

MANUFLEX TYPE „N“

INSTALLATION INSTRUCTIONS

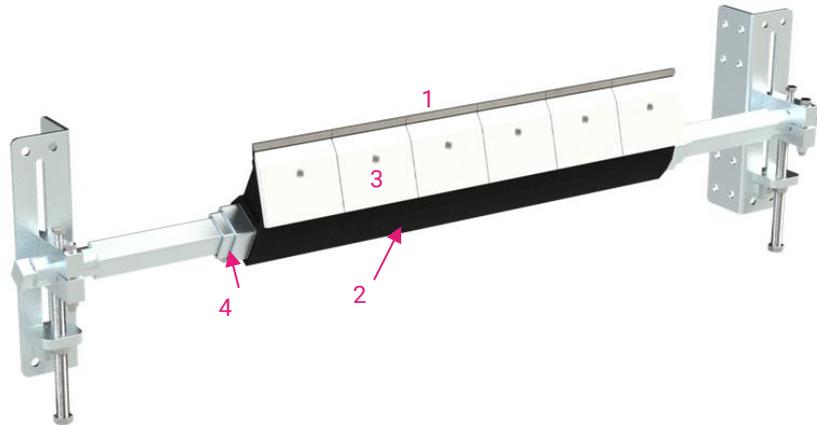
400 – 2,000 mm belt width



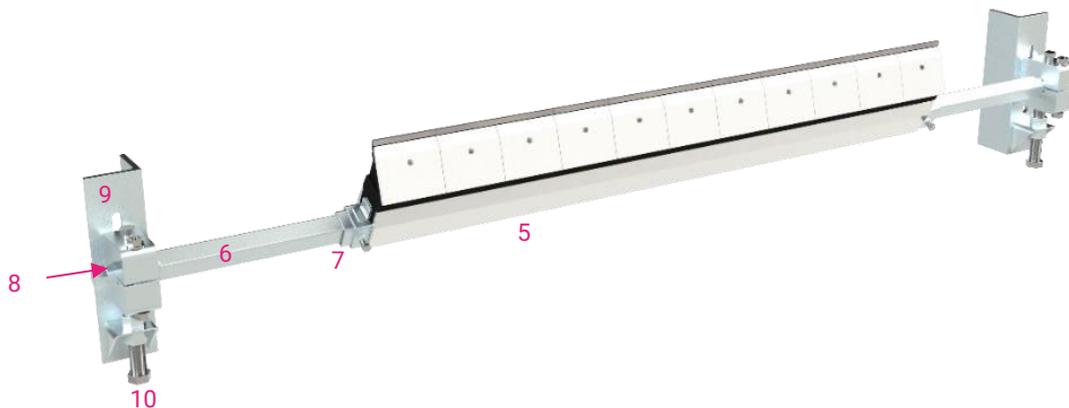
DESCRIPTION

The manuflex N is a secondary scraper equipped with carbide blades. It is manufactured in two variants:

For 400 – 1.200 mm belt width



For 1.400 – 2.000 mm belt width



The carbide scrapers (1), which are 125 mm wide, 3 mm thick and 10 mm high, are also available with 5 mm thickness and a height of 10 mm. They are soldered onto support plates and screwed onto rubber segments (2). PE deflector plates (3) help to ensure an efficient material flow. The rubber segments are pushed onto a tubular axle (5) or, in the case of belt widths of 1,400 – 2,000 mm, onto a torsion-resistant aluminium profile (6).

Solid axles (7) are pushed onto their tubular counterparts to make the scraper telescopic. Clamping rings (8) prevent axial displacement of the scraper strip. The axles are secured in holders (9), which are screwed into place with mounting brackets (10). These mounting brackets may be welded or bolted to the conveyor system.

The mounting brackets are fitted with screws (11) designed to permit adjustment of the contact force of the scraper on the belt. The rubber segments allow the carbide scrapers to act on the surface with a swinging motion for intensive cleaning of the conveyor belt. The carbide scrapers are individually height-adjustable. This ensures an even scraping action across over the entire width of the belt. It also allows the replacement of worn scrapers.

Note:

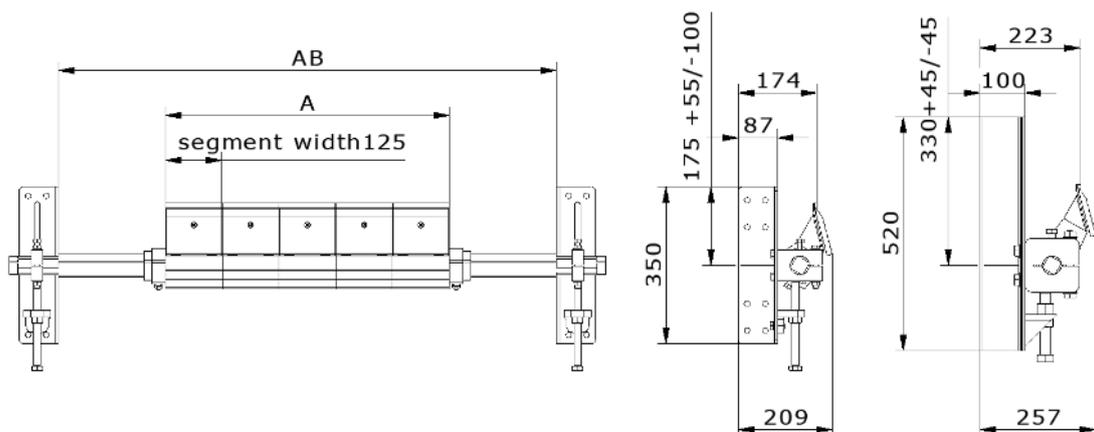
In case of need, manuflex N carbide scrapers for larger belt widths are also available to order.

Note:

manuflex N carbide scrapers are ideal for operation in reverse.

DIMENSIONS AND WEIGHTS

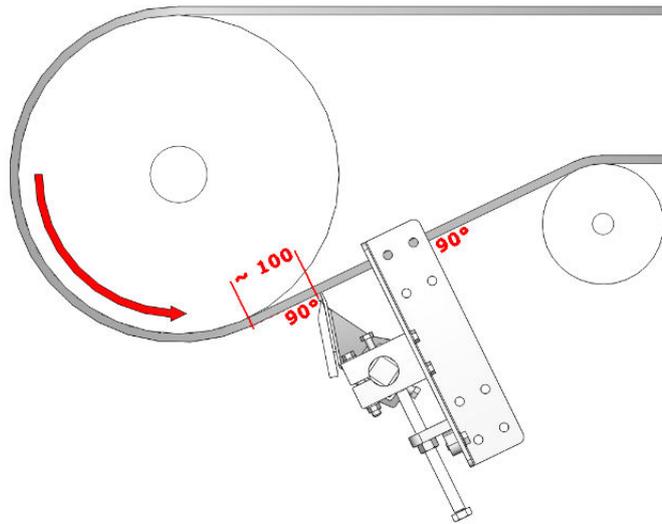
Belt width BB / mm	Strip width A / mm	No. of Segments	System width AB / mm	Weight / kg
400	375	3	475 - 850	25.5
500	500	4	600 - 975	28.0
650	625	5	725 - 1,100	30.5
800	750	6	850 - 1,230	35.5
1,000	1,000	8	1,100 - 1,880	48.0
1,200	1,125	9	1,225 - 2,005	50.5
1,400	1,375	11	1,465 - 2,145	83.5
1,600	1,500	12	1,590 - 2,270	93.5
1,800	1,750	14	1,840 - 2,520	101.5



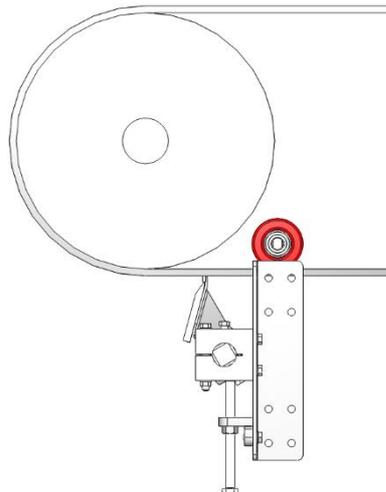
POSITIONING

Distance from the discharge pulley: The manuflex N is installed behind the discharge pulley to perform its role as a secondary scraper. A distance of approximately 50 mm to 100 mm from the pulley is recommended for this purpose.

Installation angle: The complete manuflex N assembly must be fitted at right angles to the belt. Even if the belt is deflected (e.g. by a snub pulley) the scraper must remain at an angle of 90° to the belt. The angle of installation between the belt and the scraper strip must never exceed 90° , as this can lead to vibration and rattle of the scraper.



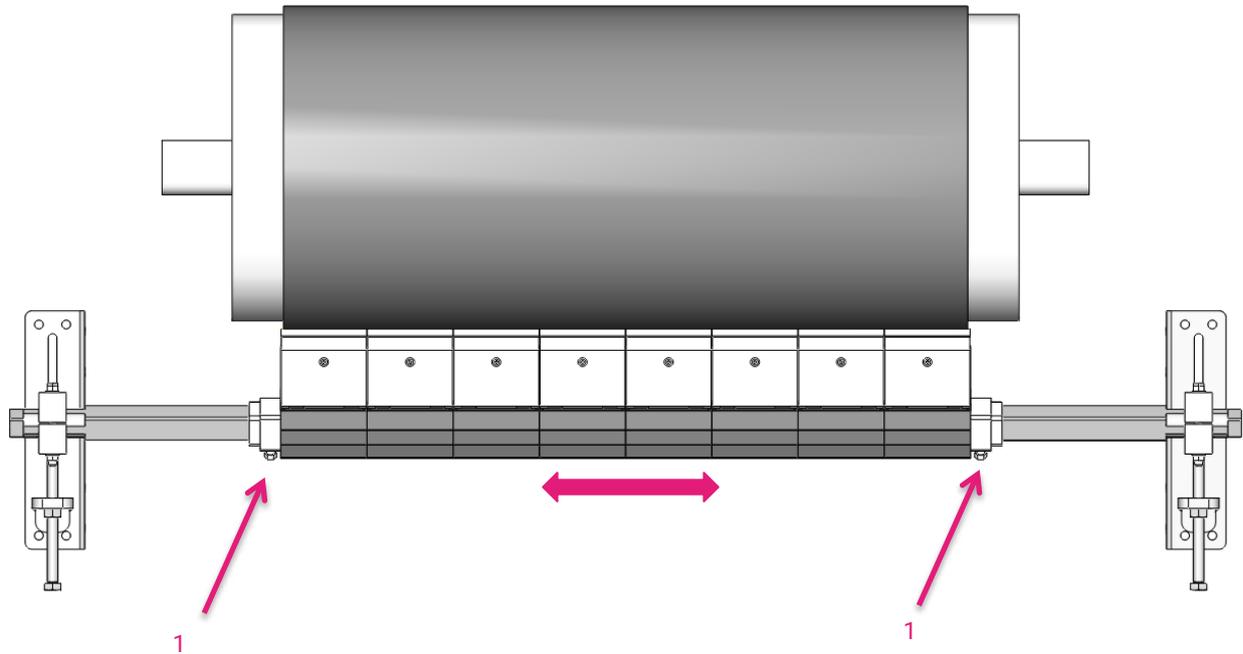
Counter-pressure roller: The use of a counter-pressure roller is recommended if the belt tends to curl up behind the drum or lacks tension.



Position relative to the belt: If the scraper is mounted as described, its position can be adjusted relative to the width of the belt. When doing so, please ensure that the belt is running centrally with respect to the drum.

Start by loosening the screws that secure the clamping rings.

The tubular axle and segments can now be pushed in centrally beneath the belt.

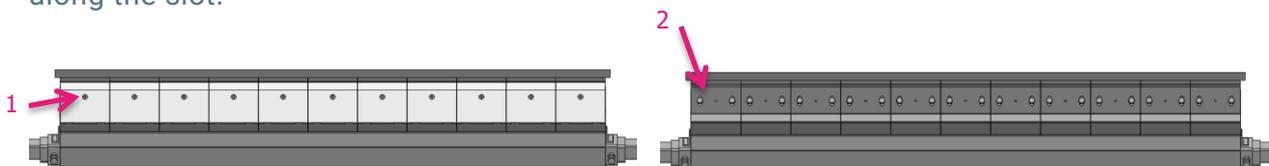


ADJUSTING THE SCRAPERS

Adjustment of the individual scrapers is a very important step. Their contact with the belt must be precisely adjusted to ensure even cleaning of its surface. Exact adjustment of the scrapers is also necessary to ensure that the rubber segments evenly bear the load of the scrapers.

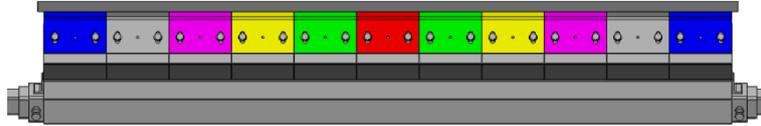
Please proceed as follows when adjusting the scrapers (the illustration shows a belt width of 1,400 mm):

- 1: Loosen the M6 countersunk-head screws and remove the PE deflector plates.
- 2: Loosen the two M8 hexagonal cap screws on each scraper until the scraper can move along the slot.



3: Slide the middle scraper (shown in red) along its slot until it comes into contact with the belt.

4: Repeat the process with the adjacent scrapers (shown in green). Proceed alternately until the outer scrapers (shown in blue) are adjusted.

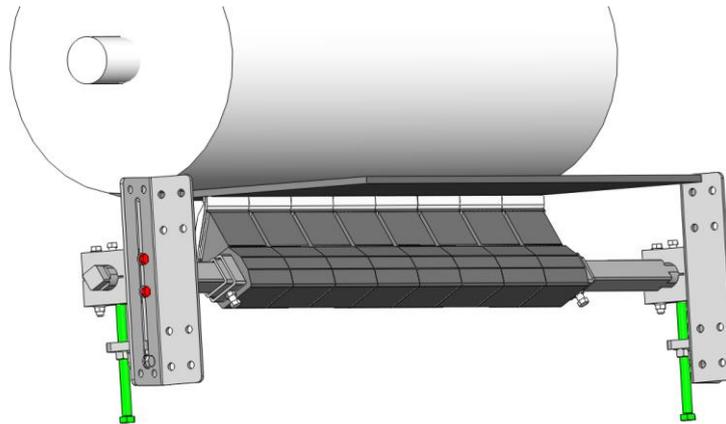


5: Use a hand torch to inspect the area behind the scrapers and ensure that they are all in proper contact with the belt. If adjustment is correct, no light will shine through.

6: Screw the PE deflector plates back into place on the scrapers.

PRETENSION

Pretension can be applied if the manuflex N is fitted as described and the scraper strip is in contact with the belt. Loosen the (red) fixing screws on the axle holders for this purpose. The pretension can now be set by means of the (green) adjusting screws.



TENSION FORCE

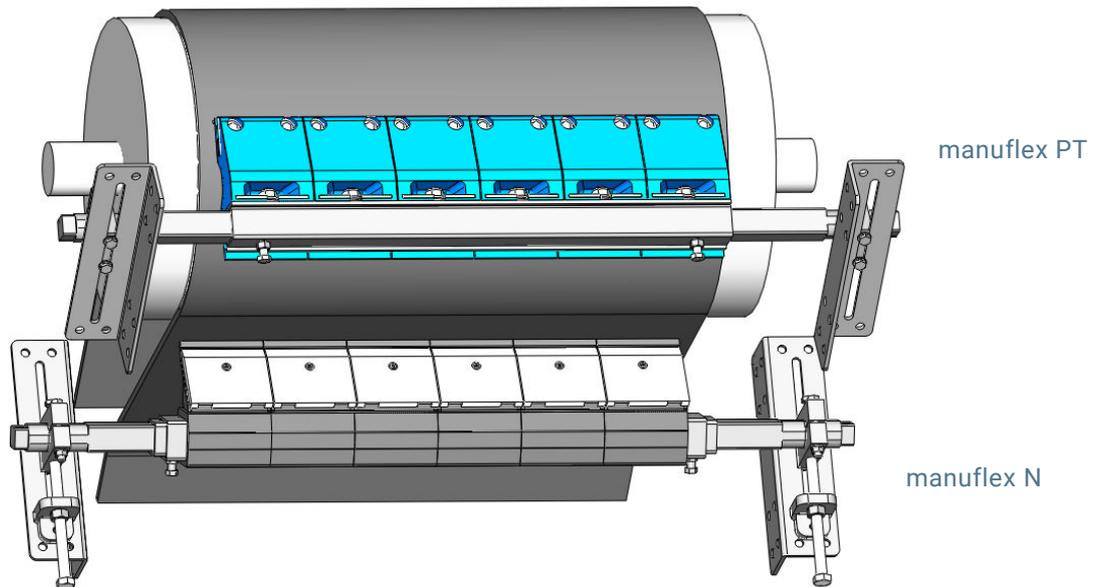
The fitter responsible for adjusting tension should ensure that the proper tension force is applied. It is recommendable to adjust the tension carefully, and then to readjust it after a suitable running-in period.

TEST RUN

Once all the screws, nuts and bolts have been tightened, a test run can be started. The manuflex N should run quietly and without vibration while it thoroughly cleans the belt.

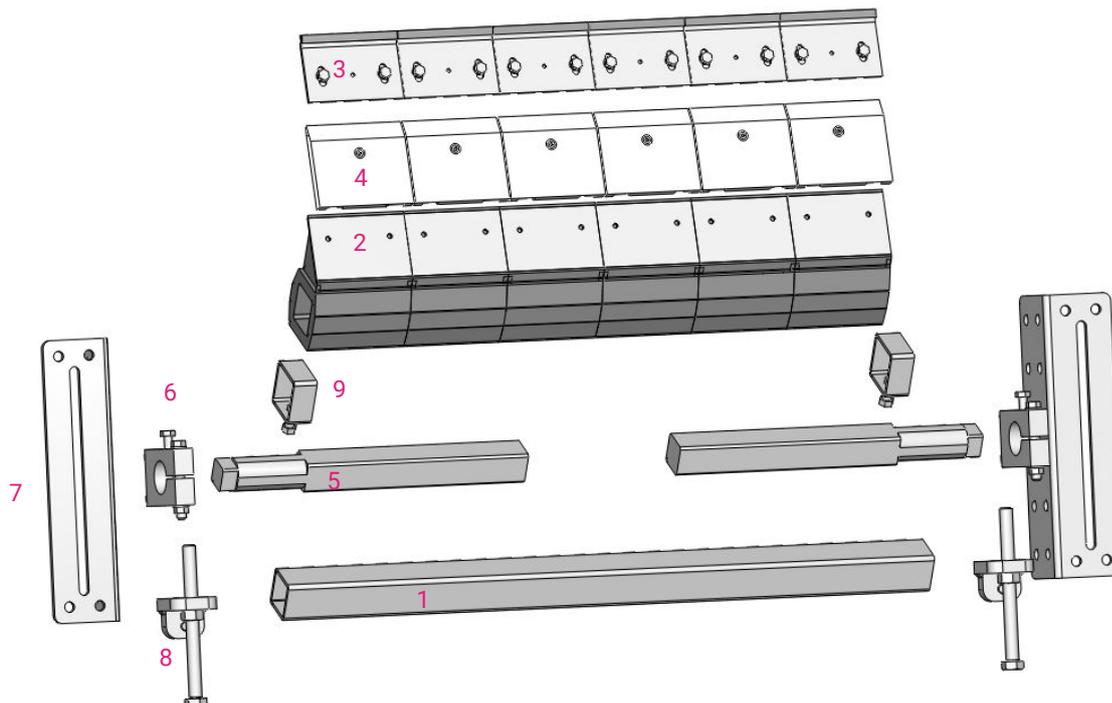
CLEANING PERFORMANCE

An additional drum scraper may be necessary for belt pre-cleaning if you are handling highly adhesive bulk materials. Suitable items from the manuflex range include the manuflex PT.



INDIVIDUAL COMPONENTS

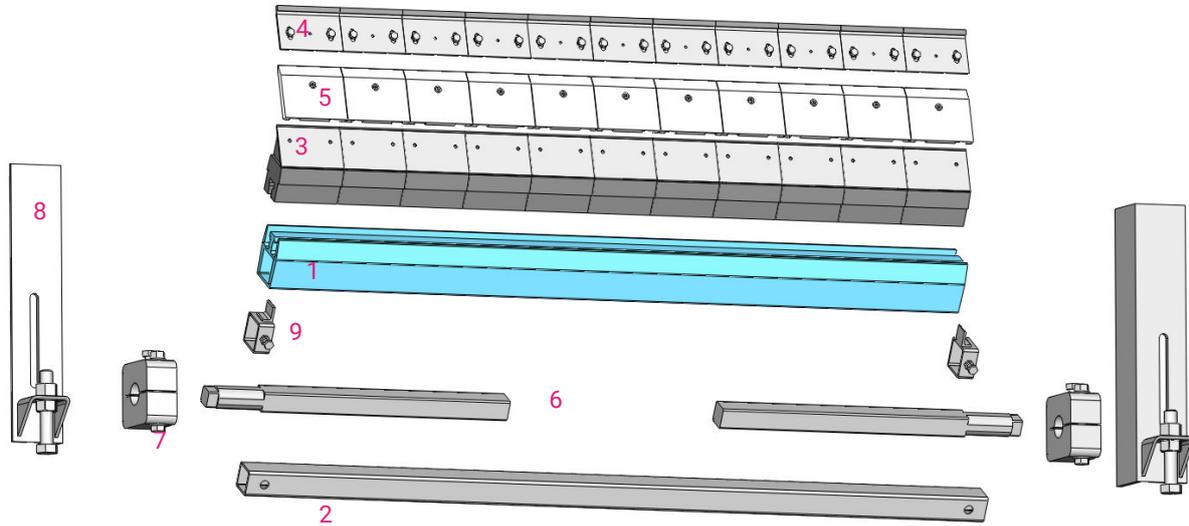
Belt width 400 – 1.200 mm



Item	Designation	Art. no.
1	Tubular axle	11558 Belt width / Length (mm) 400 / 475 – 500 / 600 – 650 / 725 800 / 850 – 1,000 / 1,100 – 1,200 / 1,225
2	Rubber segment N, up to 1,200 mm	11559 Belt width / No. of pieces 400 / 3 – 500 / 4 – 650 / 5 800 / 6 – 1,000 / 8 – 1,200 / 9
3	Carbide scraper N, HM3 Carbide scraper N, HM5	11560 11606 Belt width / No. of pieces 400 / 3 – 500 / 4 – 650 / 5 800 / 6 – 1,000 / 8 – 1,200 / 9
4	PE deflector plate	11576 Belt width / No. of pieces 400 / 3 – 500 / 4 – 650 / 5 800 / 6 – 1,000 / 8 – 1,200 / 9
5	Axle up to BB 650	11555
5	Axle BB 800	13378
5	Axle up to BB 1,000	11556
6	Axle holder up to BB 800	11552
6	Axle holder up to BB 1,200	11553
7	Mounting bracket up to BB 1,400	14198
8	Threaded block	14132
9	Clamping ring	11569

INDIVIDUAL COMPONENTS

Belt width 1,400 – 2,000 mm



Item	Designation	Art. No.
1	Tubular axle	11558 Belt width / Length (mm) 1,400 / 1,475 – 1,600 / 1,600 1,800 / 1,850 – 2,000 / 2,100
2	Aluminium profile	11558 Belt width / Length (mm) 1,400 / 1,375 – 1,600 / 1,500 1,800 / 1,750 – 2,000 / 2,000
3	Rubber segment, up to 1,200 mm	11565 Belt width / No. of pieces 1,400 / 11 – 1,600 / 12 1,800 / 14 – 2,000 / 16
4	Carbide scraper N, HM3 Carbide scraper N, HM5	11560 11606 Belt width / No. of pieces 1,400 / 11 – 1,600 / 12 1,800 / 14 – 2,000 / 16
5	PE deflector plate	11576 Belt width / No. of pieces 1,400 / 11 – 1,600 / 12 1,800 / 14 – 2,000 / 16
6	Axle from BB 1,000	11556
7	Axle holder from BB 1,400	11552
8	Mounting bracket from BB 1,400	14198
9	Clamping collar from BB 1,400	11569

INSTALLATION SEQUENCE

1. Ensure that the belt conveyor is switched off and blocked to prevent accidental operation.
2. Determine the position of the manuflex N behind the drum.
3. Weld or bolt the mounting bracket to the system structure.
4. Check the belt for straight running over the drum.
5. Adjust the manuflex N relative to the centre of the belt.
6. Adjust the mounting bracket to an angle of 90°.
7. Adjust the pretension.
8. Adjust the scrapers.
9. Tighten all screw fittings.
10. Apply suitable corrosion protection to welded joints.
11. Remove all tools and items of equipment.
12. Carry out a test run.
13. Readjust the pretension as required.