

 **BELLE BANNE® U**



**High-performance belt scrapers
for belt conveyors**

The high-performance scraper uses



patented technology.

Unlike other scrapers, this one consists of a series of high-quality, hard metal scraper blades mounted on a flexible metal and rubber support. The complete scraper blade assembly is housed in a sturdy, curved scraper blade holder. Tension is provided by a spring system.

The universal scraper belt has the



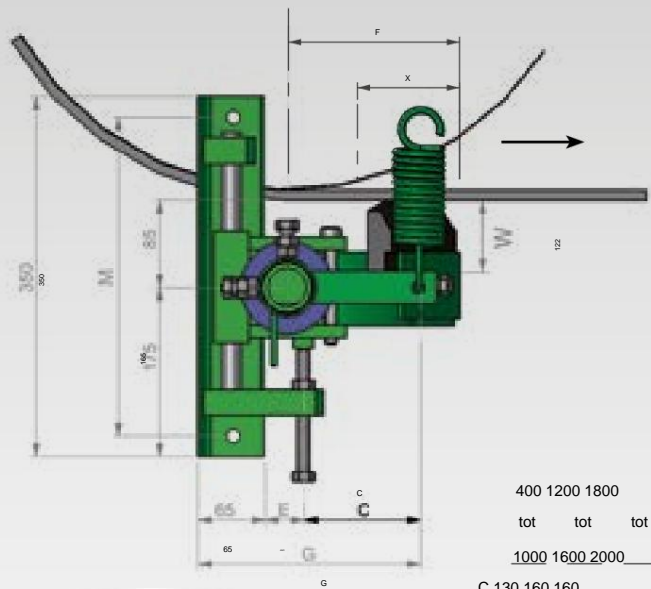
following advantages:

- The pressure distribution is focused towards the center
From the conveyor belt towards the center, where maximum efficiency is required.
- Easy assembly and adjustment.
- It requires very little maintenance.
- Continuous efficiency and very long blade life
scraper because of this and the belt
The conveyor belts adapt to each other throughout the blade lifespan.
- Excellent scraping, without risk of clogging.

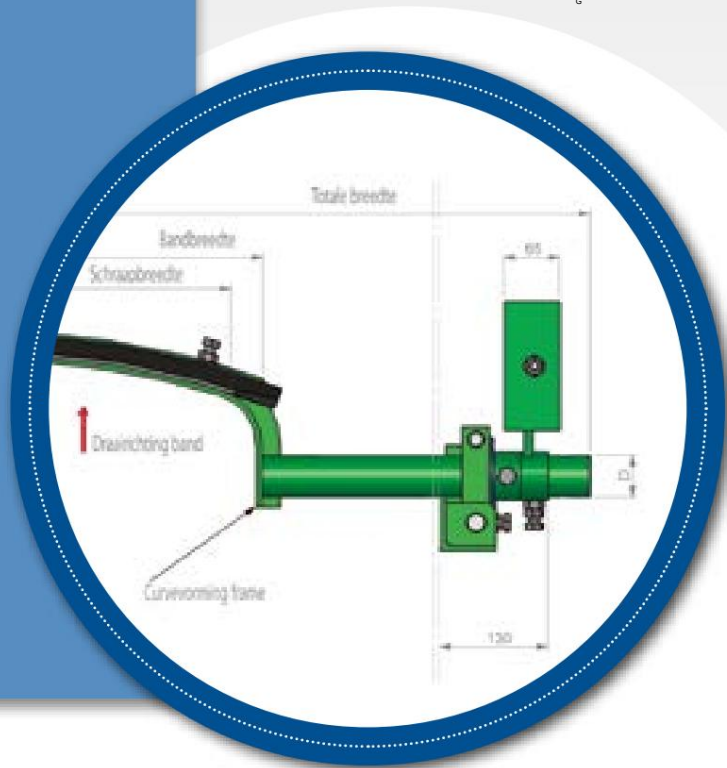
The assembly is coated with an anti-rust coating and all bolts and nuts are made of stainless steel.

The BELLE BANNE U SCRAPER can be applied on belt conveyors with a single direction of rotation.

High-performance belt scrapers for belt conveyors



C 130 160 160
M 310 310 310



DELIVERY PACKAGE:

Reference	Bandwidth	Total Width	D	W	X	-	F	G	Weight
U 400	400	1200	48.6	70	45	38	134	237	26 kg
U 500	500	1300	48.6	70	60	38	134	237	28 kg
U 650	650	1450	48.6	62	75	38	159	262	31 kg
U 800	800	1600	48.6	62	105	38	184	287	33 kg
U 1000	1000	1800	48.6	62	120	38	215	318	38 kg
U 1200	1200	2100	60.5	60	140	38	240	343	47 kg
U 1400	1400	2300	60.5	60	135	38	240	343	50 kg
U 1600	1600	2500	60.5	60	125	38	246	349	60 kg
U 1800	1800	2700	76.3	50	125	46	246	357	67 kg
U 2000	2000	3100	76.3	50	125	46	246	357	70 kg

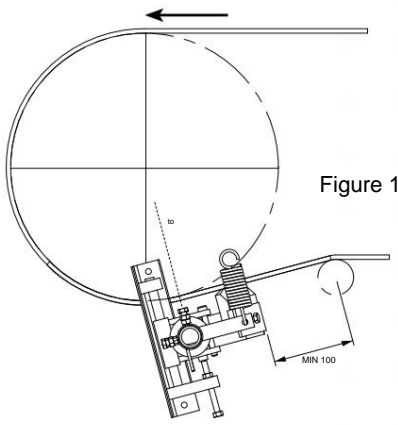


Figure 1

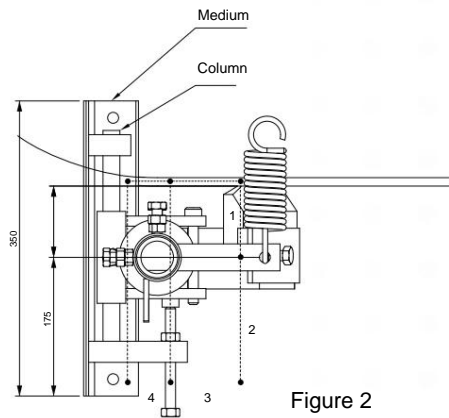


Figure 2

Opening dimensions

	1	2	3	4
400 to 1000	100	150	100	50
1200 to 2000	100	180	100	50

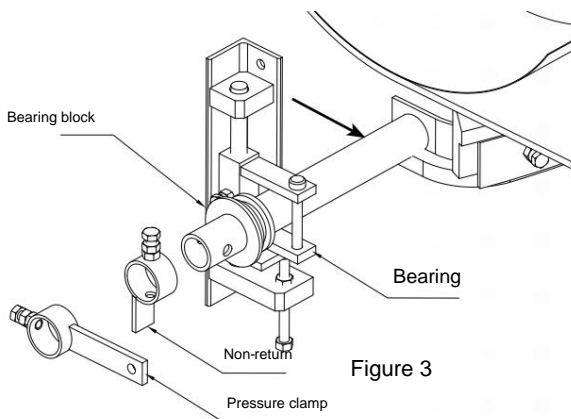


Figure 3

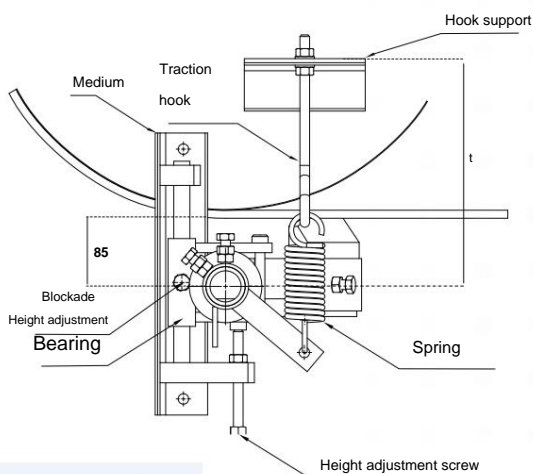


Figure 4

	t. Mini/Maxi
400 to 1000	300/380
1200 to 2000	320/400

Site selection

In general, the dimensions of the scraper must be taken into account, and good drainage of the scraped material must be ensured. The scraper should not be placed too close to the drum (no closer than line a in Figure 1) to allow sufficient tension on the scraper.

Scraper preparation

Secure the scraper blade in the center of the holder and tighten the 2 fixing bolts.

Mounting the 2 side fixing brackets

If necessary, make 2 rectangular openings in the conveyor belt frame as shown in Fig. 2.

Position the bearing blocks in the center of the two brackets and tighten them securely. Tighten all the bracket bolts. Now attach the brackets to the conveyor belt frame so that the center of the bearing blocks is 85 mm below the conveyor belt.

Scraper tube assembly

Hang the scraper tube on the bearing blocks.

Slide the plastic rings onto the tube until they are in the bearing blocks. Place the locking pin on the bearing blocks and secure them with the split pins. Slide the non-return rings onto the tube, one on each side of the non-return bracket.

Now adjust the support so that the scraper blade makes contact with the belt (see fig. 2).

Voltage system assembly

Slide the tension clamps over the tube and tighten them, so that the clamps are approximately perpendicular to the point where the tension supports will be placed.

Now attach the springs and hooks to the clamps and tension brackets that need to be attached to the chassis.

Pressure adjustment

Apply slight tension to the scraper and tighten the two anti-return rings, leaving a gap of a few millimeters between the support and the ring. Ensure the scraping surface is parallel to the conveyor belt and the scraper blade fits snugly against the belt. Now apply tension to the scraper until a good scraping effect is achieved.

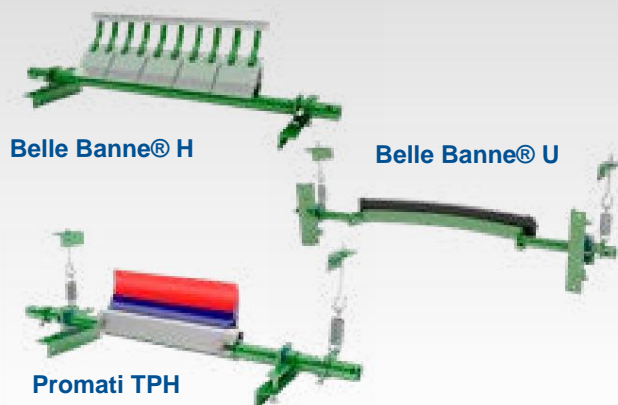
This will vary for each application. Under normal conditions, a 0.5 mm gap between each spring coil is sufficient.

Precautionary measures

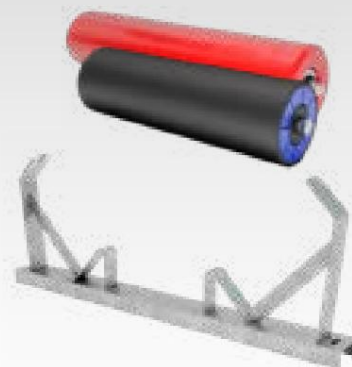
- The belt area must be in good condition, without protruding parts (like staples).
- The maximum permitted speed of the belt is 6 m/s.
- The maximum ambient temperature is 80°C.
- Regular maintenance will prolong the scraper's lifespan and will increase its efficiency.

Product range overview

Belt scrapers



Rollers and supports



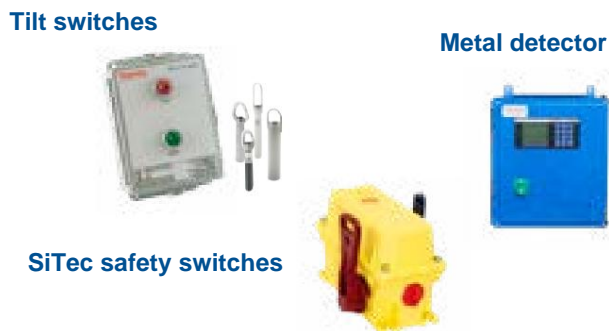
Dust suppression and impact zone



Conveyor drums and guide rollers



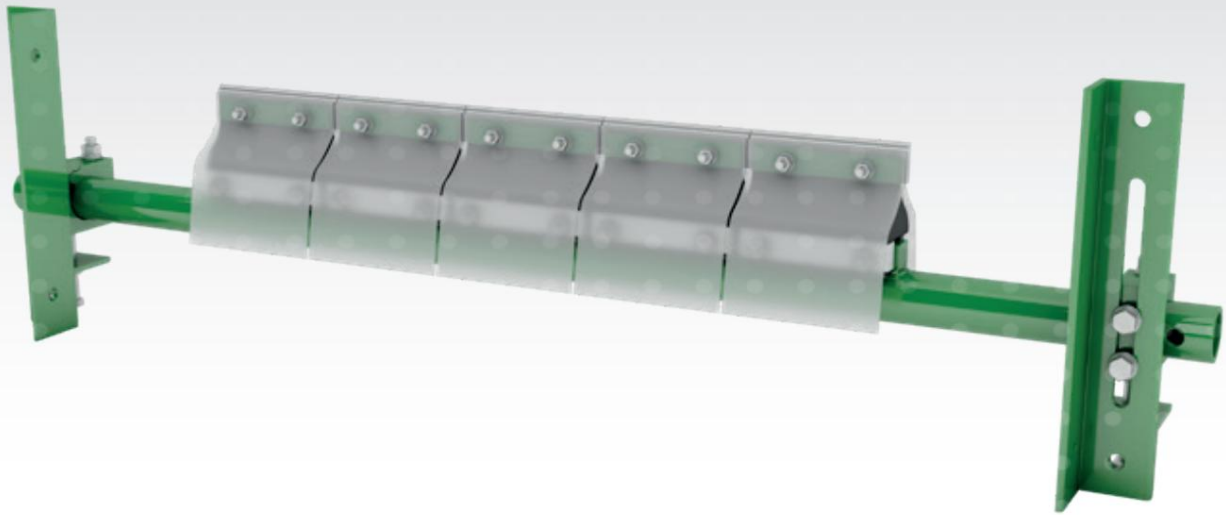
Safety materials



Sealing system and wear protection materials



 **BELLE BANNE® R**



**High-performance belt scrapers
for belt conveyors**

The pioneer in high-performance scrapers, the **Belle Banne R scraper**, is equipped with individually adjustable elements consisting of:

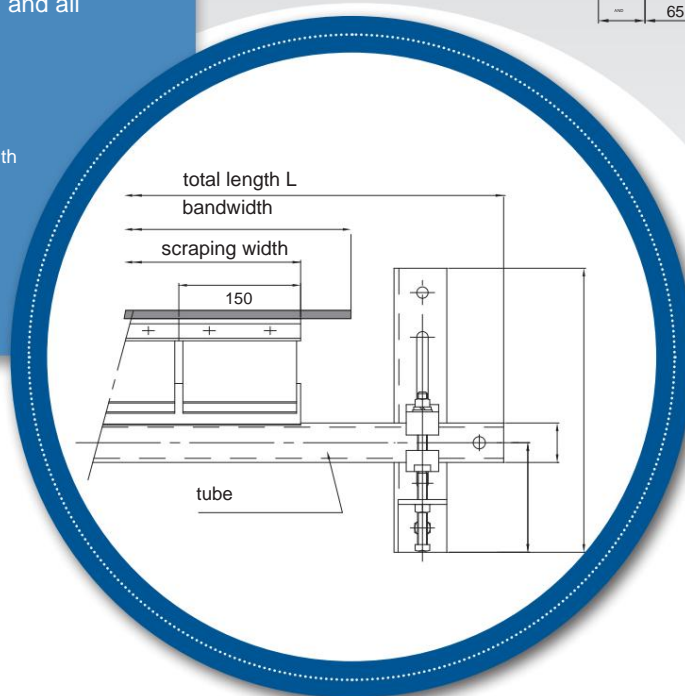
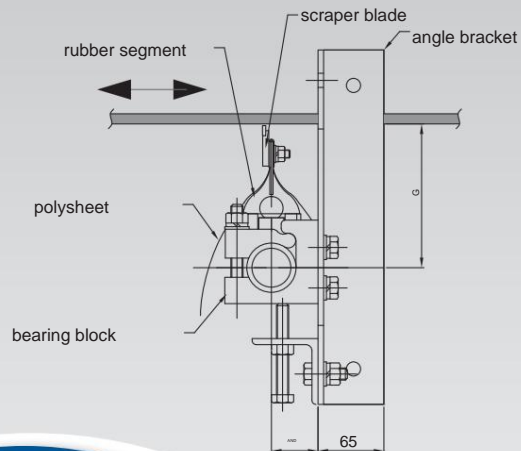
- A special rubber segment that absorbs vibrations and guarantees efficient scraping pressure of the blades on the belt.
- a hard metal scraper blade
- a sheet of non-stick polysheet

The height is adjusted using a simple guide system.

Everything is treated with an anti-rust coating and all bolts are made of stainless steel.

The **Belle Banne R scraper** can be used on conveyors with both one and two directions of rotation; Combined with a tangential scraper, it functions as an end scraper.

High-performance belt scrapers for belt conveyors



DELIVERY PACKAGE:

Reference	Bandwidth	# of blades	L	D	S	B	G	...	Weight
R 400x300	400-300	2	1000	48.6	350	135	142	50	20 kg
R 500x450	500	3	1100	48.6	350	135	142	50	23 kg
R 650x600	650-600	4	1250	48.6	350	135	142	50	26 kg
R 800x750	800	5	1400	48.6	350	135	142	50	29 kg
R 1000x900	1000-900	6	1600	48.6	350	135	142	50	32 kg
R 1200x1200	1200	8	1900	60.5	350	135	148	59	40 kg
R 1400x1350	1400	9	2100	60.5	350	135	148	59	43 kg
R 1600x1500	1600-1500	10	2400	60.5	350	135	148	59	47 kg
R 1800x1800	1800	12	2500	76.3	400	155	156	65	63 kg
R 2000x1950	2000	13	2700	76.3	400	155	156	65	74 kg

Standard equipment includes 55° Shore rubber segment dampers and 150 mm wide scraper blades.

NOMENCLATURE:

The designation includes the scraper type (1), the band width (2), the actual scraping width (3), the rubber segment type (4), the polysheet (5) and the type of scraper blades (6).

Example: **R 800 - 750 SP/M3**
(1) (2) (3) (4) (5) (6)

(6): Type of scraper blades:

- **M3**: Hard metal (ref. R 150 M3)
- **IM3**: Stainless steel (ref. IR 150 M3)
- **P**: Ceramic (ref. R 150 P)

MOUNTING:

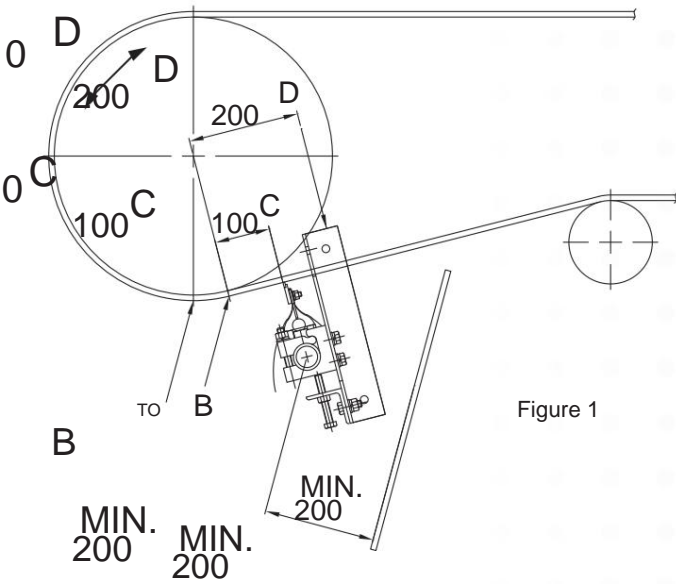


Figure 1

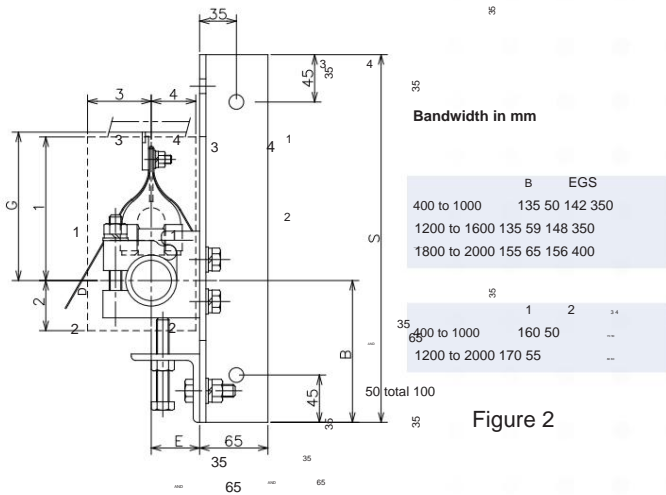


Figure 2

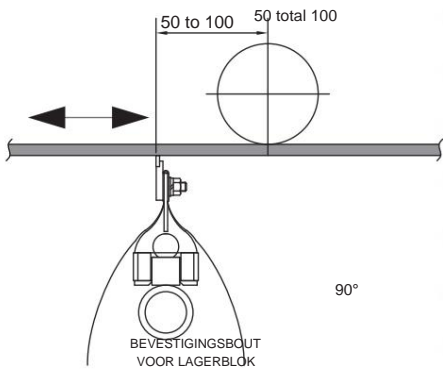
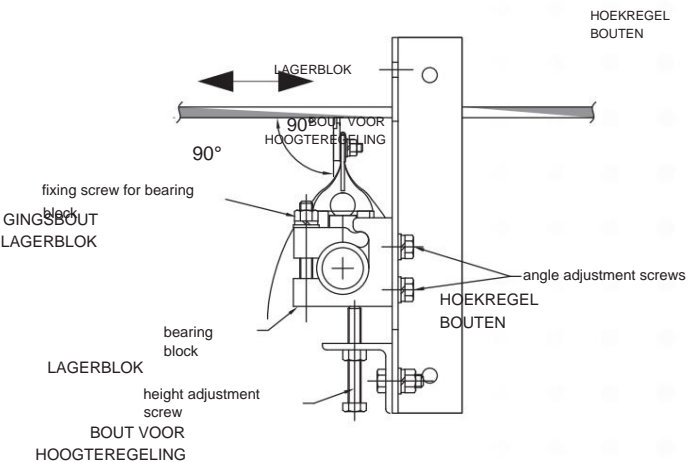


Figure 3



Site selection

- In general, the following should be taken into account:
- the dimensions of the scraper
 - good evacuation of the scraped material

The exact placement of the scraper should be done according to Figure 1 and the following table:

	AB*	BC	CD
1 direction	+	++	+
2 directions	+	++	+

* This is only possible under ideal conditions: without dents in the drum, no contamination between the band and drum, without hanging drum lining.

In certain cases, a pressure roller should be placed on the scraper as shown in Figure 3 to stabilize the belt or apply sufficient pressure to the scraper.

Scraper preparation

Check the alignment of the scraper blades and tighten all screws securely.

Secure the tube bearing to the supports according to dimension B in figure 2.

Mounting

If necessary, make two rectangular openings in the conveyor housing as shown in Figure 2 (dotted line). Now, attach the two brackets to the frame according to dimension G.

Place the scraper in position and slide the two side supports over the ends of the tube. Screw these supports firmly to the tube and adjust the two adjustment bolts so that the supports are parallel to the tube. Lower the scraper 5 mm. Center the scraper and adjust the scraping angle of the blades to 90°. Now, tighten all the screws securely.

Tension adjustment

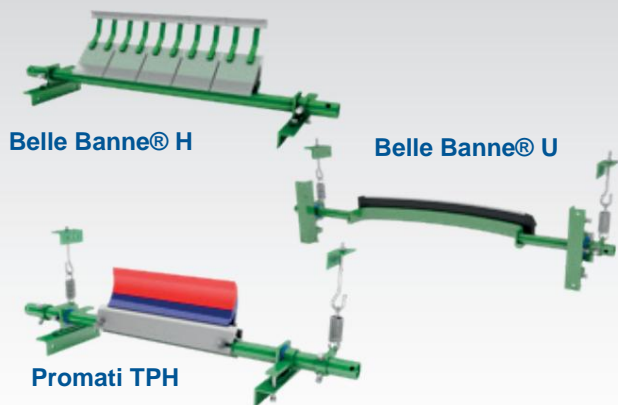
Screw the scraper upwards on both sides until it makes contact with the belt. A follow-up check of the adjustment will be necessary while the conveyor belt is in operation.

Precautions

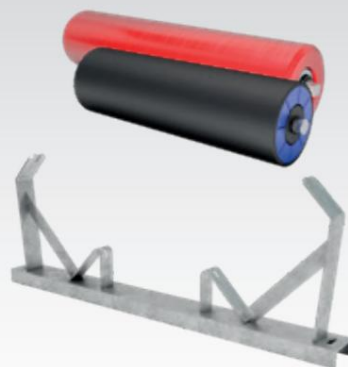
- The surface of the belt must be in good condition, without protruding parts (like staples).
- The maximum permitted speed of the belt is 4 m/s.
- The maximum ambient temperature is 80°C.
- Regular maintenance will increase the scraper's lifespan and will improve its efficiency.

Product range overview

Belt scrapers



Rollers and supports



Dust suppression and impact zone



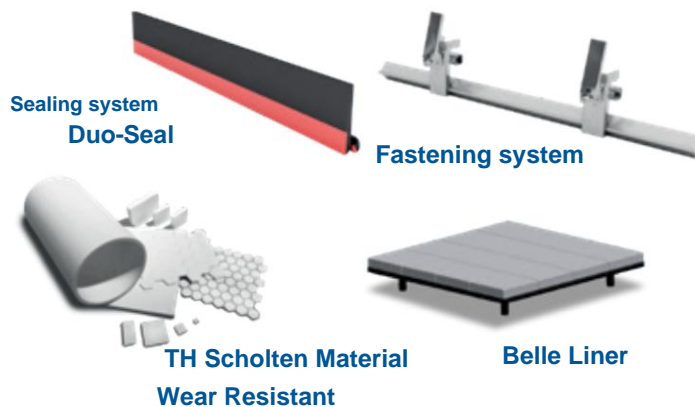
Conveyor drums and guide rollers



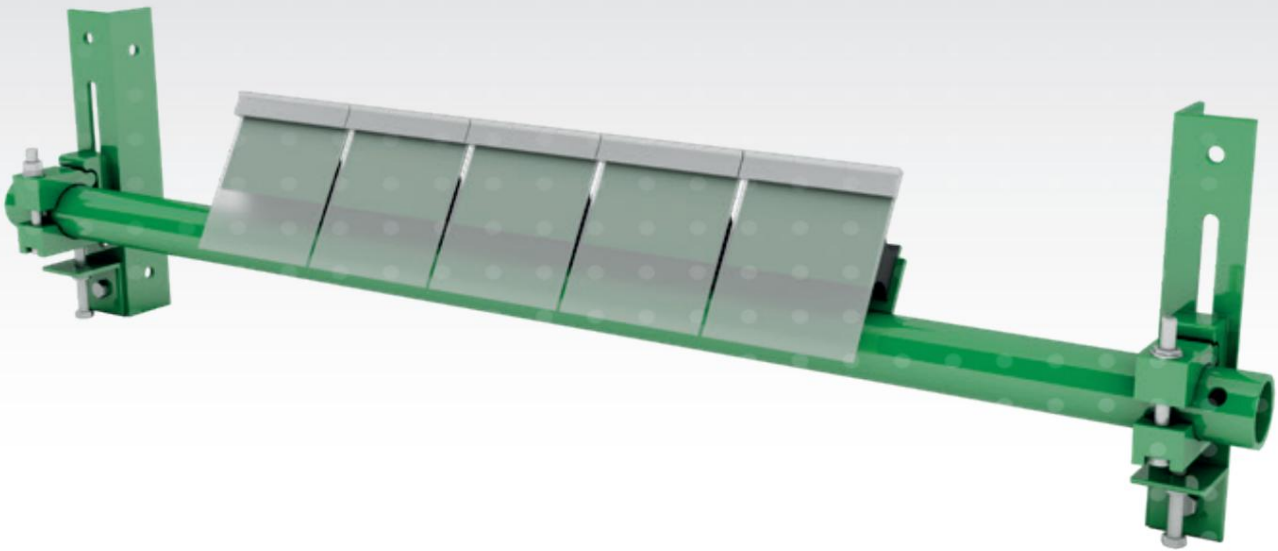
Safety materials



Sealing system and wear protection materials



 **BELLE BANNE® P**



**High-performance belt scrapers
for belt conveyors**

The pioneer in high-performance scrapers, the **Belle Banne P scraper**, is equipped with individually adjustable elements consisting of:

- A special rubber segment that absorbs vibrations and ensures efficient scraping pressure of the blades on the belt.
- a hard metal scraper blade
- a sheet of non-stick polysheet

The tension is provided by a simple guide system.

The whole is covered with a Bevestigingsbout coating rustproof and all bolts and nuts are from voor lagerblok stainless steel.

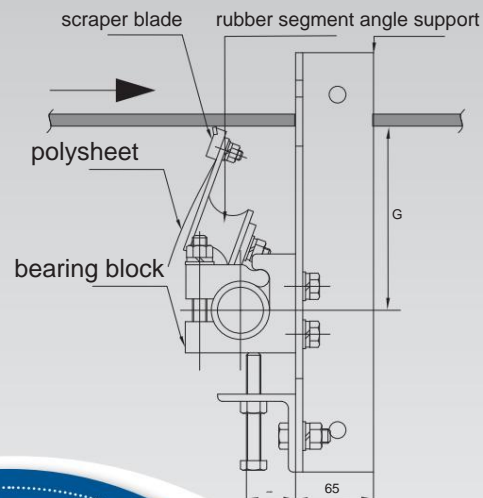
The Belle Banne P scraper can only

be applied on belt conveyors with one direction of rotation; when

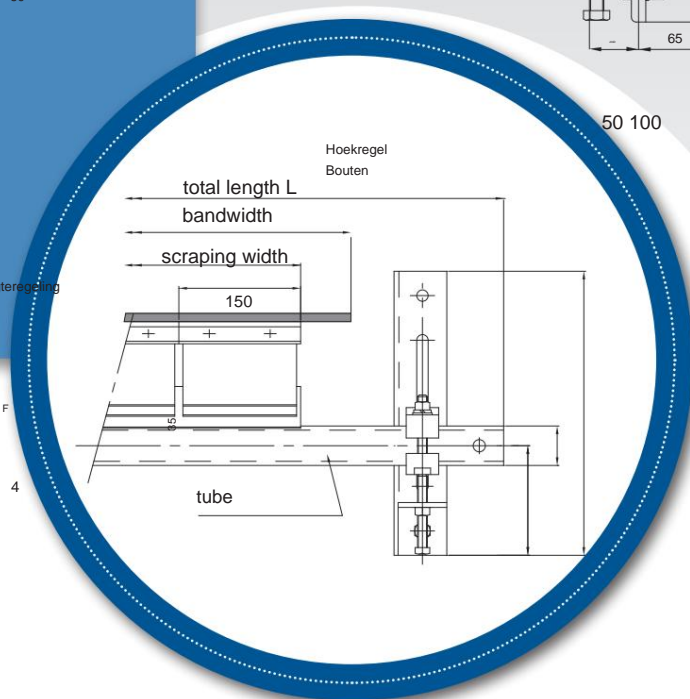
Lagerblok

Combined with a tangential scraper, it acts as a final scraper.

High belt scrapers performance for belt conveyors



70° - 60°



DELIVERY PACKAGE: 2

Reference	Bandwidth # of blades	L	D	S	B	G	-	Weight	
P 400x300	400-300	2	1000	48.6	350	135	153	50	20 kg
P 500x450	500	3	1100	48.6	350	135	153	50	22 kg
P 650x600	650-600	4	1250	48.6	350	135	153	50	25 kg
P 800x750	800	5	1400	48.6	350	135	153	50	28 kg
P 1000x900	1000-900	6	1600	48.6	350	135	153	50	31 kg
P 1200x1200	1200	8	1900	60.5	350	135	158	59	38 kg
P 1400x1350	1400	9	2100	60.5	350	135	158	59	42 kg
P 1600x1500	1600-1500	10	2400	60.5	350	135	158	59	46 kg
P 1800x1800	1800	12	2500	76.3	400	155	167	65	60 kg
P 2000x1950	2000	13	2700	76.3	400	155	167	65	71 kg

Standard equipment includes 55° Shore rubber segment dampers and 150 mm wide scraper blades.

NOMENCLATURE:

The designation includes the scraper type (1), the band width (2), the actual scraping width (3), the rubber segment type (4), the polysheet (5) and the type of scraper blades (6).

Example: **P 800 - 750 SP/M3**
(1) (2) (3) (4) (5) (6)

(6): type of scraper blades

- **M3**: Hard metal (ref. P 150 M3)
- **IM3**: Stainless steel ((ref. IP 150 M3)
- **P**: Ceramic (ref. P 150 P)

MOUNTING:

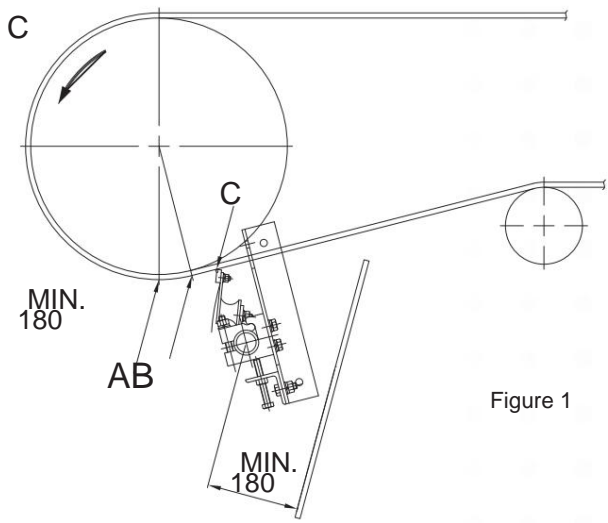


Figure 1

Schraapmes Rubber segment Hoeksteun

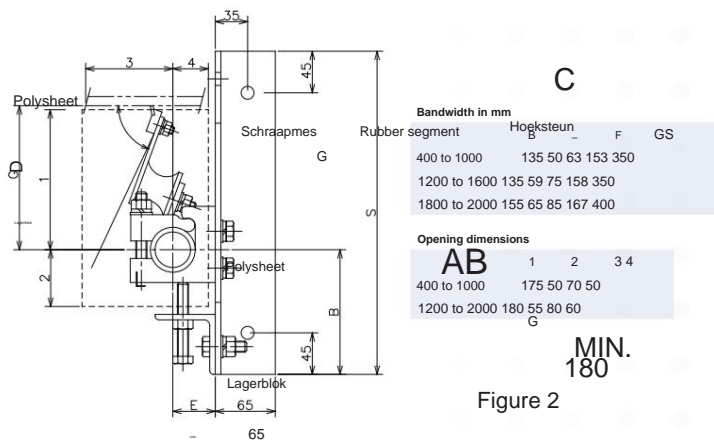


Figure 2

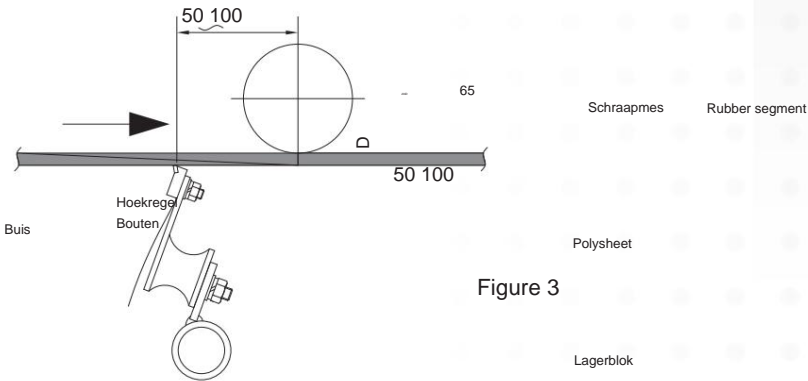
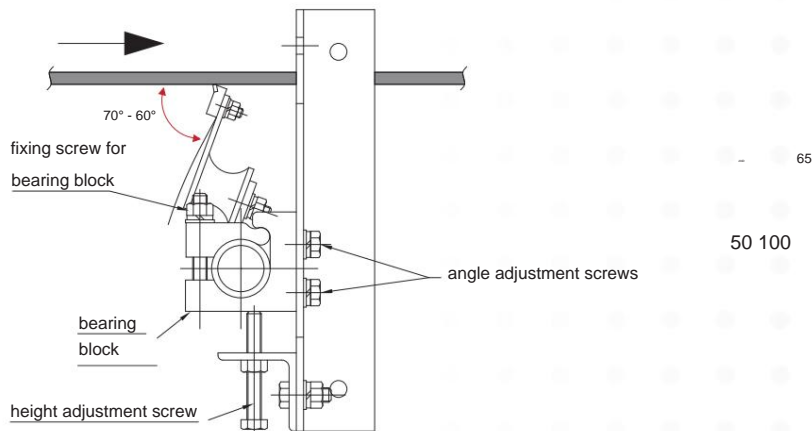


Figure 3



Site selection

In general, the following should be taken into account:

- the dimensions of the scraper
- good evacuation of the scraped material

Between A and B, the scraper can be placed if the drum is perfectly cylindrical. However, the scraper is usually placed 30 to 80 mm past point B (Fig. 1).

In certain cases, a pressure roller should be placed on the scraper as shown in Figure 3 to stabilize the belt or apply sufficient pressure to the scraper.

Scraper preparation

Check the alignment of the scraper blades and tighten all screws properly.

Secure the tube bearing to the supports according to dimension B in figure 2.

Mounting

If necessary, make two rectangular openings in the conveyor belt frame as shown in Figure 2 (dotted line). Now, attach the two supports to the frame according to dimension G.

Place the scraper in position and slide the two side supports over the ends of the tube. Screw them securely to the tube and secure the two adjustment bolts so the supports are parallel to the tube. Drop the scraper 5 mm. Center the scraper and adjust the scraping angle of the blades to 70° using the caliper.

Now tighten all the screws firmly.

Tension adjustment

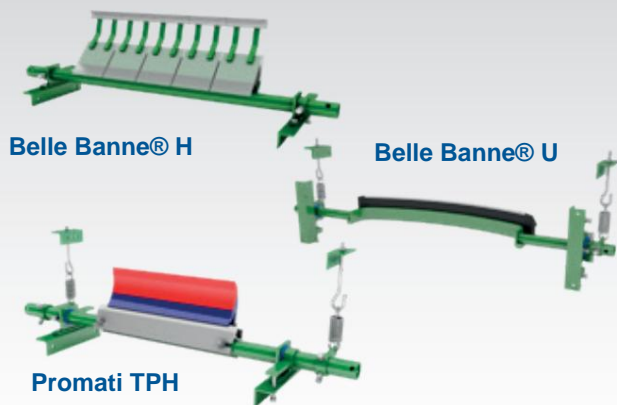
Adjust the scraper upwards on both sides until it makes contact with the belt. A follow-up check of the adjustment is needed while the belt is on operation.

Precautions

- The surface of the belt must be in good condition, without protruding parts (like staples).
- The maximum permitted speed of the belt is 4 m/s.
- The maximum ambient temperature is 80°C.
- Regular maintenance will prolong the scraper's lifespan and will increase its efficiency.

Product range overview

Belt scrapers



Rollers and supports



Dust suppression and impact zone



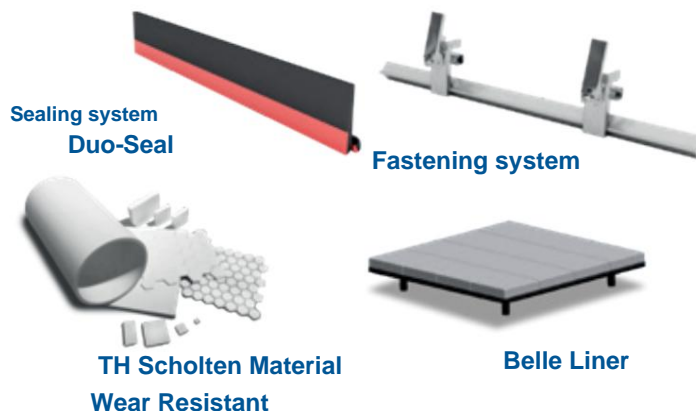
Conveyor drums and guide rollers



Safety materials



Sealing system and wear protection materials



 **BELLE BANNE® H**



**High-performance belt scrapers
for belt conveyors**

The pioneer in high-performance tangential scrapers, the **Belle Banne H scraper**, is equipped with individually adjustable elements consisting of

- a special rubber segment that ensures the tension in the band.
- a support adjusted according to the diameter of the drum.
- a hard metal scraper blade.
- a non-stick polyethylene sheet.

The tension is regulated by means of a simple screw lever system.

The assembly is treated with an anti-corrosive coating and all screws and nuts are made of stainless steel.

The **Belle Banne H scraper** can

Apply to conveyors with one or two directions of rotation; when combined with a secondary scraper, it acts as a primary scraper.

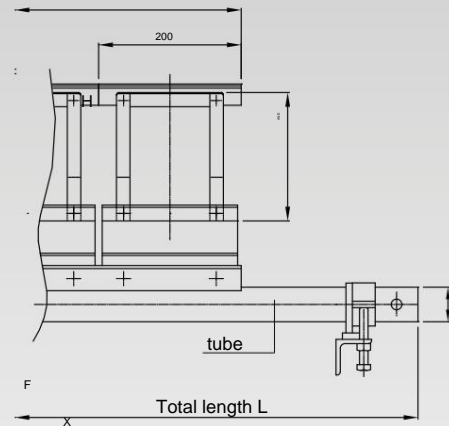
High-performance belt scrapers for belt conveyors

15

TO

B

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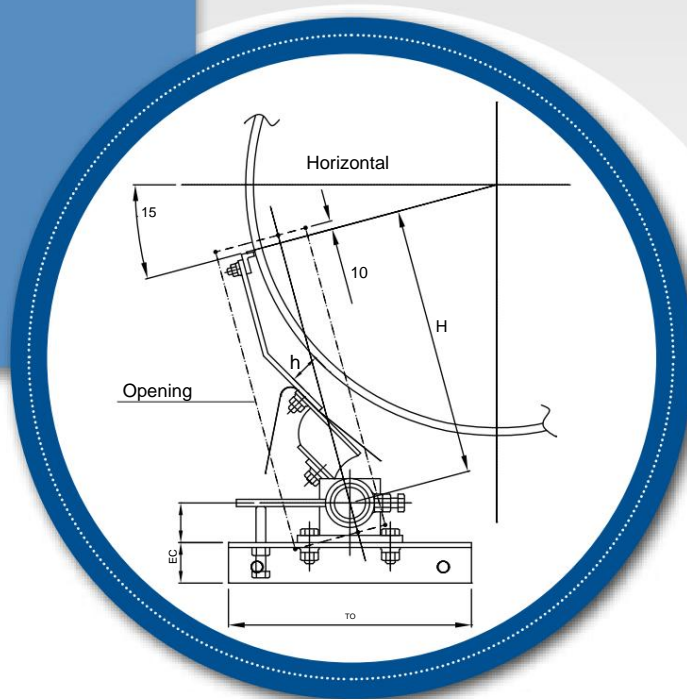


TO

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15

to

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TO

DELIVERY PACKAGE:

Reference	Bandwidth	# of blades	L	T	to	C	...	SH	Weight
H 500x400	500	400	2	1000	48.6	300	50	49	18 kg
H 650x600	650	600	3	1150	48.6	300	50	49	22 kg
H 800x800	800	800	4	1300	48.6	300	50	49	26 kg
H 1000x1000	1000	1000	5	1500	48.6	300	50	49	32 kg
H 1200x1200	1200	1200	6	1800	48.6	300	50	49	37 kg
H 1400x1400	1400	1400	7	2000	60.5	350	65	59	51 kg
H 1600x1600	1600	1600	8	2200	60.5	350	65	59	58 kg
H 1800x1800	1800	1800	9	2500	76.3	350	65	67	75 kg
H 2000x2000	2000	2000	10	2900	76.3	350	65	67	80 kg

Standard equipment includes 55° Shore rubber segments and 200 mm wide scraper blades.

NOMENCLATURE:

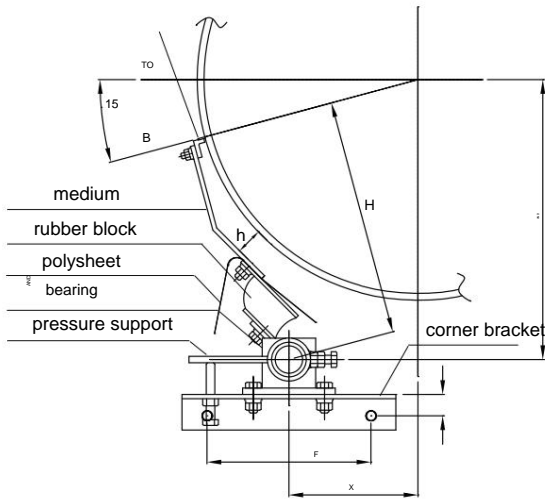
The designation includes the scraper type (1), the strip width (2), the actual scraping width (3), the support type (4), the polyethylene sheet (5) and the type of scraper blades (6).

Example: **H 800 - 800 SSP/M3**

(1) (2) (3) (4) (5) (6)

(6): Type of scraper blades:

- **M3**: Hard metal (ref. H 200 M3)
- **IM3**: Stainless steel (ref. IH 200 M3)
- **P**: Ceramic (ref. H 200 P)



		F	F
H	500 to 1200	230	30
H	1400 to 2000	270	35

Choosing the location



The scraper blades of the Belle Banne H scraper must be in contact with the belt between lines A and B, as close as possible to line B, so that a minimum of material accumulates on the buffer. (see fig. 1)

The location should be carefully examined beforehand, taking into account the space required to place the scraper (fig. 2), the location of the tube and the fixing of the regulating supports.

Scraper preparation

Check the alignment of the scraper blades and tighten all screws securely.

Mounting

Ensure the bearing blocks are centered in the support. Determine the correct scraper position using the table included in the scraper packaging. Based on the drum diameter and the scraper tube diameter, obtain X and Y values from the table. These values determine the scraper tube's position relative to the drum diameter. Maintain these two measurements as closely as possible to automatically achieve the correct 15° scraping angle.

Voltage regulation - Adjustment

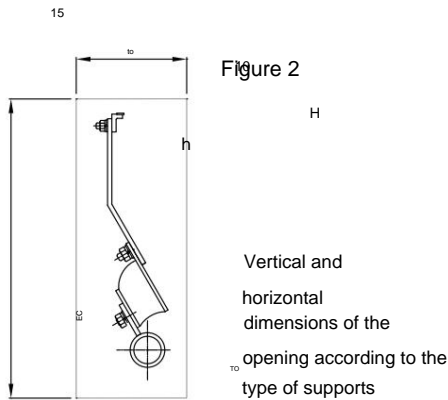
Place the pressure supports on both ends of the shaft and tighten them securely, so that the scraper is centered and the scraper blades are against the drum.

The H scraper can also be placed on slightly curved drums; in this case, the scraper blades must be adapted to the curvature of the drum.

In general, it can be said that the best tension is the minimum tension that achieves a good scraping effect.

Precautions

- The drum must be completely flat and the convexity must be limited.
- The surface of the belt must be in good condition
Condition: Staple-free!
- The maximum permitted belt speed is 4 m/s.
- The maximum permitted ambient temperature is 80°C.



	H.H	SML			LL
to	100	100	120	120	120
b	320	380	450	480	580

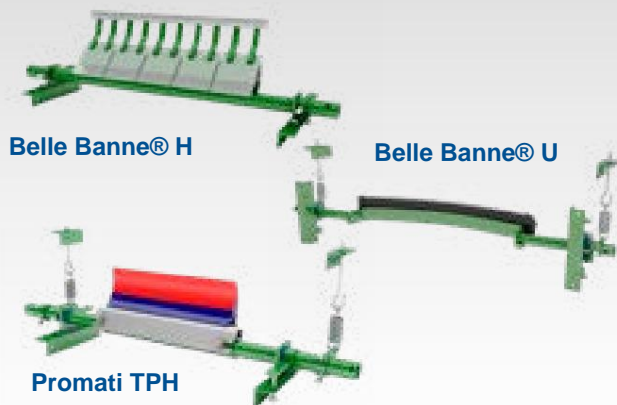
Dimensions H and supports

Drum	medium			
	H.H	SML		LL
250	49			
300	46			
350	43			
400	40			
450	36			
500	32	55		
600		45		
700		40 60		
800		35 50		
900			45	
1000			40 35	
1100				30
1200				25 70
1300				65
1400				60
1500				57
S	150 205 255 290 390			
H	270 330 390 420 520			

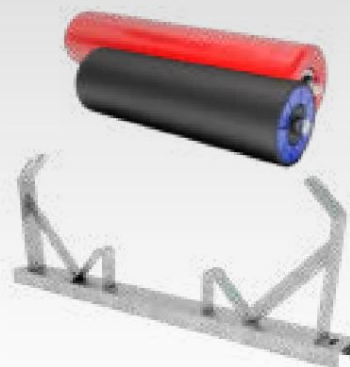
S = Height of support

Product range overview

Belt scrapers



Rollers and supports



Dust suppression and impact zone



Conveyor drums and guide rollers



Safety materials



Sealing system and wear protection materials

