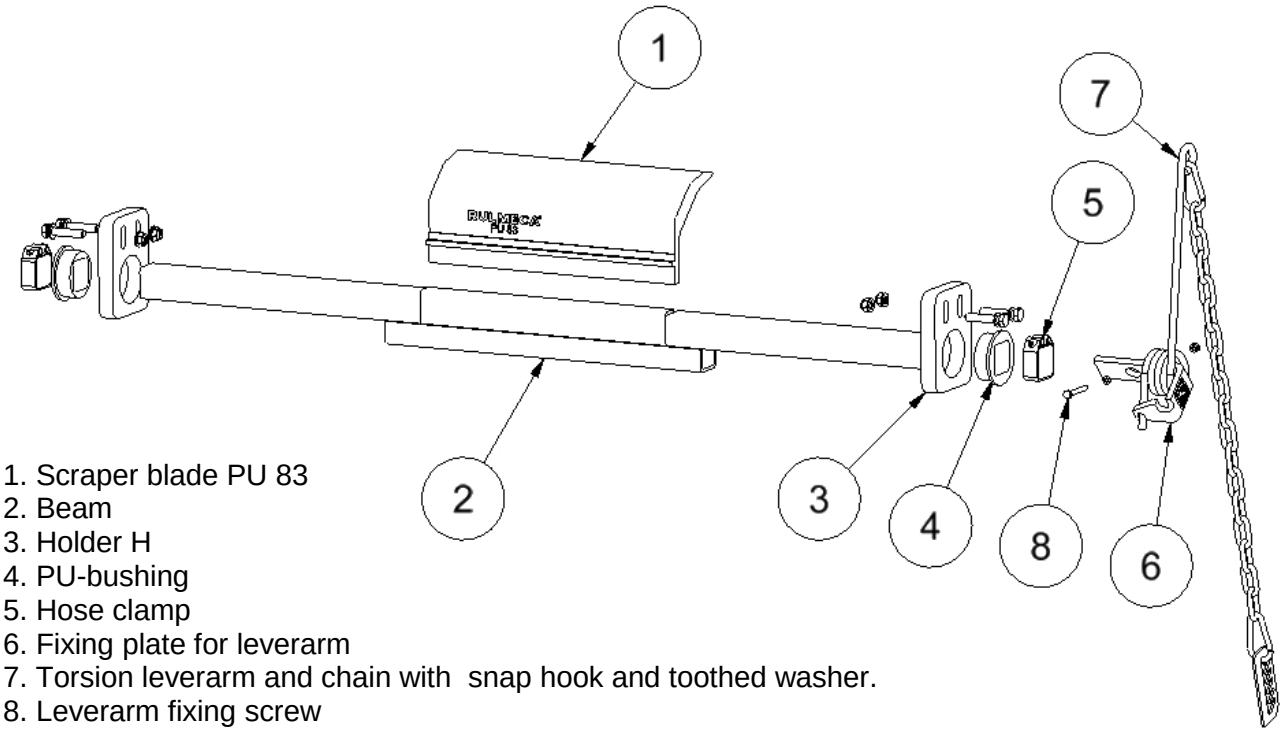
FITTING THE PU 83 PRE-SCRAPER



1. Scraper blade PU 83
2. Beam
3. Holder H
4. PU-bushing
5. Hose clamp
6. Fixing plate for leverarm
7. Torsion leverarm and chain with snap hook and toothed washer.
8. Leverarm fixing screw

All steel parts are electro-galvanized

GENERAL INFORMATION

The PU 83 is a simple pre-scraper that cleans the conveyor belt effectively in moderately difficult operating environments. The scraper blade is a resilient polyurethane strip that adapts to the shape of the conveyor belt. Worn scraper blades can be changed without using tools. The scraper has a simple design with a minimum of moving parts.

IMPORTANT

In order to achieve the best scraping results, the following conditions must be met:
The conveyor belt must be free of damage. The belt may otherwise catch on the scraper blade (1), resulting in a breakdown.
Make sure that large pieces of material cannot bounce up and catch between the belt and the beam (2), causing damage to the belt.
The scraper must not be fitted to chevron belts or belts with mechanical joints.
Max. belt speed: **3.5** m/s
Max. temperature: + 50°C in wet environments
Max. temperature: + 85°C in dry environments (ambient temperature + frictional heat)

CAUTION

Always turn off the belt conveyor before installing or carrying out maintenance on the scraper.
Make sure that the belt cannot start while this work is in progress.

Rulli Rulmeca S.p.A - 24011 Almè (BG) - Italia - Via A. Toscanini,1
Tel: 035 4300111 Fax: 035 545523 e.mail: rulmeca@rulmeca.it Web: www.rulmeca.com

FITTING

1.	The scraper is placed against the drive pulley with the centre of the beam (2) at a radius (L) from the centre of the pulley. The slope of the conveyor, the speed of the belt and the space available determine how high the scraper is placed on the pulley.
2.	PLEASE NOTE: The flow of material must not hit the scraper blade (1).
3.	Slip the hose clamps (5), the PU bushes (4) and the holders (3) onto the beam (2). Or in reverse way – important - same way on both sides!
4.	Make two mounting plates (=flat bars with two holes Ø11 mm) and weld these to the frame. We suggest attaching them in the vicinity of the drive pulley bearings.
5.	Bolt the holders (3) to the mounting plates using the bolts supplied.
6.	Centre the scraper on the pulley and lock the beam laterally using the hose clamps. Cut the beam to a suitable length.
7.	Mount the Torsion leverarm (7) onto the fixing plate (6). Make sure that the short spring pin looks in the notch on the fixing plate.
8.	Insert the fixing plate (6) into the end of the beam (2). Drill a hole (ø7 mm) right through the square tube and look the fixing plate (6) using an M6 x 50 mm bolt (8).
9.	Weld the square washer to the frame. Set the lever arm (7) and hook the snap hook onto the square washer. Find the optimal pressure, which is often low, by trial and error.

MAINTENANCE

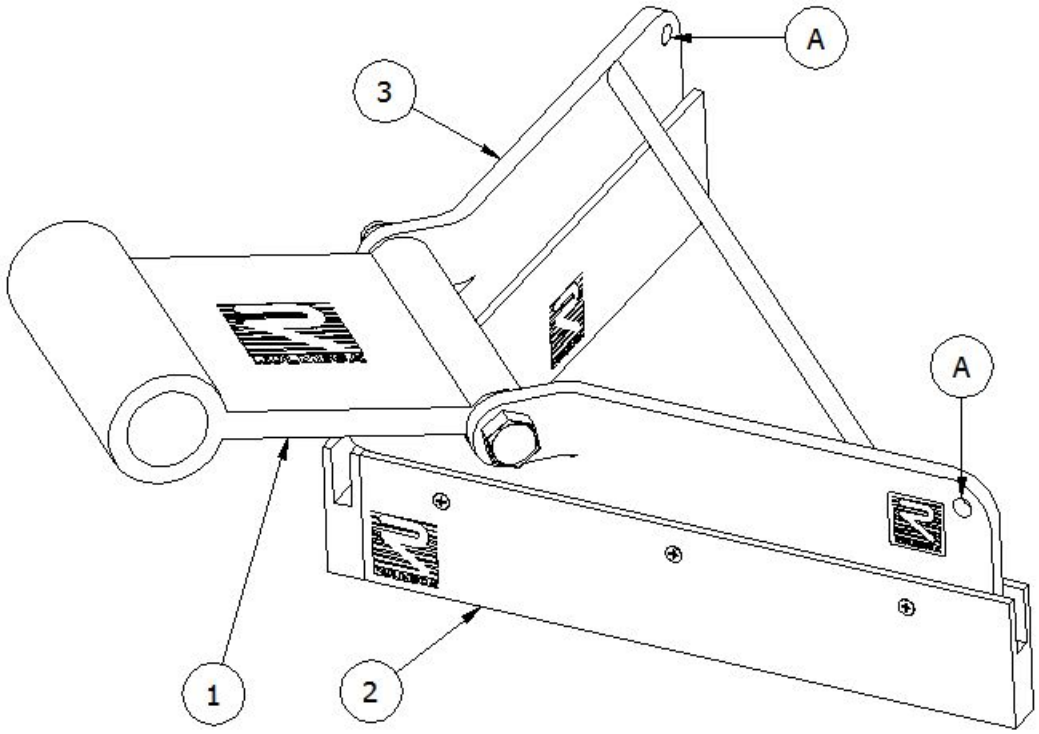
Inspect and clean the scraper regularly– we suggest once a week.
If sticky material collects between the belt and the scraper blade so that the blade is pushed out from the belt, the beam may be moved out 10-20 mm.
Readjust the scraper pressure so as to achieve optimal cleaning. There must be no vibrations or noise. However, vibrations may arise when the belt is run without material or when the belt has a sort of coating for ex. resin. In the long term, vibrations may result in cracking of the beam. These must therefore be eliminated. Try therefore:
…… changing the angle of the blade against the belt a few degrees.
…… changing the pressure of the blade against the belt.
…… making a more robust attachment to the frame.
…… increasing the mass of the beam (2) by, fitting a small lever arm/ weight to the beam (2).

WARRANTY

Damage to the scraper caused by incorrect handling or in connection with incorrect installation cannot be considered to be covered by warranty if these instructions have not been followed. We therefore accept no claims for any consequential damage or loss.

FITTING THE PU-88 SCRAPER

1. PU link art 8888
2. Scraper blade, polyurethane art 8828
3. Electro-galvanized steel arm art 8868



GENERAL INFORMATION

The Maxi-Plough is fitted to the return run of the conveyor belt, in front of the return pulley. The purpose of the plough is to remove loose material from the return run of the belt.

IMPORTANT

In order to achieve the best results, the following conditions must be met:

- The conveyor belt must be free of damage.
- If the plough is to be fitted to a reversible conveyor, the rear part must be locked between holes A and the frame by means of two chains. The plough should also be modified so that there is a small opening in the nose for the release of material.
- Be careful when the plough is fitted to belts with mechanical joints.
- Max. belt speed: **3.5** m/s
  Max. temperature: + 50°C in wet environments
  Max. temperature: + 85°C in dry environments (ambient temperature + frictional heat)

CAUTION

Always turn off the belt conveyor before installing or carrying out maintenance on the scraper. Make sure that the belt cannot start while this work is in progress.

Rulli Rulmeca S.p.A - 24011 Almè (BG) - Italia - Via A. Toscanini,1
Tel:+39-035.4300111 Fax:+39-035.545523 e.mail: rulmeca@rulmeca.it Web: www.rulmeca.com

FITTING

1.	Slip a steel tube of ø 40 mm through the PU link (1).
2.	Fasten the tube to the frame. The centre of the ø 40 mm tube is placed 20 mm below the centre of the M16x200 bolt. Approximately 90 mm above the conveyor belt.
3.	Place the plough at the centre of the belt. Lock the PU link (laterally), using the two hose clamps.

MAINTENANCE

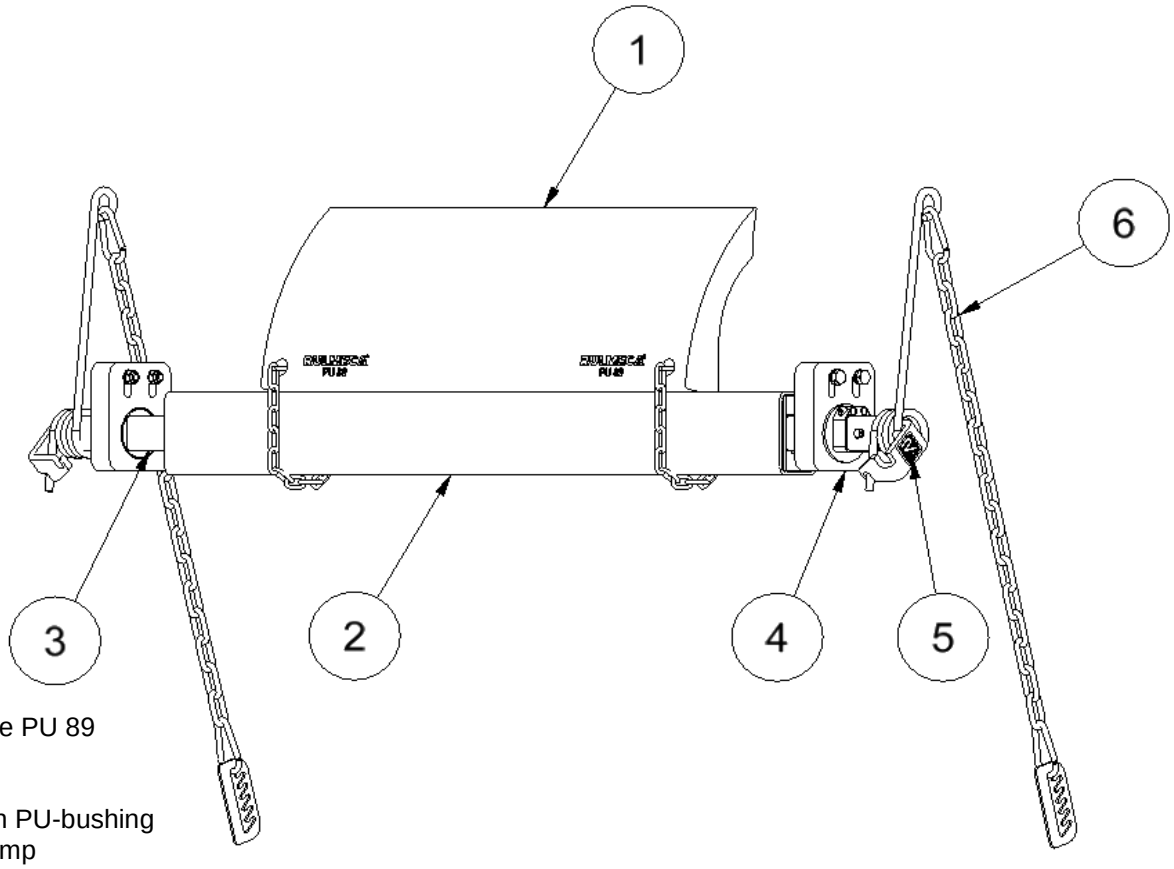
- Inspect the scraper regularly– we suggest a couple of times a month.
- Change the scraper blade (yellow) when its height has decreased to 35 mm.

B-W	PLOUGH WIDTH	L LENGTH	SPARE PART STRIP
400	520	380	8824
500	620	430	8825
650	770	510	8826
800	920	570	8828
1000	1120	680	8830
1200	1320	780	8832
1400	1520	880	8834
1600	1720	980	8836
1800	1920	1080	8838

WARRANTY

Damage to the plough caused by incorrect handling or in connection with incorrect installation cannot be considered to be covered by warranty if these instructions have not been followed. We therefore accept no claims for any consequential damage or loss.

FITTING THE PU-89



1. Scraper blade PU 89
2. Beam
3. Beam end
4. Holder H with PU-bushing and hose clamp
5. Fixing plate for leverarm
6. Torsion leverarm and chain with snap hook and toothed washer.

All steel parts are electro-galvanized

GENERAL INFORMATION

The PU 89 is a robust pre-scraper that effectively cleans conveyor belts in difficult operating environments. The scraper blade is a resilient polyurethane blade that adapts to the shape of the conveyor belt. Worn out scraper blades can easily be changed without using any tools. It has a simple design with a minimum of moving parts.

IMPORTANT

In order to achieve the best scraping results, the following conditions must be met:

- The conveyor belt must be free of damage. The belt may otherwise catch on the scraper blade (1), resulting in a breakdown.
- Make sure that large pieces of material cannot bounce up and catch between the belt and the beam (2), causing damage to the belt.
- The scraper must not be fitted to chevron belts or belts with mechanical joints.
- Max. belt speed: **3.5** m/s
- Max. temperature: + 50°C in wet environments
- Max. temperature: + 85°C in dry environments (ambient temperature + frictional heat)

CAUTION

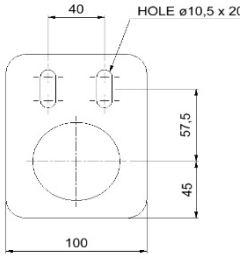
Always turn off the belt conveyor before installing or carrying out maintenance on the scraper. Make sure that the belt cannot start while this work is in progress.

Rulli Rulmeca S.p.A - 24011 Almè (BG) - Italia - Via A. Toscanini,1
Tel:+39-035.4300111 Fax:+39-035.545523 e.mail: rulmeca@rulmeca.it Web: www.rulmeca.com

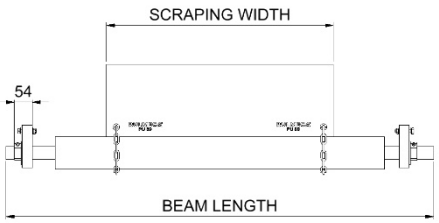
FITTING

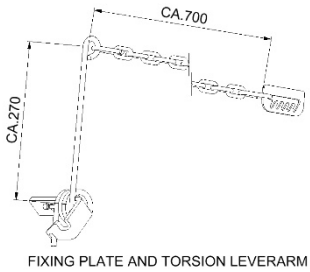
1.	The scraper is placed against the drive pulley with the centre of the beam (2) at a radius (L-measure) from the centre of the pulley. The slope of the conveyor, the speed of the belt and the space available determine how high the scraper is placed on the pulley.
2.	PLEASE NOTE: the flow of material must not hit directly the blade (1)
3.	Secure the scraper blade by running the short chains through the blade dedicated holes and around the beam. Lock with the snap hooks
4.	Lead in both beam ends (3) into the main beam (2)
5.	Slip the hose clamps, the PU bushes and the holders (4) onto the beam (2)
6.	Make two mounting plates (=flat bars with two holes Ø11 mm) and weld these to the frame. We suggest that they are attached in the vicinity of the drive pulley bearings
7.	Bolt the holders (4) to the mounting plates using the bolts supplied
8.	Centre the scraper on the pulley and lock the beam laterally using the hose clamps. Cut the beam ends to a suitable length
9.	Mount the Torsion lever arm (6) onto the fixing plate (5). Make sure that the short spring pin locks in the notch on the fixing plate
10.	Insert the fixing plate (5) into the end of the beam (2). Drill a hole (ø7 mm) right through the square tube and lock the fixing plate (5) using an M6 x 50 mm bolt
11.	Weld the square washer to the frame. Set the lever arm (6) and hook the snap hook onto the square washer. Find the optimal pressure, which is often low, by trial and error

B-W	SCRAPING WIDTH	BEAM LENGTH
650	545	850
800	695	1300
1000	895	1500
1200	1095	1700
1400	1295	1900

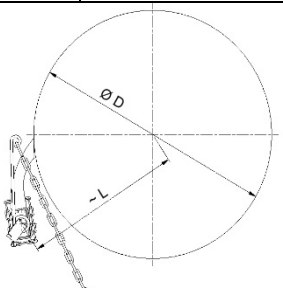


PULLEY	L-MESSURE
Ø400	290
Ø500	330
Ø630	390
Ø800	545
Ø1000	640





FIXING PLATE AND TORSION LEVERARM



MAINTENANCE

Inspect and clean the scraper regularly– we suggest once a week.
If sticky material is collected between the belt and the scraper blade so that the blade is pushed out from the belt, the beam may be moved out 10-20 mm.
Readjust the scraper pressure to achieve optimal cleaning. There must be no vibrations or noise. However, vibrations may arise when the belt is run without material or when the belt has a sort of coating, for example resin. In the long term, vibrations may result in cracking of the beam. These must therefore be eliminated.
Try therefore to:

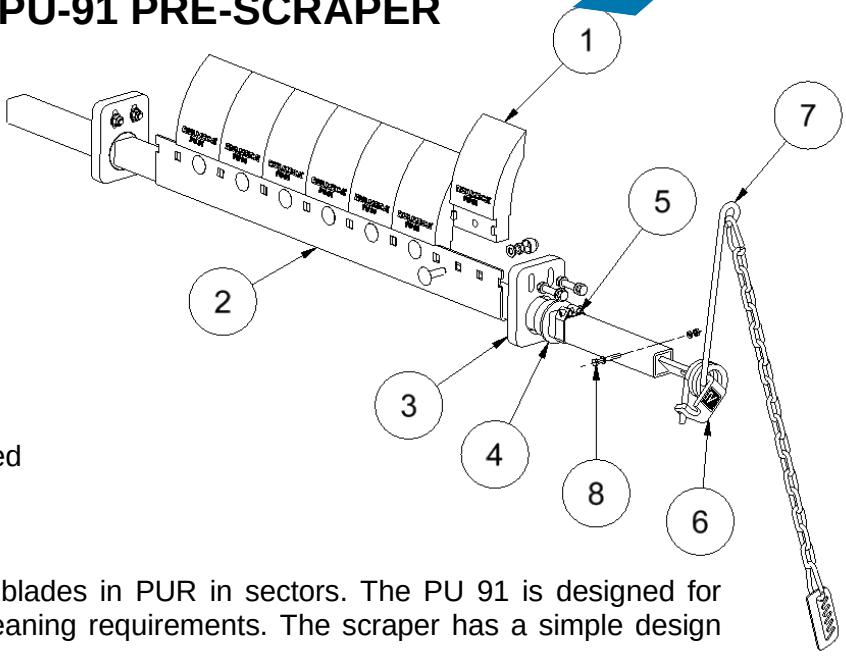
- change the angle of the blade against the belt with a few degrees.
- change the pressure of the blade against the belt.
- make a more robust attachment to the frame.
- increase the mass of the beam (2) by, for example, fitting a small lever arm/ weight to the beam (2).

WARRANTY

Damage to the scraper caused by incorrect handling or in connection with incorrect installation cannot be considered to be covered by warranty if these instructions have not been followed. We therefore accept no claims for any consequential damage or loss.

Rulli Rulmeca S.p.A - 24011 Almè (BG) - Italia - Via A. Toscanini,1
Tel:+39-035.4300111 Fax:+39-035.545523 e.mail: rulmeca@rulmeca.it Web: www.rulmeca.com

FITTING THE PU-91 PRE-SCRAPER



1. Scraper segment PU 91
2. Beam
3. Holder H
4. PU-bushing
5. Hose clamp
6. Fixing plate for leverarm
7. Torsion leverarm and chain with snap hook and toothed washer
8. Leverarm fixing screw

All steel parts are electro-galvanized

GENERAL INFORMATION

The PU 91 is a pre-scraper with blades in PUR in sectors. The PU 91 is designed for medium industry with stringent cleaning requirements. The scraper has a simple design with a minimum of moving parts.

IMPORTANT

In order to achieve the best scraping results, the following conditions must be met:

- The conveyor belt must be free of damage. The belt may otherwise catch on the scraper segments (1), resulting in a breakdown.
- Make sure that large pieces of material cannot bounce up and catch between the belt and the beam (2), causing damage to the belt and to the scraper.
- The scraper must not be fitted to chevron belts or belts with mechanical joints.
- Max. belt speed: **3.5** m/s
- Max. temperature: + 50 °C in wet environments.
- Max. temperature: + 85 °C in dry environments (ambient temperature + frictional heat).

CAUTION

Always turn off the belt conveyor before installing or carrying out maintenance on the scraper. Make sure that the belt cannot start while this work is in progress.

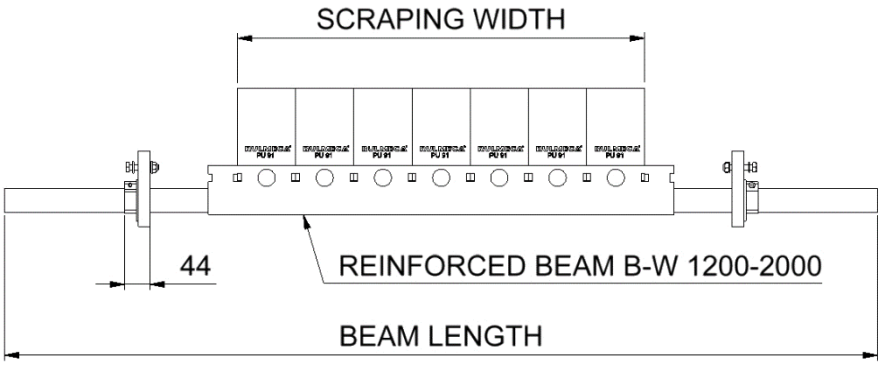
FITTING

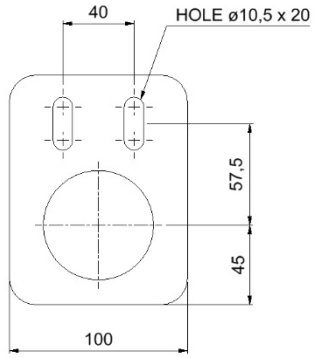
1.	The scraper is placed against the drive pulley with the centre of the beam (2) at a radius (L) from the centre of the pulley. How high the scraper is placed on the pulley is determined by: a) the slope of the conveyor, b) the speed of the belt and c) the space available.
2.	PLEASE NOTE: The flow of material must not hit the segments (1).
3.	Slip the holders (3), the PU-bushes (4) and the hose clamps (5) onto the beam (2).
4.	Make two mounting plates (=flat bars with two holes Ø11 mm) and weld these to the frame. We suggest attaching them in the vicinity of the drive pulley bearings.
5.	Bolt the holders (3) to the mounting plates. Check that the L measurements are correct and that the PU blade (1) touches the belt (see picture).
6.	Centre the scraper on the pulley and lock the beam laterally using the hose clamps. Cut the beam to a suitable length.
7.	Mount the Torsion lever arm (7) onto the fixing plate (6). Make sure that the short spring pin locks in the notch on the fixing plate.
8.	Insert the fixing plate (6) into the end of the beam (2). Drill a hole (ø7 mm) right through the square tube and lock the fixing plate (6) using an M6 x 50 mm bolt (8).
9.	Weld the toothed washer to the conveyor frame. Set the lever arm (7) and hook the snap hook onto the toothed washer. Find the optimal pressure by trial.

Rulli Rulmeca S.p.A - 24011 Almè (BG) - Italia - Via A. Toscanini,1
Tel:+39-035.4300111 Fax:+39-035.545523 e.mail: rulmeca@rulmeca.it Web: www.rulmeca.com

MAINTENANCE

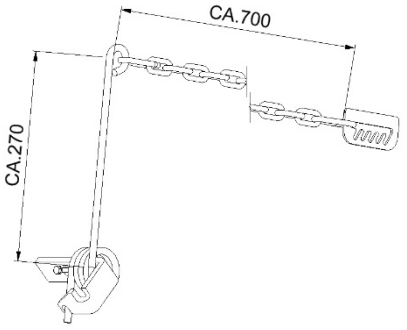
Inspect and clean the scraper regularly – we suggest once a week. When half the blade height remains, change all the segments (1). Change the segments by undoing the M12 nuts. Bolt on the new segments. Set the scraper, lock the chain to the frame. Readjust the scraper pressure so as to achieve optimal cleaning. There must be no vibrations or noise. However, vibrations may arise when the belt is run without material or when the belt has a coating of resin. In the long term, vibrations may result in cracking of the beam. These must therefore be eliminated. Try therefore:
…… changing the angle of the blades against the belt a few degrees
…… changing the pressure of the blades against the belt
…… making a more robust attachment to the frame
…… increasing the mass of the beam (2) by, for example, fitting a small weight to the beam.





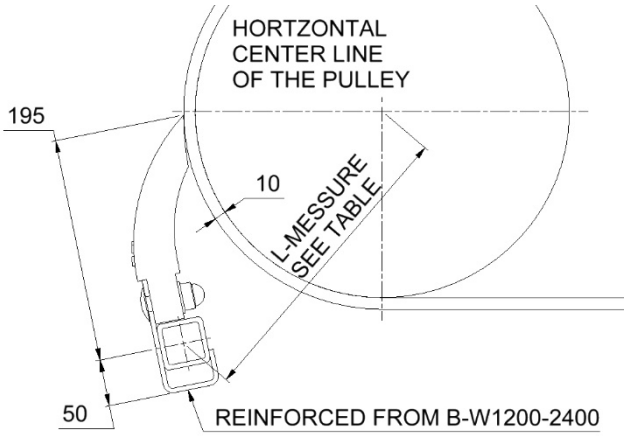
HOLDER H, THICKNESS 20 mm

BW	SEGMENTS	SCRAPING WIDTH	BEAM LENGTH	NO OF LEVERARMS
400	4	400	1100	1
500	5	500	1200	1
650	6	600	1300	1
800	7	700	1500	1
1000	9	900	1700	2
1200	11	1100	1900	2
1400	13	1300	2000	2
1600	15	1500	2300	2
1800	17	1700	2500	2
2000	19	1900	2700	2



FIXING PLATE AND TORSION LEVERARM

PULLEY	L-MESSURE
Ø220	227
Ø270	246
Ø320	262
Ø400	290
Ø500	330
Ø630	390

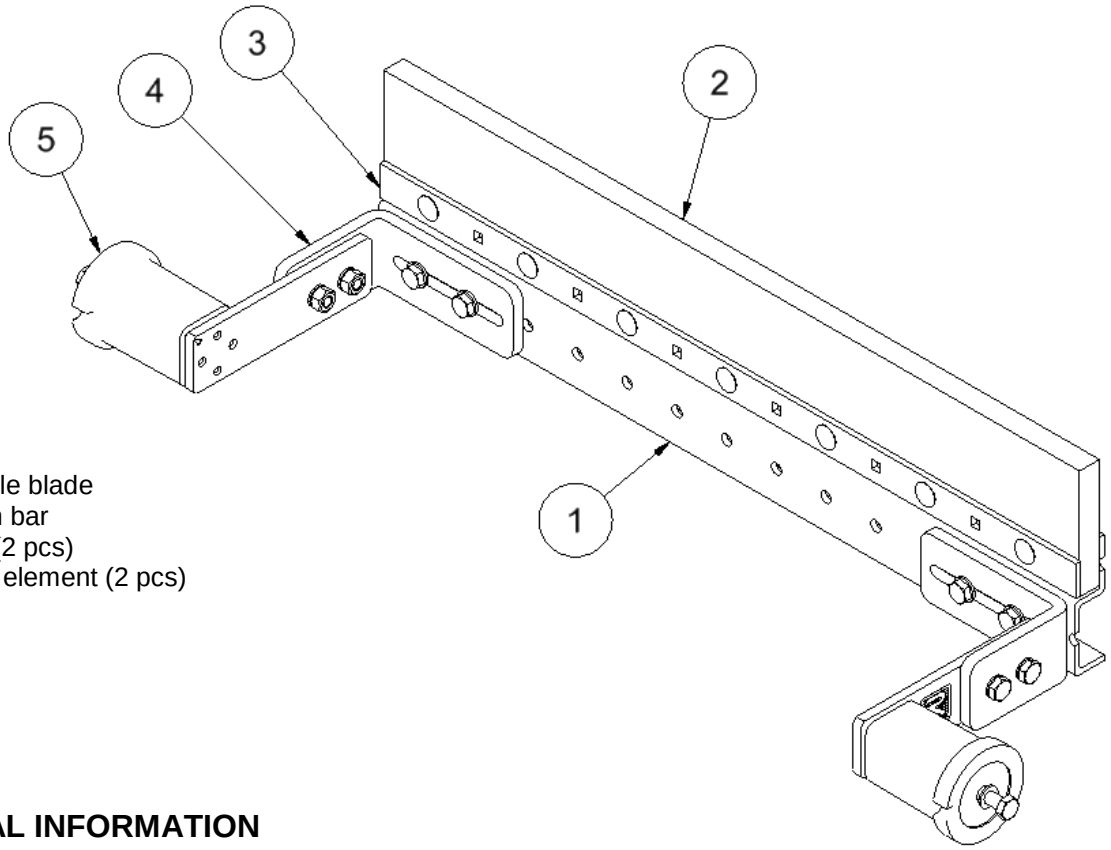


WARRANTY

Damage to the scraper caused by incorrect handling or in connection with incorrect installation cannot be considered to be covered by warranty if these instructions have not been followed. We therefore accept no claims for any consequential damage or loss.

Rulli Rulmeca S.p.A - 24011 Almè (BG) - Italia - Via A. Toscanini,1
Tel:+39-035.4300111 Fax:+39-035.545523 e.mail: rulmeca@rulmeca.it Web: www.rulmeca.com

FITTING THE PU-92 SECONDARY SCRAPER



1. Beam
2. PU single blade
3. Flat iron bar
4. Holder (2 pcs)
5. Torsion element (2 pcs)

GENERAL INFORMATION

The PU 92 is a secondary scraper with a strip in PUR. The PU 92 is designed for medium industry with stringent cleaning requirements. The scraper has a simple design with a minimum of moving parts.

IMPORTANT

In order to achieve the best scraping results, the following conditions must be met:

- The conveyor belt must be free of damage.
- The conveyor belt must be flat. If the belt has a tendency to bulge, fit a return roller (sheet-metal roller) a few decimetres from the scraper.
- The scraper must not be fitted to reversible conveyors.
- The scraper must not be fitted to chevron belts or belts with mechanical joints.
- Max. belt speed: **3.5** m/s
- Max. temperature: + 50°C in wet environments
- Max. temperature: + 85°C in dry environments (ambient temperature + frictional heat)

CAUTION

Always turn off the belt conveyor before installing or carrying out maintenance on the scraper. Make sure that the belt cannot start while this work is in progress.

FITTING

1.	The scraper is placed below the drive pulley with the PUR strip as shown in the drawing (page 2)
2.	With 8 mm steel plate, make two mounting plates with holes (for mounting the blue torsion elements)
3.	Weld the mounting plates to the frame
4.	The scraper is bolted to the mounting plates using the supplied bolts
5.	Set the blue torsion elements (5) using a pipe wrench, at a torque angle equal on both sides. Tighten the fixing screws using a torque wrench at the value shown in the table (page 2)

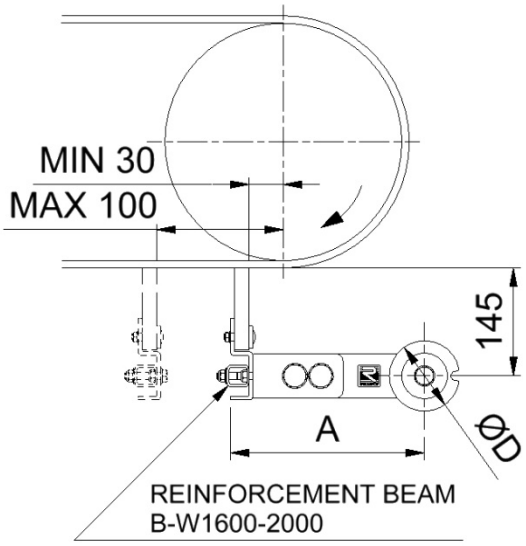
Rulli Rulmeca S.p.A - 24011 Almè (BG) - Italia - Via A. Toscanini,1
Tel:+39-035.4300111 Fax:+39-035.545523 e.mail: rulmeca@rulmeca.it Web: www.rulmeca.com

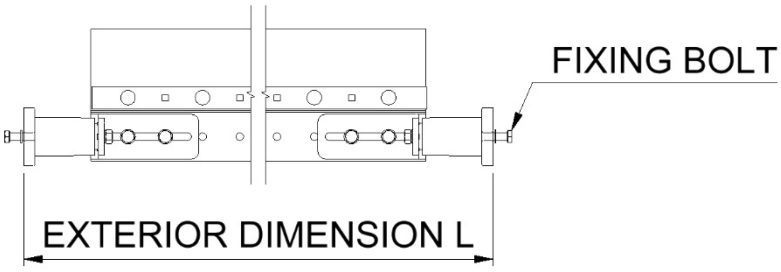
MAINTENANCE

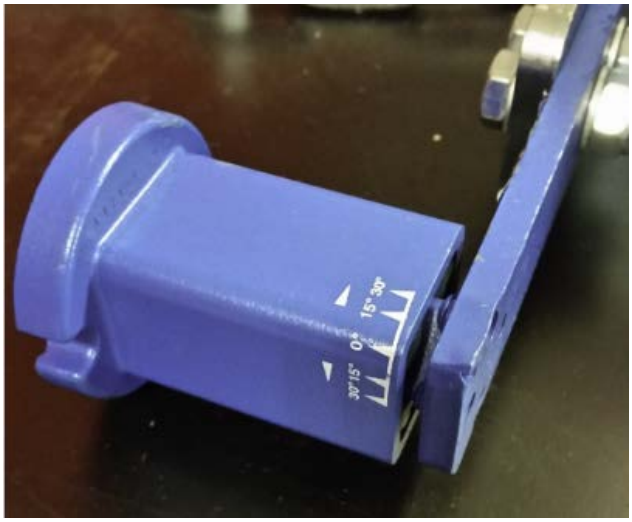
Inspect and clean the scraper regularly– we suggest once a week.
When half the strip height remains, change it (2).
Change the strip by undoing the M8 nuts and flat iron bar. Bolt on the new strip.
Set the scraper. Set the torsion element using a pipe wrench and lock the bolt.
Readjust the scraper pressure so as to achieve optimal cleaning. There must be no vibrations or noise.
However, vibrations may arise when the belt is run without material or when the belt has a coating of resin. In the long term, vibrations may result in cracking of the beam. These must therefore be eliminated. Try therefore:
…… changing the angle of the blade against the belt a few degrees
…… changing the pressure of the blade against the belt.
…… making a more robust attachment to the frame.
…… increasing the mass of the beam (1) by, for example, fitting a small lever arm to the beam (1).

NOTE ! We suggest that the torsion elements will be set according to F torque angle (see table here below) which is giving a scraping pressure of approximately 5-10 N/cm^2 (0.05 ÷ 0.1 MPa) .
We do recommend that the torsion elements not will be set at a pretension angle above 20°.

B-W	L standard beam length	Ø D	A	Fixing screw	Fixing screw torque	F pressure torque angle
400	482-582	58	166	M10	49 Nm	9º - 14º
500	582-682	58	166	M10	49 Nm	11º - 16º
650	682-782	58	166	M10	49 Nm	12º - 18º
800	840-940	78	208	M12	86 Nm	10º - 15º
1000	1040-1140	78	208	M12	86 Nm	13º - 18º
1200	1240-1340	78	208	M12	86 Nm	15º - 21º
1400	1440-1540	78	208	M12	86 Nm	17º - 23º
1600	1700-1800	95	260	M16	210 Nm	12º - 17º
1800	1900-2000	95	260	M16	210 Nm	14º - 18º
2000	2100-2200	95	260	M16	210 Nm	15º - 20º







WARRANTY

Damage to the scraper caused by incorrect handling or in connection with incorrect installation cannot be considered to be covered by warranty if these instructions have not been followed. We therefore accept no claims for any consequential damage or loss.

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Tel:+39-035.4300111 Fax:+39-035.545523 e.mail: rulmeca@rulmeca.it Web: www.rulmeca.com