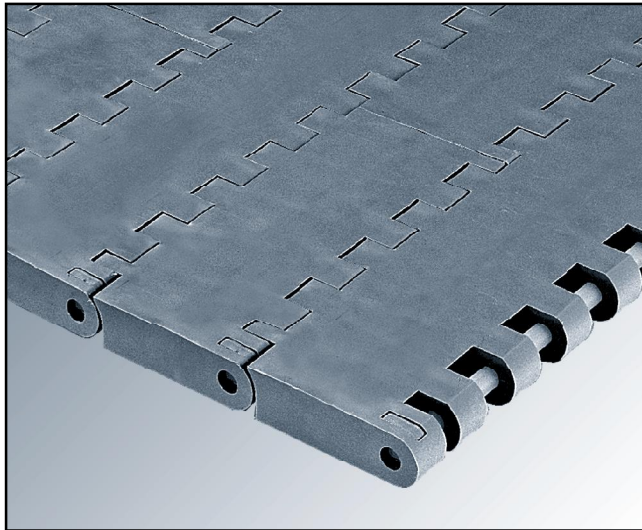
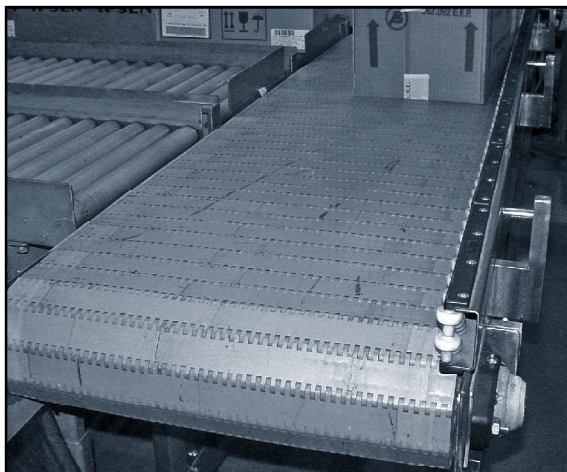
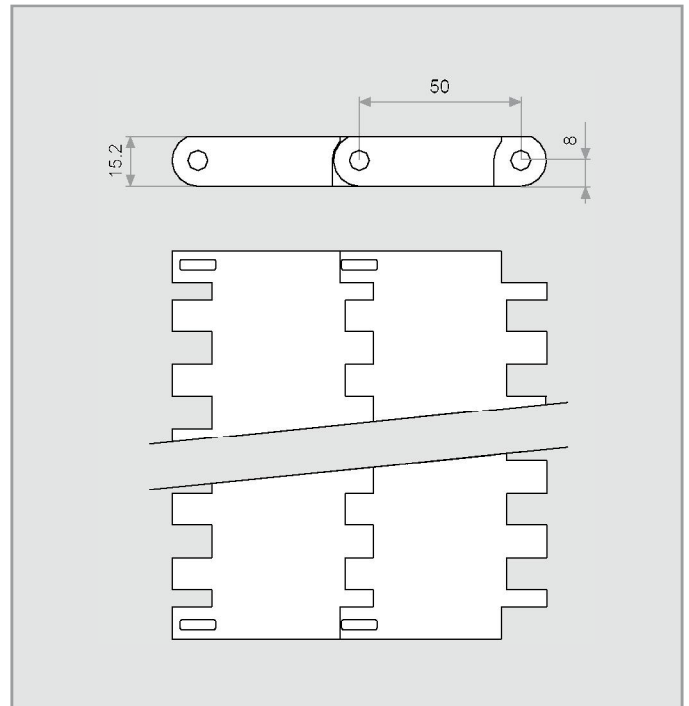


## SERIES E50 FLAT TOP



Eurobelt Series E50 Flat Top, due to its closed surface, completely flat and smooth, avoids any damage and overturn in the product, as well as the resulting line blockage.

It is the conveyor belt most commonly used in elevating conveyors for products in bulk, and in delicate product conveyance.

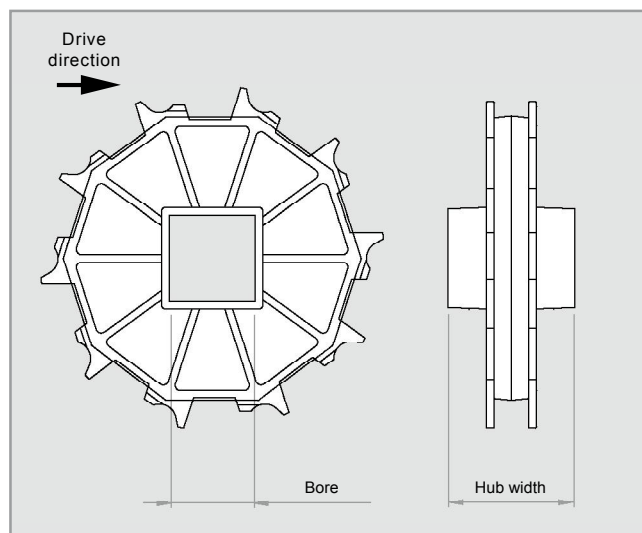


Pitch	50 mm
Surface	Flat Top
Open area	0 %
Thickness	15.2 mm
Drive system	Hinge
Belt width	Multiples of 20 mm
Rod diameter	Ø 6 mm
Retention system	Cap

Material of the belt	Material of the rod	Belt strength (kg/m)	Temperature range (°C)	Belt weight (kg/m <sup>2</sup> )	Available colours in stock
PP - Polypropylene	PP - Polypropylene	1,800	+1 to +104	7.70	[W] - [G]
PE - Polyethylene	PE - Polyethylene	1,100	-50 to +65	8.04	[N] - [B]

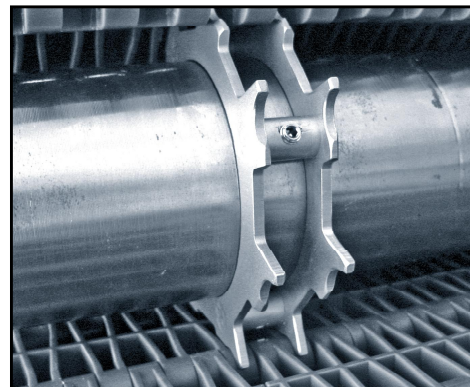
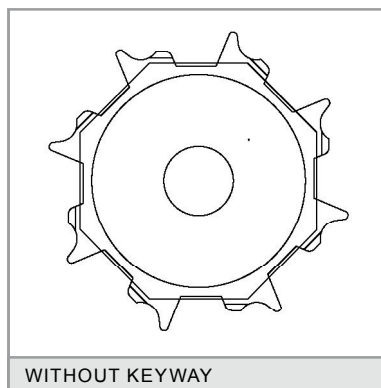
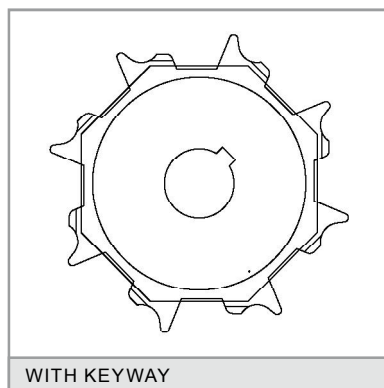
Colours: [W] White - [G] Grey - [B] Blue - [N] Natural - [O] Black. // The materials and colours that are normally in stock are those above indicated. In special cases in which it is needed a belt in a material or colour different from those above mentioned, you should ask directly to EUROBELT.

**ACCESSORIES [SPROCKETS]**



N° of teeth T	Pitch diameter	Bore for square shaft		Hub width	Materials
		mm	inch		
6	100	40	1.5"	40	Polypropylene
8	130.6	40	1.5"	40	
10	161.8	40 60	1.5" 2.5"	60	Polyacetal
16	256.2	40 60	1.5" 2.5"	60	Stainless steel

**SPROCKETS FOR SQUARE SHAFT**



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

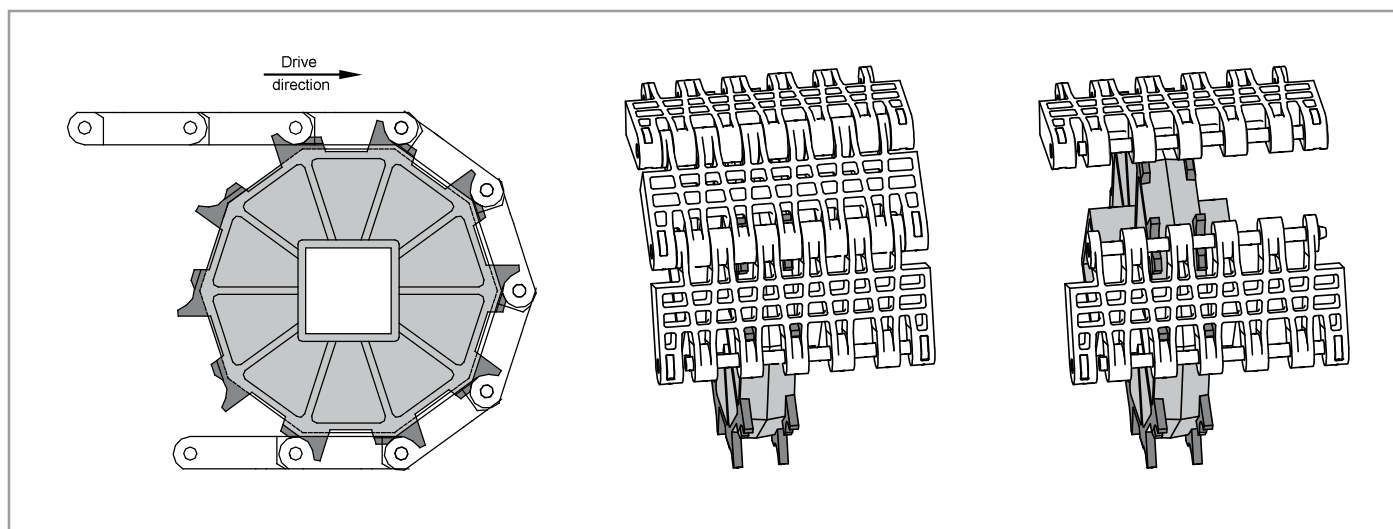
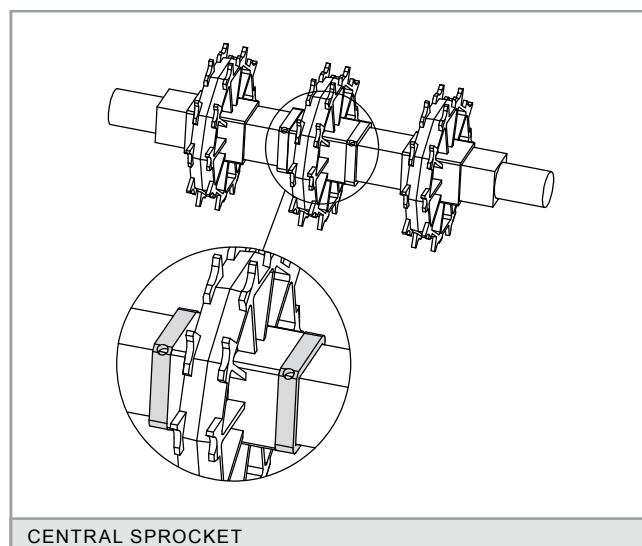
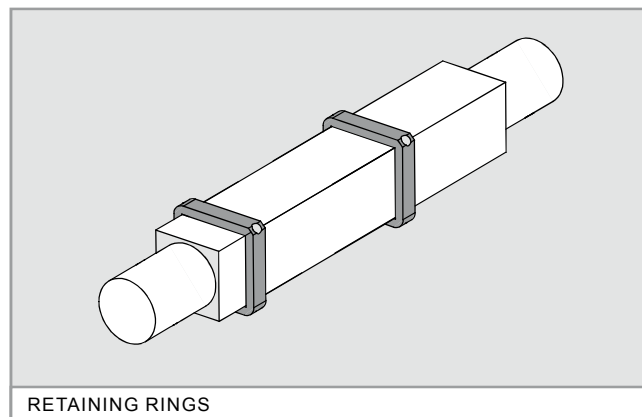
These rings are placed at every side of the central sprocket to fasten it to the shaft in order to avoid any lateral movements of the belt.

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



## ACCESSORIES [FLIGHTS]



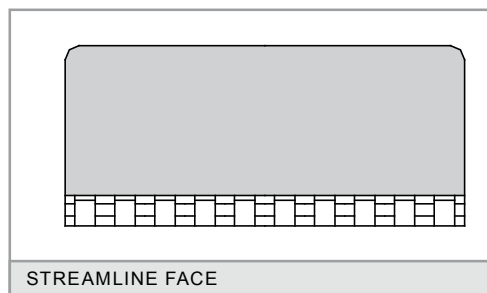
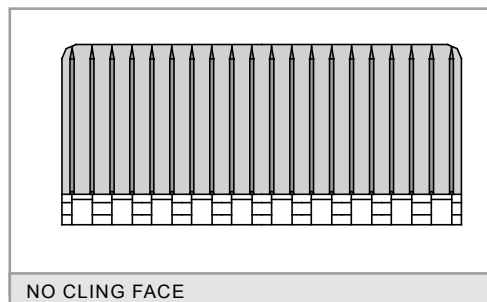
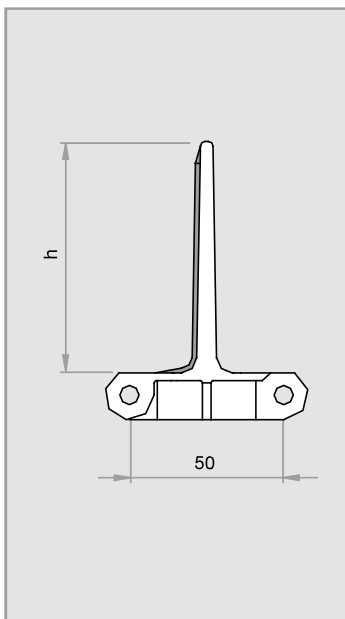
When building a conveyor, Eurobelt can design your belt with flights and/or side guards, taking into account the size and the weight of the product to be transported, as well as the height and inclination of the conveyor.

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.

Their edges are completely rounded to avoid any damage of the product.

### STRAIGHT FLIGHT [STREAMLINE + NO CLING]



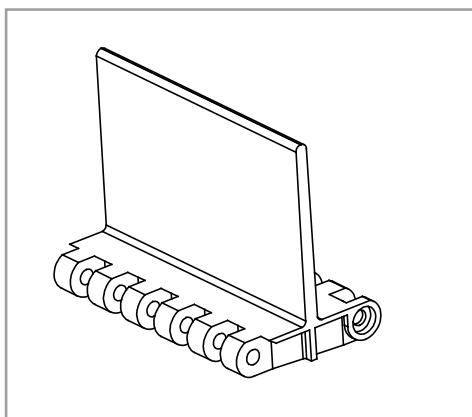
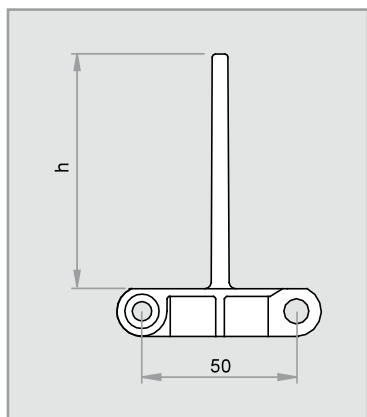
Height (h)	Materials
25	Polypropylene
50	
75	
100	Polyethylene
125	
150	

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



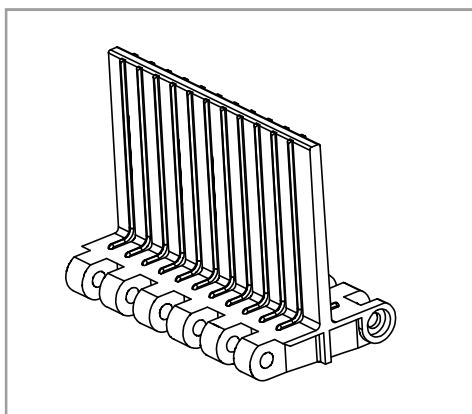
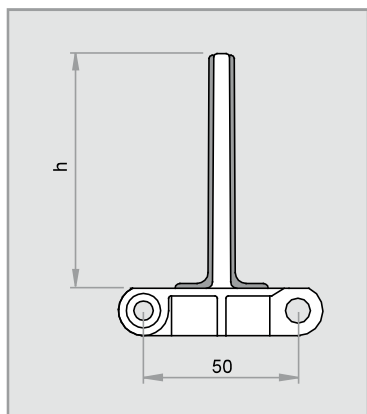
## ACCESSORIES [FLIGHTS]

### STRAIGHT FLIGHT [STREAMLINE]



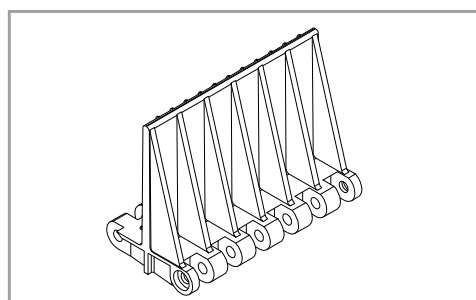
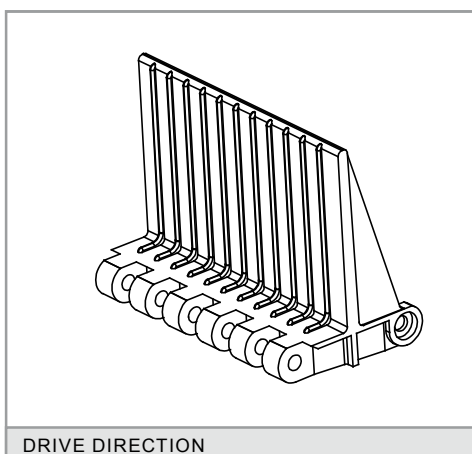
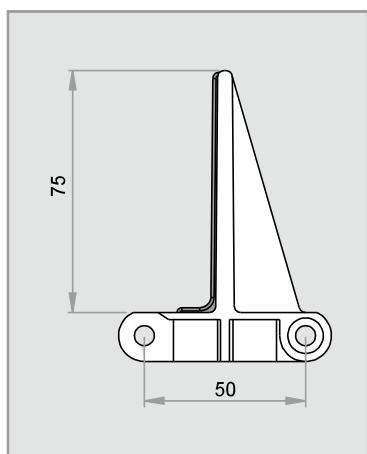
Height (h)	Materials
25	Polypropylene Polyethylene
50	
75	

### STRAIGHT FLIGHT [NO CLING]



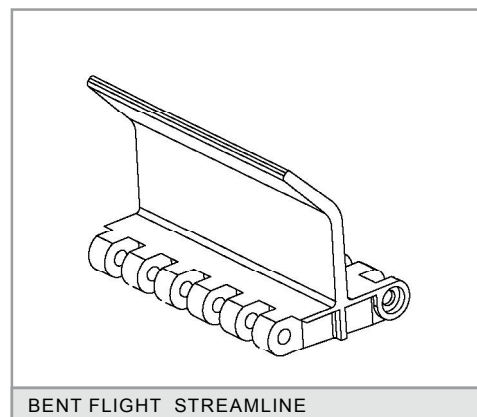
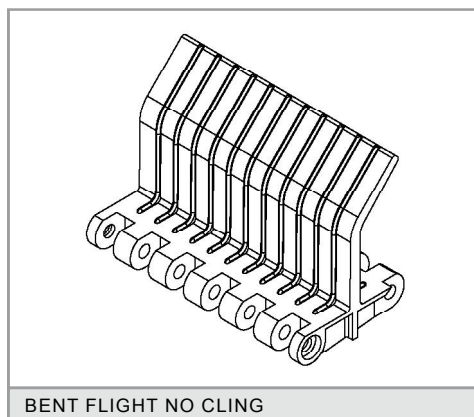
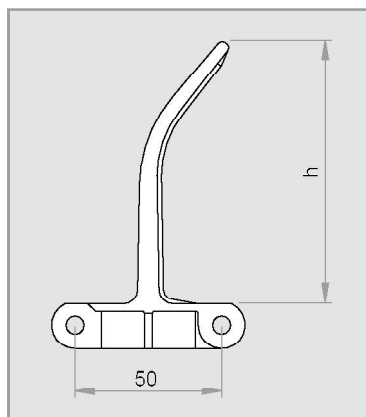
Height (h)	Materials
25	Polypropylene Polyethylene
50	
75	
100	
125	
150	

### RIBBED FLIGHT



Height (h)	Materials
75	Polypropylene Polyethylene

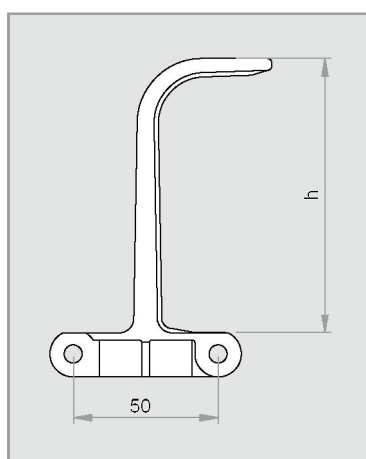
**BENT FLIGHT**



Accessories	Height (h)	Materials
Bent Flight [Streamline]	75	Polypropylene  Polyethylene
Bent Flight [No Cling]	45	
	70	
	90	
	115	
	140	
Bent Flight [Streamline + No Cling]	45	
	70	
	90	
	115	
	140	

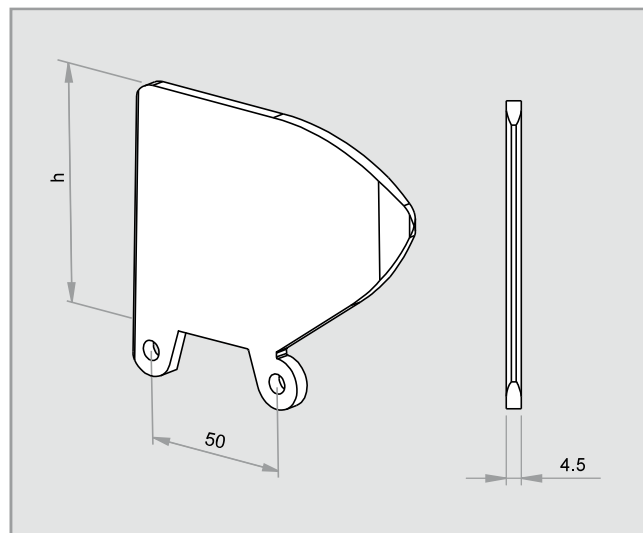
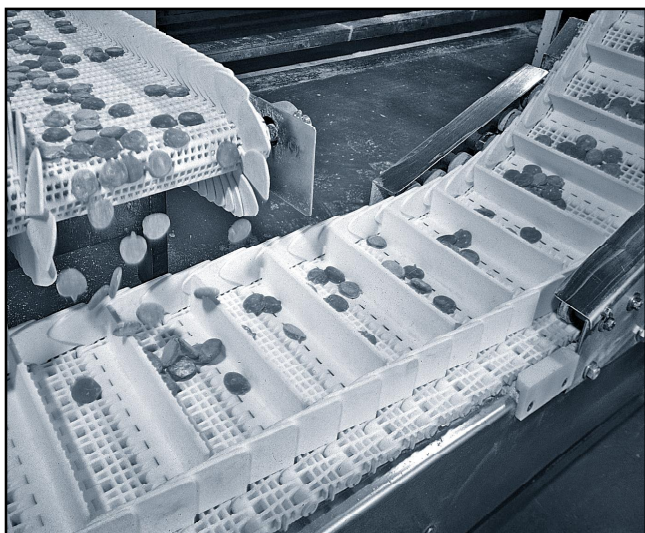


**SCOOP FLIGHT**



Height (h)	Materials
95	Polypropylene
120	

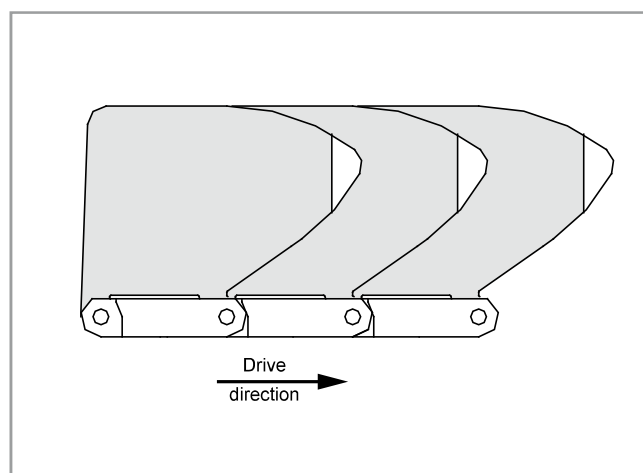
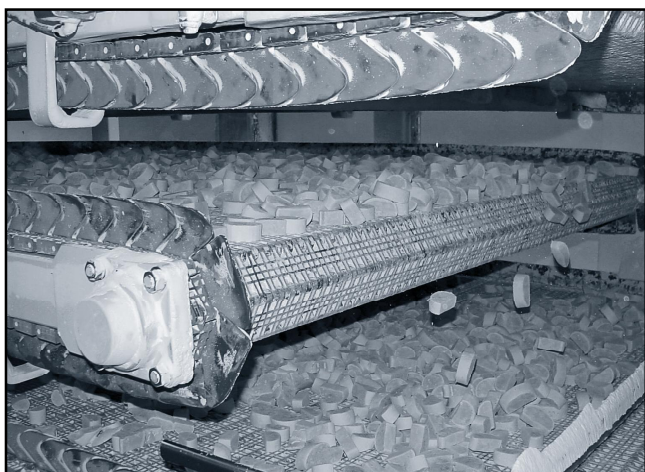
## ACCESSORIES [SIDE GUARDS]



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.

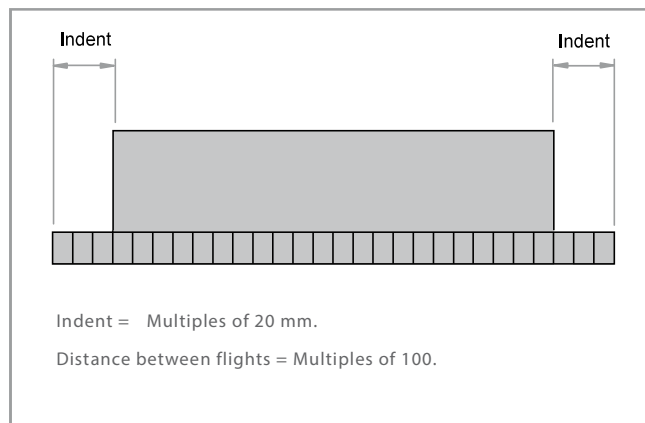
Height (h)	Materials
50	Polypropylene
75	Polyethylene
100	

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

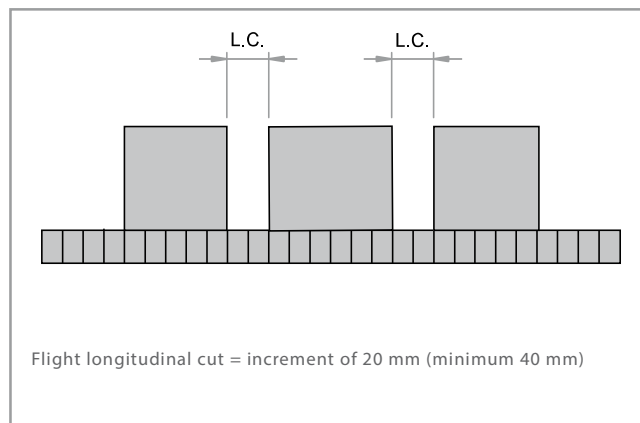


## TECHNICAL DATA [FLIGHTS AND SIDE GUARDS]

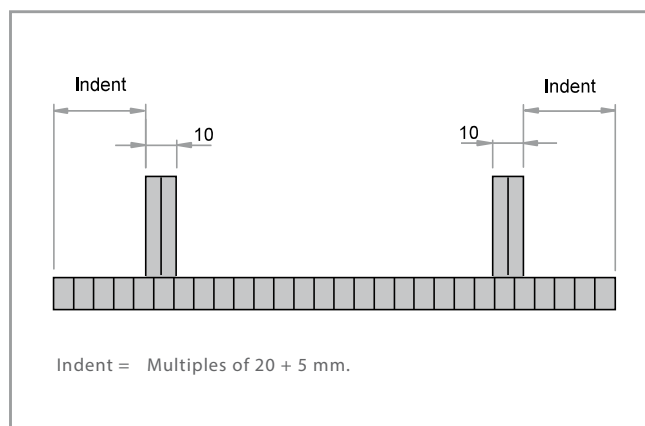
### BELT ONLY WITH FLIGHTS



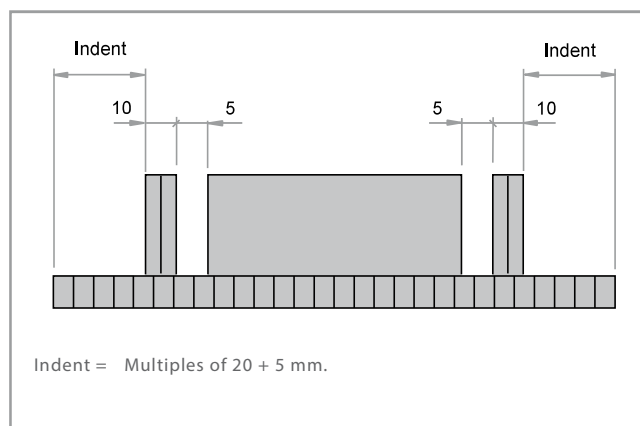
### BELT WITH LONGITUDINAL CUTS



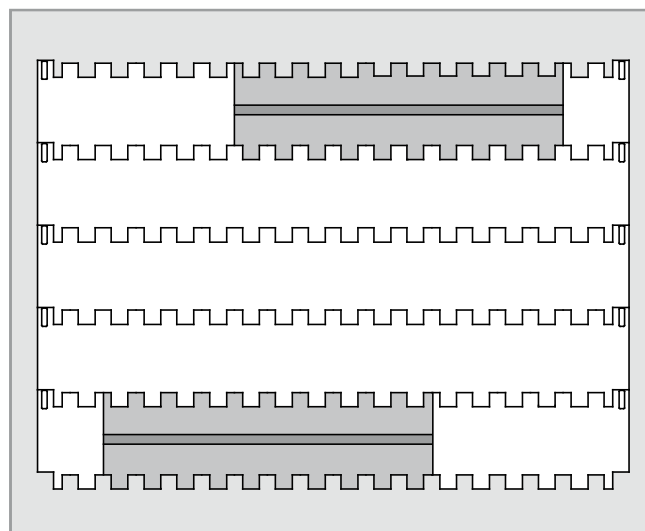
### BELT ONLY WITH SIDE GUARDS



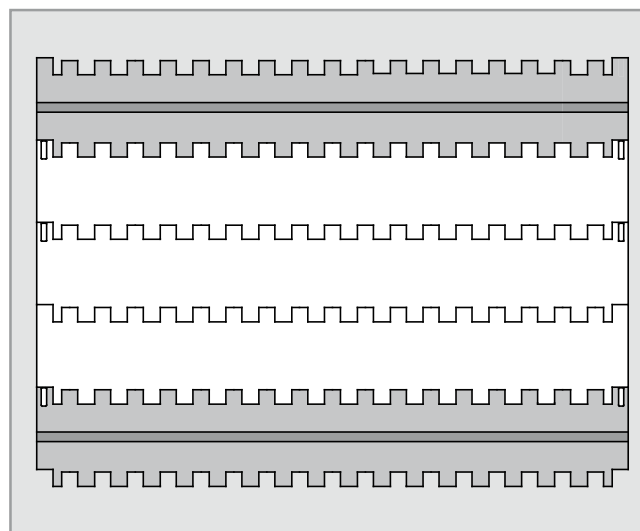
### BELT WITH FLIGHTS AND SIDE GUARDS



### BELT WITH ZIGZAG FLIGHTS

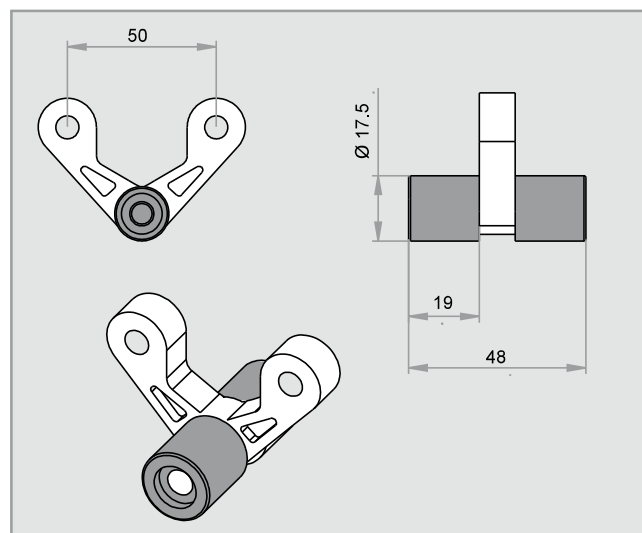
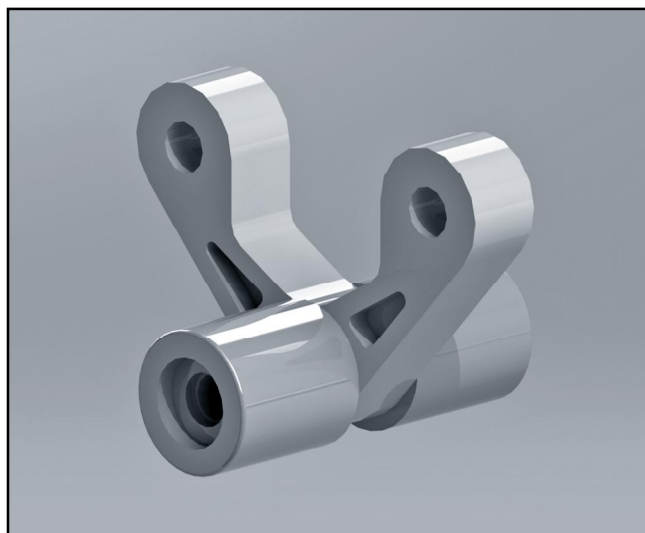


### BELT WITH FLIGHTS, WITHOUT INDENT





## ACCESSORIES [HOLD-DOWN ROLLERS]



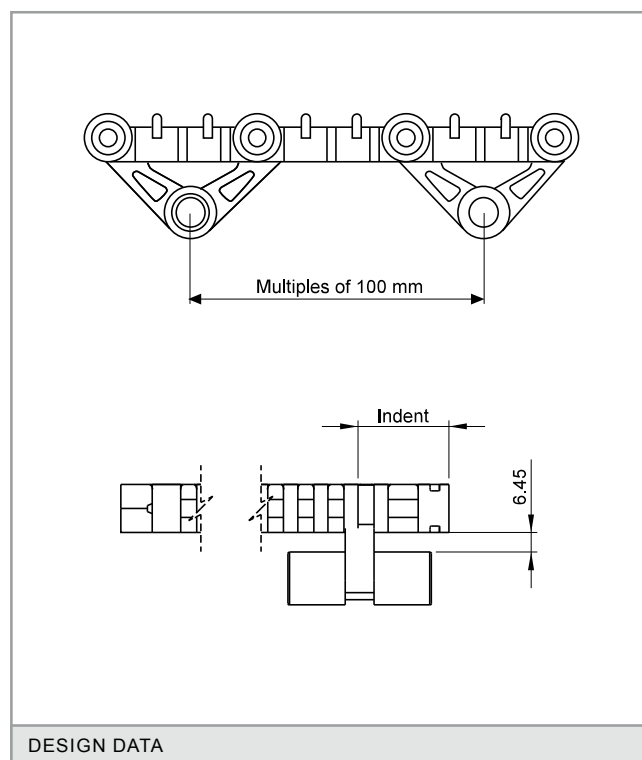
They are used to fasten the belt to the conveyor in all the inflexions.

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 throughout 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 10 mm. Hold-down rollers cannot be used with the following sprockets:

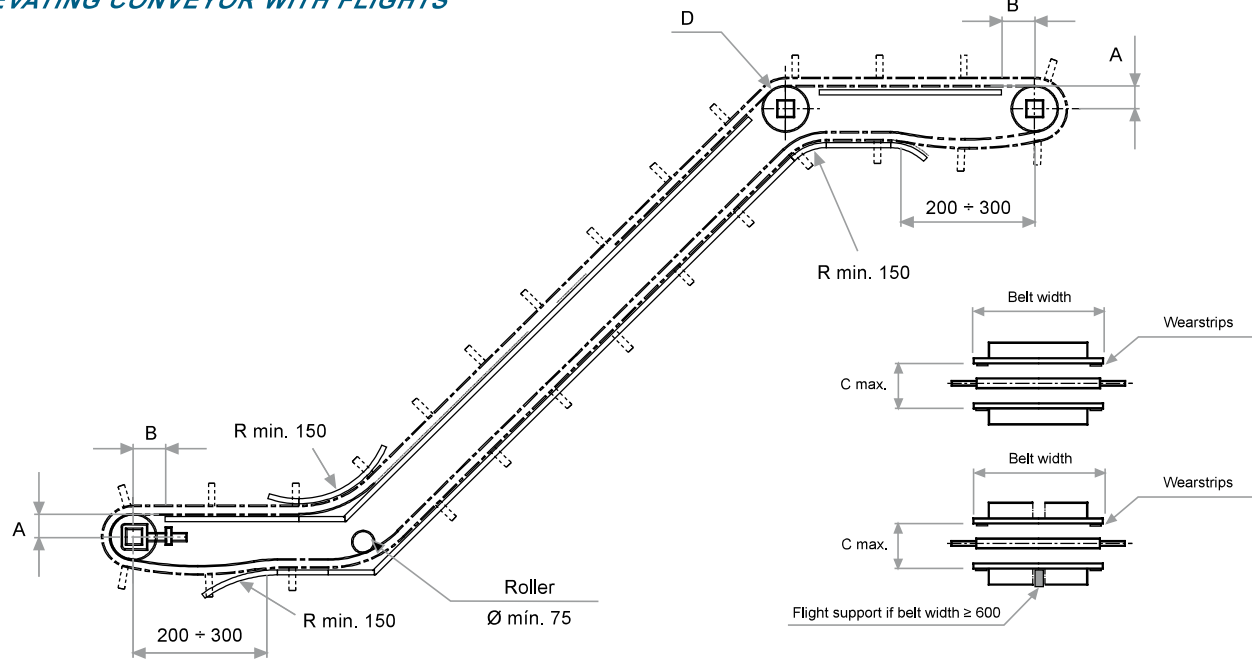
N° of teeth T	Bore for square shaft
6	40



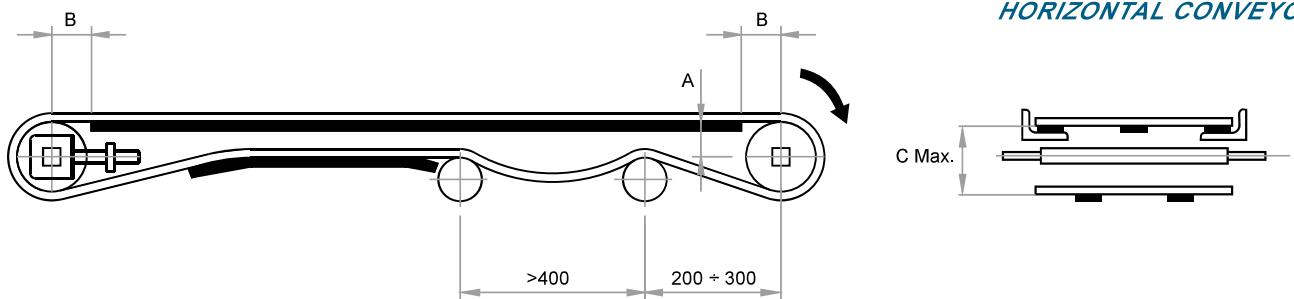
DESIGN DATA

**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.

N° of teeth T	Ø Pitch	A	B max.	C max.
6	100	42	55	105
8	130.65	58	60	135
10	161.80	72	76	165
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
40	150	1	2	2
160	450	3	2	2
460	750	5	3	2
760	1,050	7	5	3
1,060	1,350	9	6	4
1,360	1,650	11	7	5
1,660	1,950	13	9	6
1,960	2,250	15	10	7
2,260	2,550	17	11	8
2,560	2,850	19	12	9
2,860	3,150	21	14	10
3,160	3,450	23	15	11
3,460	3,750	25	16	12
3,760	4,050	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.

