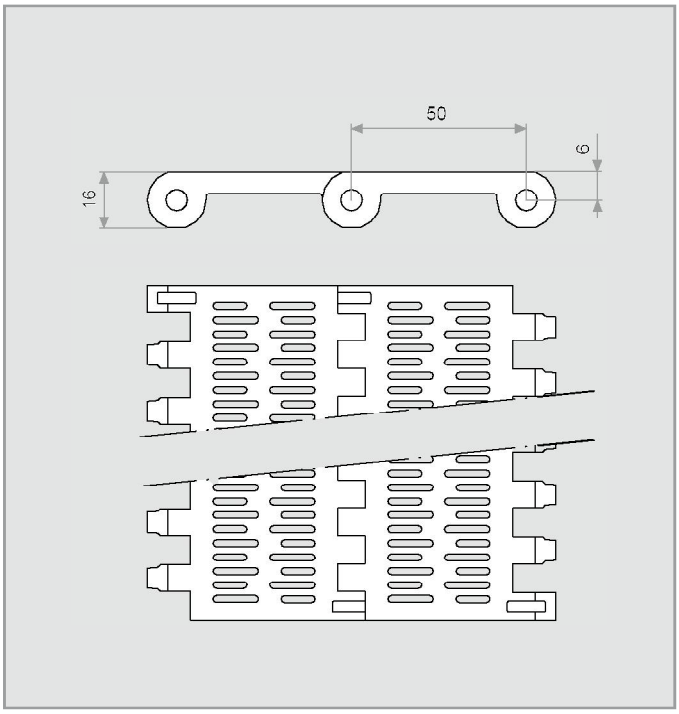
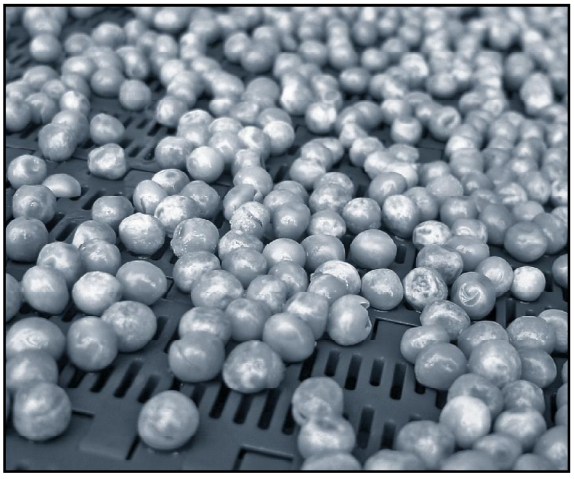
SERIES E80 PERFORATED FLAT TOP





Eurobelt Series E80 Perforated Flat Top has a 24% open area and a completely smooth surface with grille-shaped small straight holes, not presenting any structural obstacle, which have the following dimensions: [13 x 2] and [10 x 2] mm.

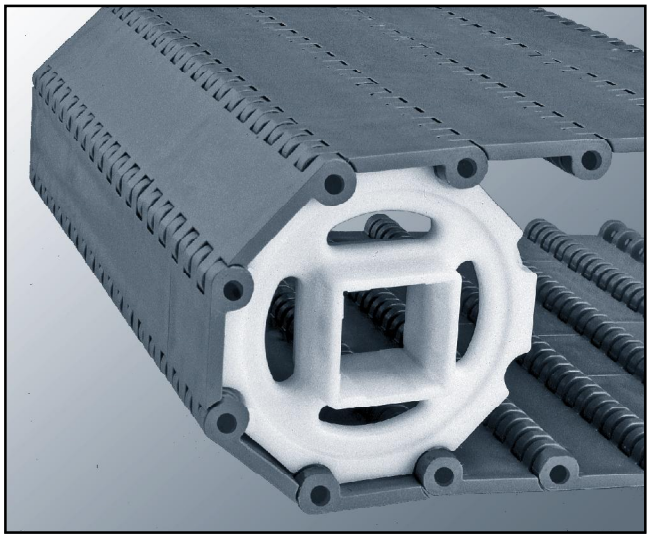


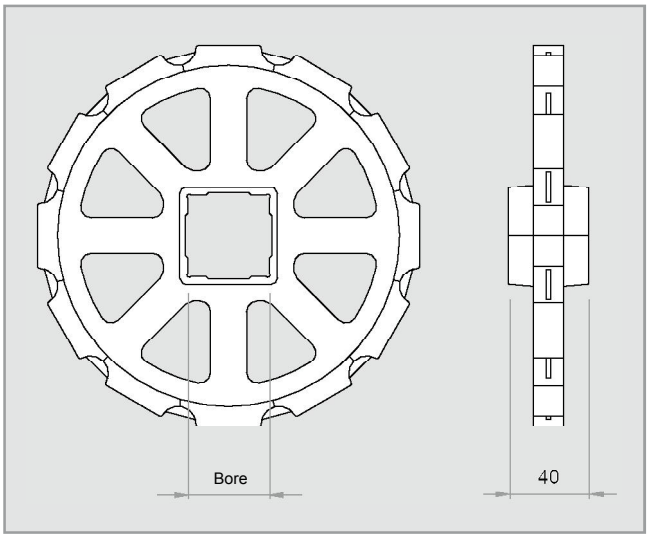
Pitch	50 mm
Surface	Perforated Flat Top
Open area	24 %
Dimensions of openings	[13 x 2] - [10 x 2] mm
Thickness	16 mm
Drive system	Hinge
Belt width	Multiples of 16 mm
Rod diameter	Ø 6 mm
Retention system	Cap

Material of the belt	Material of the rod	Belt strength (kg/m)	Temperature range (ºC)	Belt weight (kg/m²)	Available colours in stock
PP - Polypropylene	PP - Polypropylene	1,045	+1 to +104	5.40	[W] - [G]
PE - Polyethylene	PE - Polyethylene	475	-50 to +65	5.62	[N]
AC - Polyacetal	PP - Polypropylene	1,700	+1 to +90	8.15	[N] - [B]
	PE - Polyethylene	1,500	-40 to +65	8.19	[N] - [B]

Colours: [W] White - [G] Grey - [B] Blue - [N] Natural - [O] Black. // The materials and colours that are normally in stock are those above indicated. In special cases in which it is needed a belt in a material or colour different from those above mentioned, you should ask directly to EUROBELT.

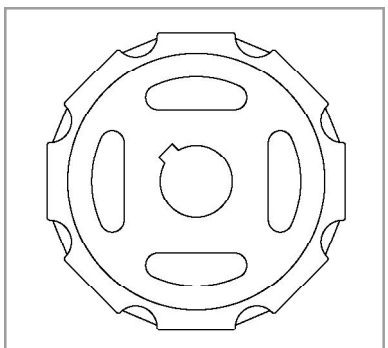
ACCESSORIES [SPROCKETS]



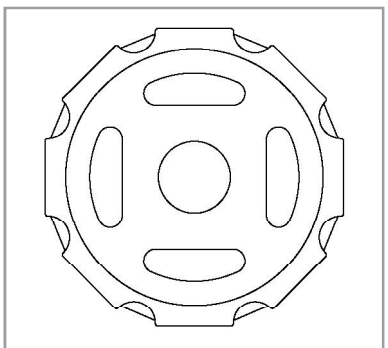


N° of teeth T	Pitch diameter	Bore for square shaft		Hub width	Materials
		mm	inch		
8	130,6	40	1.5"	40	Polypropylene Polyacetal Stainless steel
10	161,8	40 60	1.5"	40	
12	193,2	40 60	1.5"	40	
16	256,3	40 60 90	1.5"	40	

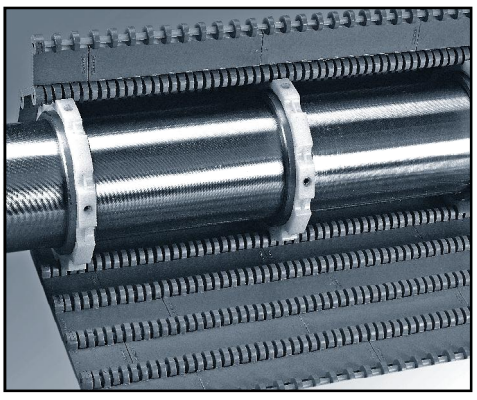
SPROCKETS FOR SQUARE SHAFT



WITH KEYWAY



WITHOUT KEYWAY



We have plastic sprockets for round shaft with and without keyway. We also have sprockets to be used with motor drum in applications needing a special cleaning or in conveyors in which it is not possible to place the motor in the outside due to problems of space or safety.

ACCESSORIES [RETAINING RINGS]

INSTALLATION

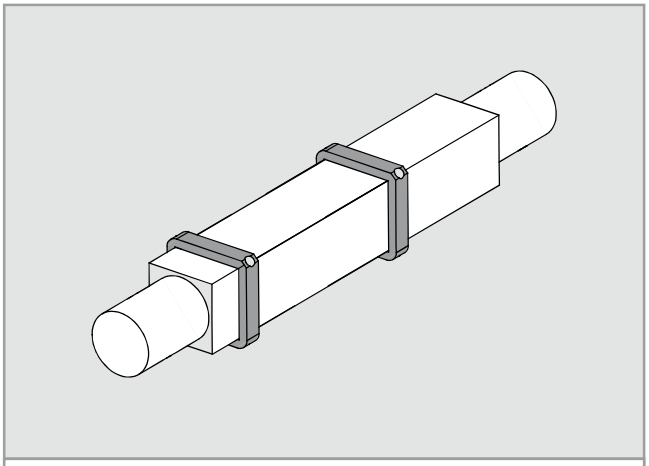
These rings are placed at every side of the central sprocket to fasten it to the shaft in order to avoid any lateral movements of the belt.

They are manufactured in AISI 316 stainless steel and they are fixed by means of a set screw stuffed in the ring itself.

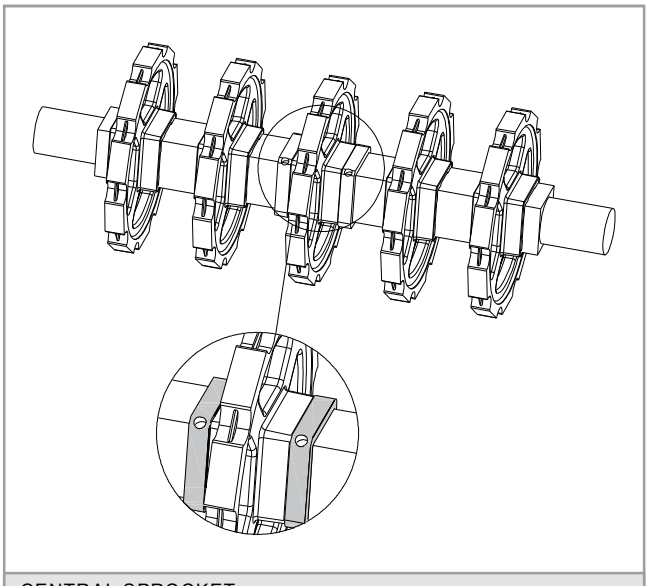
One sprocket, duly fixed with 2 retaining rings, should be put in the centre. Then you should place the same quantity of sprockets at every side of the central one but without any fixing, as they will absorb the possible belt expansions and contractions.

The same procedure should be carried out in both shafts.

Bore for square shaft	Screws
40	M 6 x 6
60	M 6 x 6
90	M 6 x 6



RETAINING RINGS



CENTRAL SPROCKET

ACCESSORIES [FLIGHTS AND SIDE GUARDS]

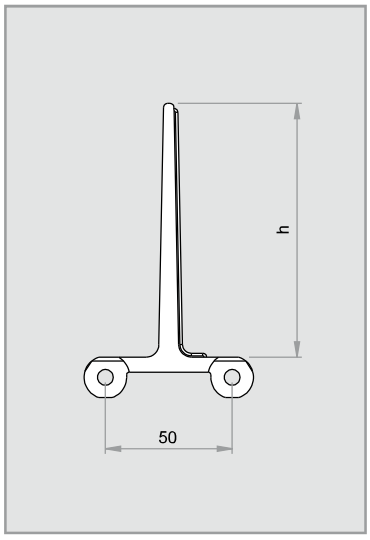
The **flights** are plastic accessories to be inserted across the belt. They are used to push the product in ascent, descent or accompaniment applications, avoiding that it slips along the belt.

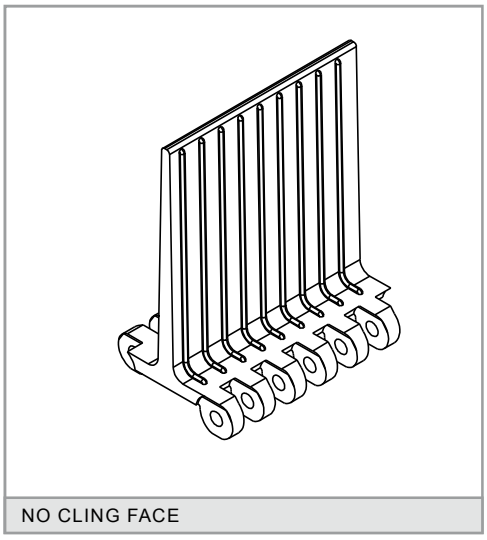
Its non-stick side has ribs that project over the surface to prevent the product from sticking.

The **side guards** are plastic accessories to be inserted into the belt structure to retain the product laterally, avoiding overflows and frictions with the conveyor structure itself.

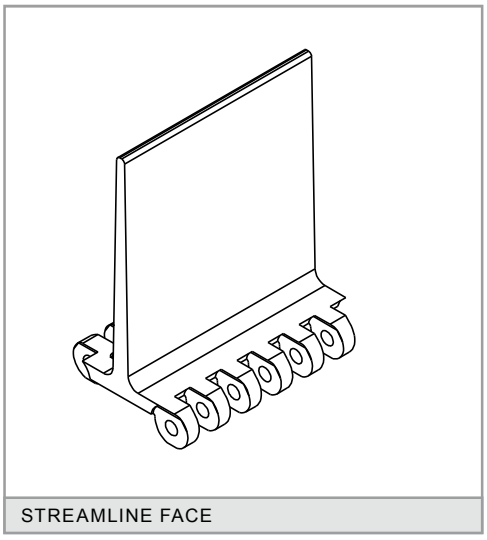
It is possible to cut down the standard height for special applications.

STRAIGHT FLIGHT [STREAMLINE + NO CLING]





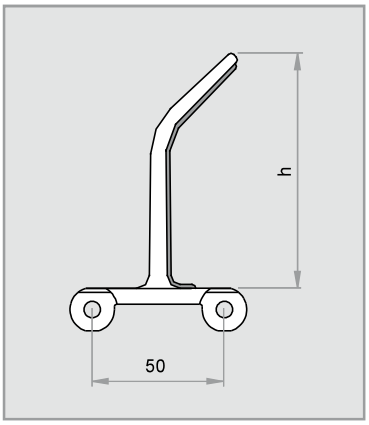
NO CLING FACE

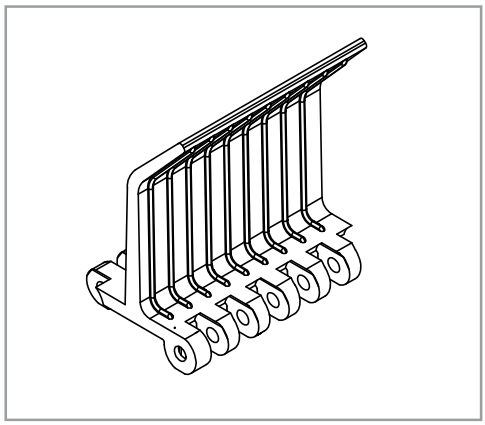


STREAMLINE FACE

Height (h)	Materials
25 50 75 100 150	Polypropylene Polyethylene Polyacetal

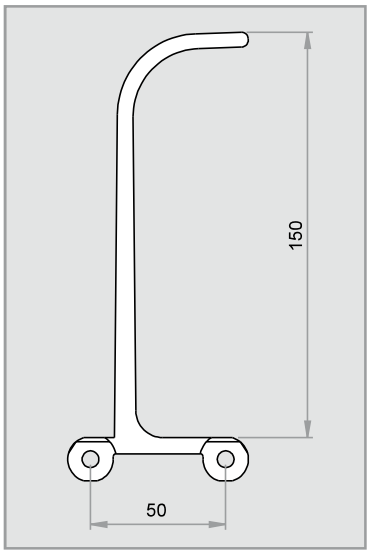
BENT FLIGHT

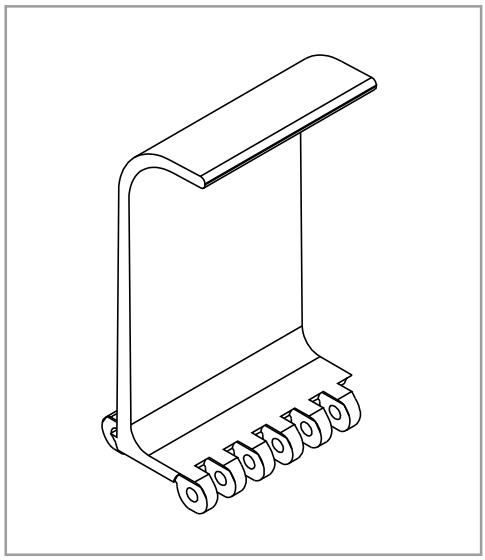


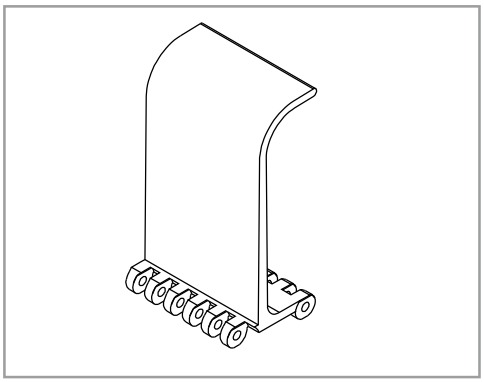


Height (h)	Materials
45 70 90 140	Polypropylene Polyethylene Polyacetal

SCOOP FLIGHT

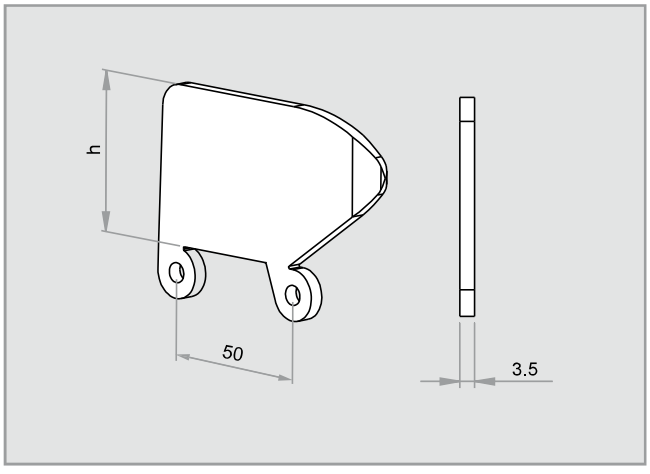


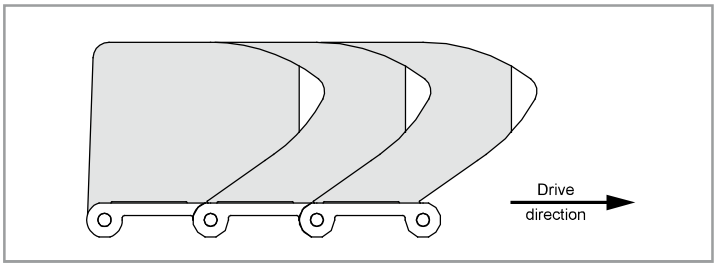




Height (h)	Materials
150	Polypropylene Polyethylene

SIDE GUARDS

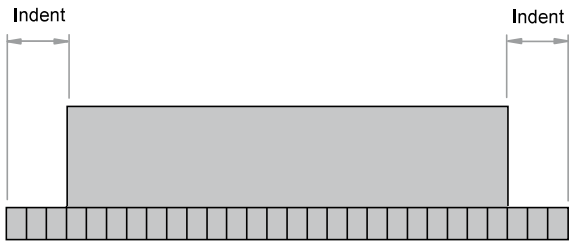




Height (h)	Materials
50 75 100	Polypropylene Polyethylene Polyacetal

TECHNICAL DATA [FLIGHTS AND SIDE GUARDS]

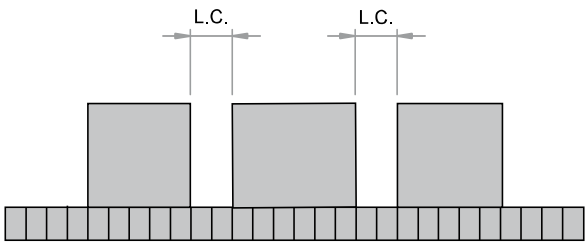
BELT ONLY WITH FLIGHTS



Indent = Multiples of 16 mm (32 mm the minimum).

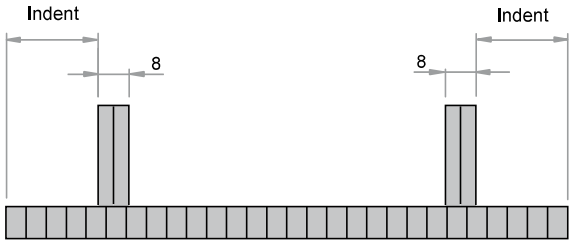
Distance between flights = Multiples of 100.

BELT WITH LONGITUDINAL CUTS



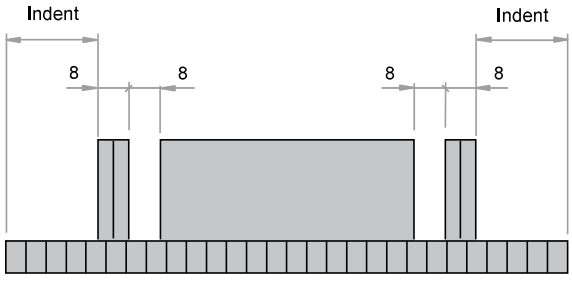
Flight longitudinal cut = Increment of 16 mm (minimum 32 mm)

BELT ONLY WITH SIDE GUARDS



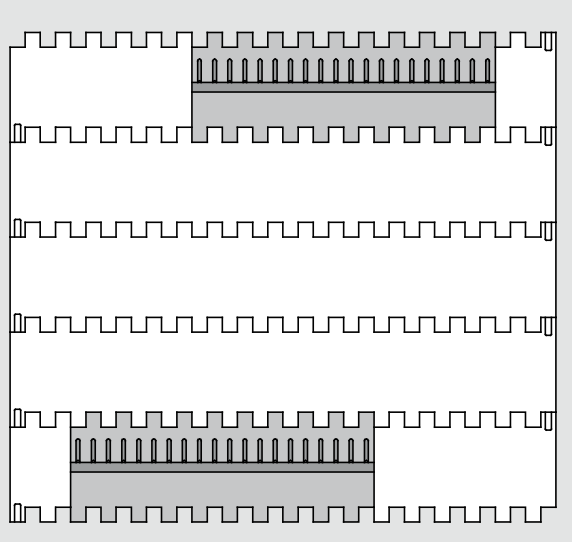
Indent = Multiples of 16 mm (32 mm the minimum).

BELT WITH FLIGHTS AND SIDE GUARDS

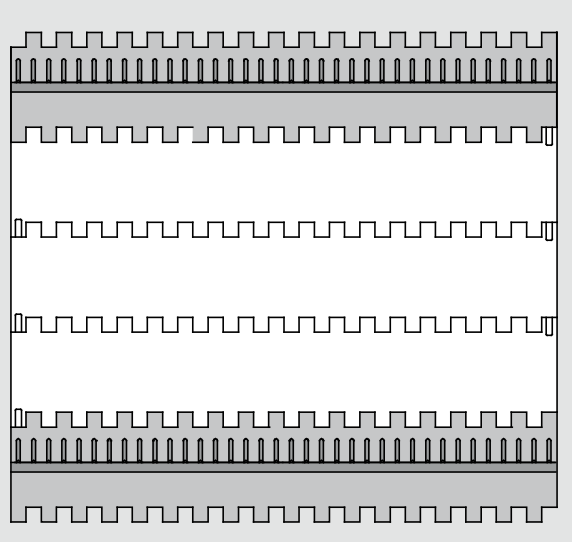


Indent = Multiples of 16 mm (32 mm the minimum).

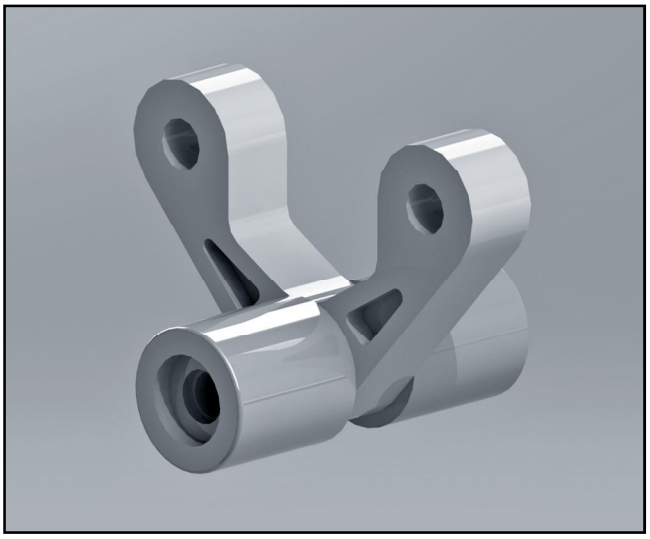
BELT WITH ZIGZAG FLIGHTS

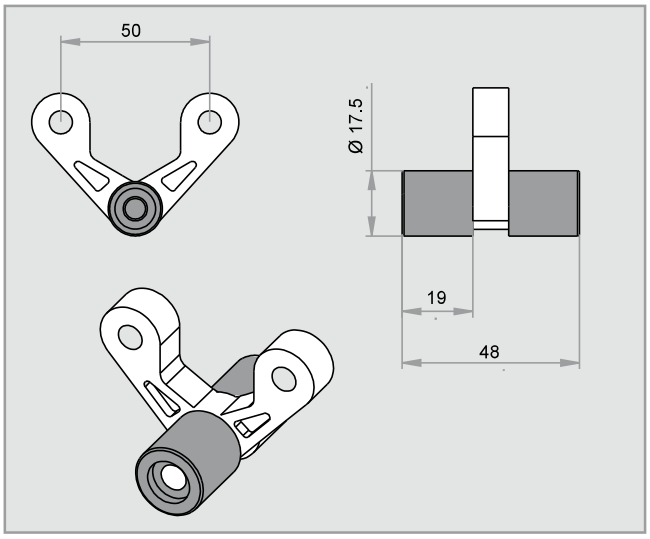


BELT WITH FLIGHTS, WITHOUT INDENT



ACCESSORIES [HOLD-DOWN ROLLERS]

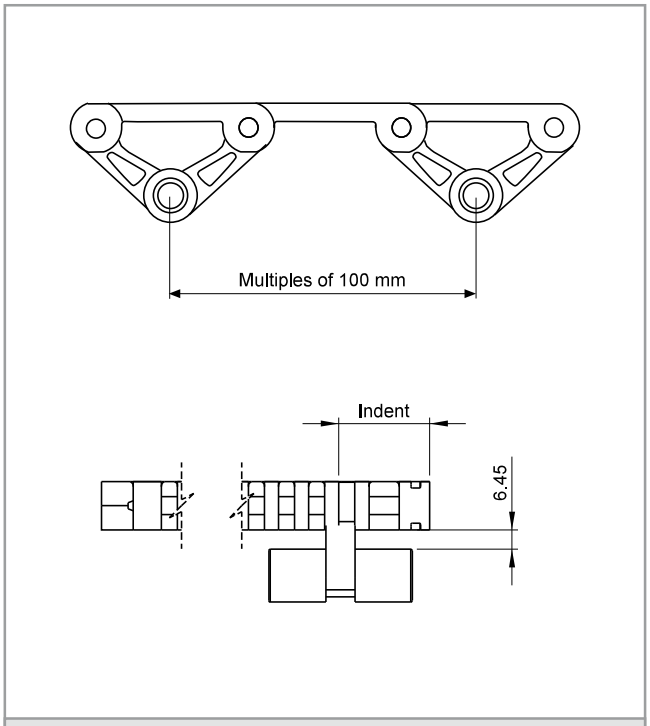




They are used to fasten the belt to the conveyor in all the inflexions. In applications in which the belt must be submerged, they are placed in the middle of the belt to prevent it from getting bent due to the flotation.

They will roll along rails fastened throughtout the conveyor structure. It is recommended to place wearstrips to avoid the wear owing to rolling as far as possible.

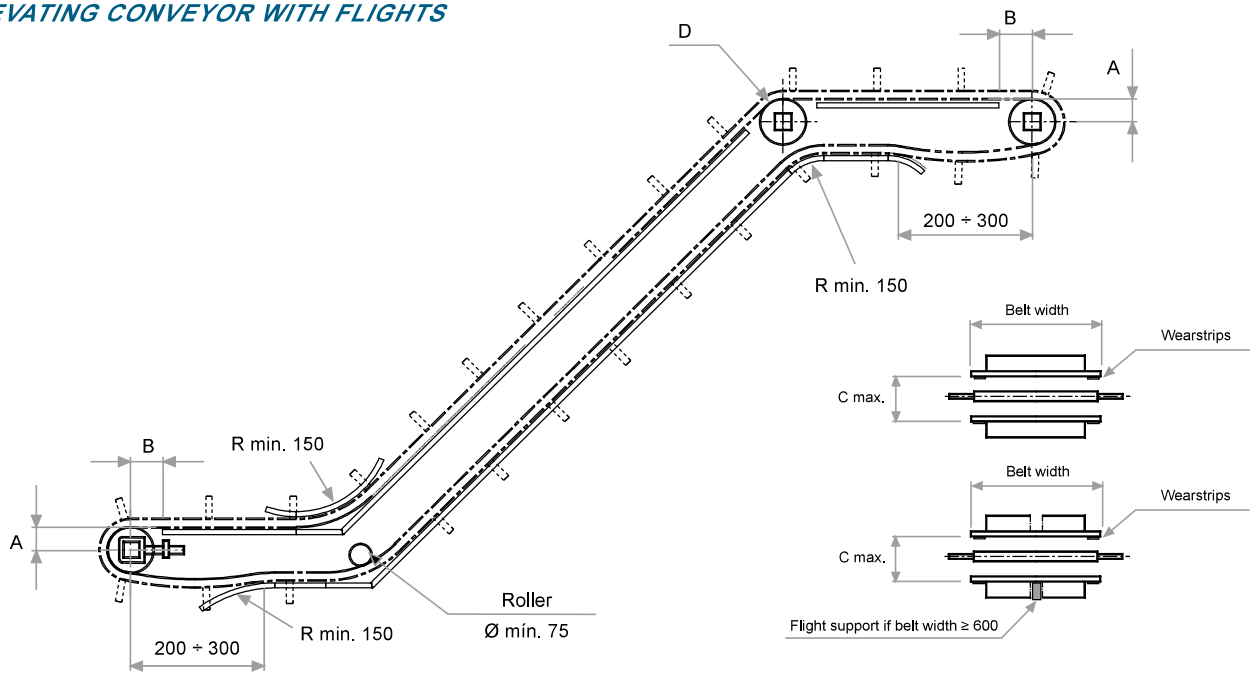
The distance between the side edge of the belt and the centre of the hold-down roller (indent) must be a multiple of 8 mm + 4. Hold-down rollers can be used with any sprocket in Series E80.



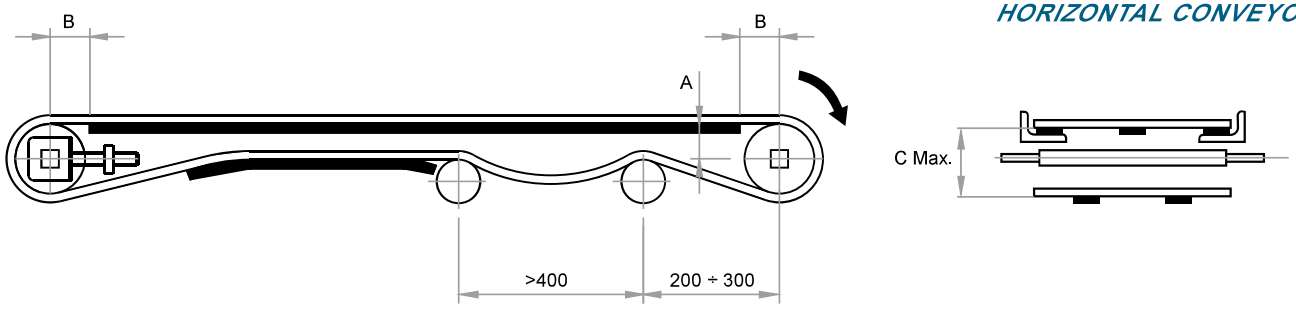
DESIGN DATA

CONSTRUCTION DATA [CONVEYOR]

ELEVATING CONVEYOR WITH FLIGHTS



HORIZONTAL CONVEYOR



[A] Distance between the sliding surface of the belt and the centre of the shaft.

[B] Distance between the vertical of the shaft and the beginning of the sliding surface.

[C] Distance between the sliding surface of the belt and the support of the return way.

[D] If sprockets are used in the inflexion shaft, do not retain the central one.

[R] This radius must be as big as allowed by the application in order to minimize the wear (min. 150 mm). For belts with side guards, consult about this radius.

In the construction of conveyors, the distances appearing in the chart below must be respected according to the belt Series and the size of the sprockets.

Nº of teeth T	Ø Pitch	A	B max.	C max.
8	130.65	58	60	135
10	161.8	72	76	165
12	193.18	89	78	200
16	256.29	120	80	260

TABLE OF SPROCKETS AND WEARSTRIPS

Belt nominal width (mm)		Minimum quantity of sprockets per shaft	Minimum quantity of wearstrips	
			Transport way	Return way
80	144	1	2	2
160	448	3	2	2
464	752	5	3	2
768	1,056	7	5	3
1,072	1,344	9	6	4
1,360	1,648	11	7	5
1,664	1,952	13	9	6
1,968	2,256	15	10	7
2,272	2,544	17	11	8
2,560	2,848	19	12	9
2,864	3,152	21	14	10
3,168	3,456	23	15	11
3,472	3,744	25	16	12
3,760	4,048	27	18	13

To calculate the necessary minimum quantity of sprockets for the drive shaft as well as for the idle one, the next formula has been used:

$$\text{Minimum quantity} = \frac{\text{Belt width (mm)}}{150 \text{ mm}}$$

This amount must always be odd.

To calculate the quantity of supports, the weight of the product to be transported must be taken into account.

The distance between supports should not exceed 230 mm in the transport way or 300 mm in the return way.