Martin® Slider Cradles

Operating Instructions

Version: 0
Language: ENG
M3596E UK 2025-05 Sld Crdl

Table of Contents

1 General

NOTE

Before starting work these operating instructions must be read and understood completely.

1.1 About these operating instructions

These operating instructions apply solely for Belt Martin® Slider Cradles and are intended for those persons who install Martin® Slider Cradles, commission them, and monitor their usage.

The operating instructions must be kept for the lifetime of the Martin® Slider Cradles and must be made available in an orderly condition to all persons entrusted with work with and on the Martin® Slider Cradles.

1.2 Intended usage

The Martin® Slider Cradles are used on belt conveyors and serve to support conveyor belts, mainly in the area of loading and in the area of calming zones. They are installed under the conveyor belt and support its running side.
Depending on their design, they serve to absorb the impact of falling bulk material and / or to guide the conveyor belt in a level manner.

They may only be used

- in industrial areas above ground
- according to the technical data in the documentation
- in the installation position as described in the documentation

The usage of the Martin® Slider Cradles is only considered to be as intended if the following conditions are also fulfilled:

- Before starting initial work, the personnel must have been instructed on the work on the system and on all relevant issues of occupational health and safety
- Any personal protective equipment required must be worn
- The provisions of the operating instructions must be observed in full.

Operation of the Martin® Slider Cradles under deviating conditions and unauthorised modification of the Martin® Slider Cradles is considered as improper usage

Special product variants of the Martin® Slider Cradles can also be used in ATEX zones 22 and 21 under certain circumstances.

1.3 Personnel qualification

Only authorised and qualified personnel may be entrusted with work with and on the Martin® Slider Cradles. Persons are considered qualified if they have the qualification of a skilled worker and meet all the following requirements:

- completed professional training or at least 5 years of professional experience in the field,
- technical experience,
- knowledge of the relevant occupational health and safety regulations.

The persons must

- be able to assess the tasks and risks assigned to them,
- be able to recognise potential dangers in advance,
- be physically and cognitively able to operate the conveyors and Martin® Slider Cradles safely,
- have been trained and instructed appropriately,
- have read and understood these operating instructions.

Work on earth connections (Protective Bonding Kits), cabling, switching, control, regulation, automation and all electrical components may be carried out only by trained electricians.

1.4 Part number

Martin® Slider Cradles **41792 - aaa b**

Belt width in cm
(050 – 180)

Material
P – Painted Steel (1.0038 / RAL 2004)
S – Stainless Steel (1.4571)

1.5 Technical Data

The Martin® Slider Cradles is suitable for the following operating parameters:

	Operating parameter
Belt widths:	500 – 1.800 mm
Belt speed:	Max. 3,5 m/s
Temperature range:	-30 – 60 °C
Trough Angles:	0° – 45°
Reversing operation	Yes

2 Safety

2.1 General safety instructions

DANGER

Entanglement in moving or rotating parts

Body parts and/or clothing may get caught and pulled in by moving or rotating parts of the machinery.

- *Before any installation or maintenance work is carried out, ensure that all power sources to the conveyor belt system and its accessories are switched off and secured against inadvertent switching on.*
- *Apply Log-Out / Tag-Out / Try-Out (LOTOTO) Procedures*
- *Apply warning signs*

DANGER

Automatic start-up of the conveyor

Serious or fatal injuries due to unintentional start-up of the conveyor.

- *Switch off the conveyor before starting work and secure it against being switched on again.*
- *Follow safe procedures to prevent unintentional restart.*

WARNING

Flying objects

Objects left on or in the conveyor can fly around uncontrollably when the conveyor is switched on and can hit and injure persons.

- *Before switching on the conveyor, remove all foreign objects such as tools, devices, etc. from the belt!*

WARNING

Risk of falling down

Martin® Slider Cradles are often mounted and operated in heights. There may be a risk of falling down.

- *Therefore, use a fall protection device when installing in higher working areas!*

WARNING

Working in confined spaces

Areas in which Martin® Slider Cradles are installed are often difficult to access and include confined spaces. It is often necessary to work in difficult positions.

- *Determine whether occupational safety measures are necessary that go beyond the usual measures!*

2.2 Personal protective equipment

Persons carrying out work on Martin® Slider Cradles must wear suitable personal protective equipment.

Minimum requirements:

Symbol	Meaning
	Wear head and eye protection
	Wear at least ankle-high foot protection
	Use gloves
	Use fall protection, if required

2.3 Safety markings on the system

The safety markings on the Martin® Slider Cradles must be kept in good condition and clearly visible at all times.

If parts of the system are replaced, ensure that the spare parts are or will be provided with appropriate safety markings.

3 Before Installation

DANGER

Entanglement in moving or rotating parts

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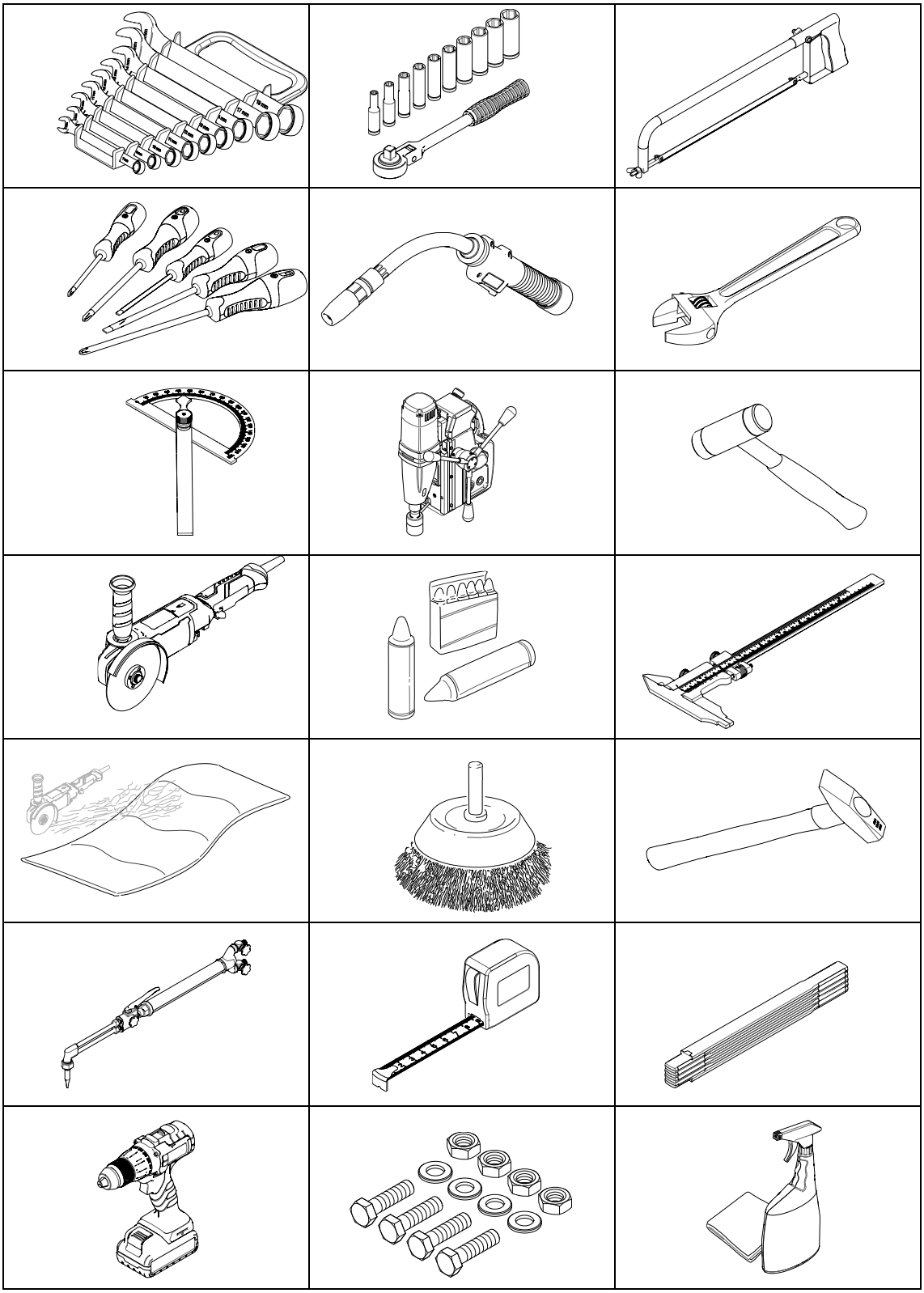
3.1 Required maximum of tools and materials



3.2 Unpacking/transportation

WARNING

Heavy weight

The Martin® Slider Cradles may have weights that require handling by lifting devices. Handling Impact Cradles by hand can cause serious skeletal injuries.

- *Use suitable aids if the load is > 25 kg per person!*

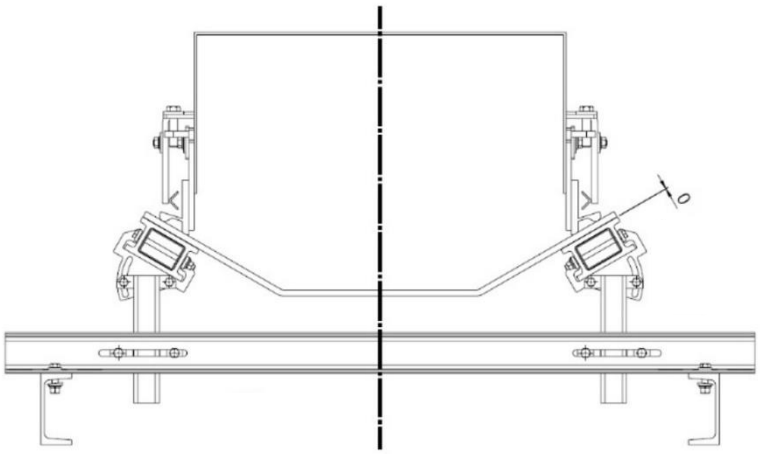
When unpacking, all components must be checked for completeness and intactness.

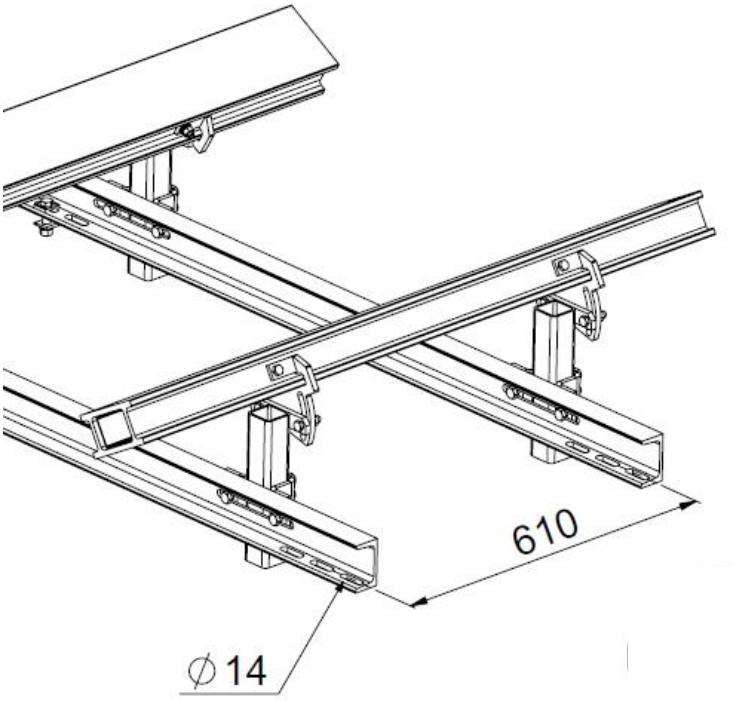
3.3 Requirements for installation

When installing one or more Impact Cradles, it is necessary to verify there is adequate power in the conveyor drive to compensate for the additional frictional drag.
Consult Martin Engineering for additional information.

3.4 Determining the installation position

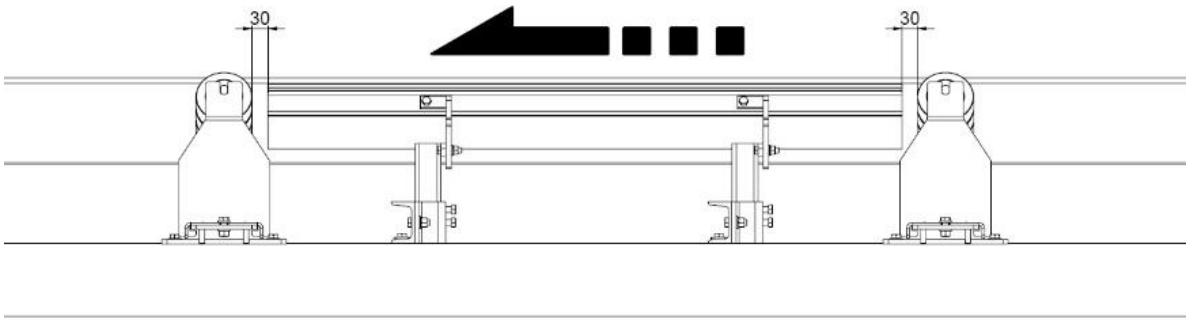
The illustrations show the typical and correct mounting position



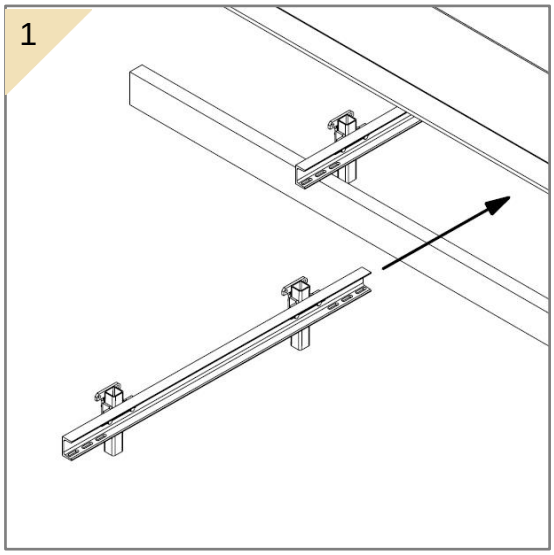


Notice: If the beams protrude sideways, they should be shortened and flush with the conveyor structure.

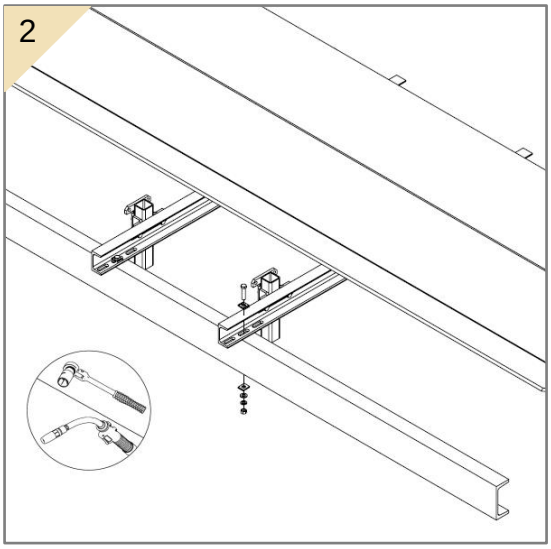
Idler stations should be installed before and after the stations.
This results in the following dimensions



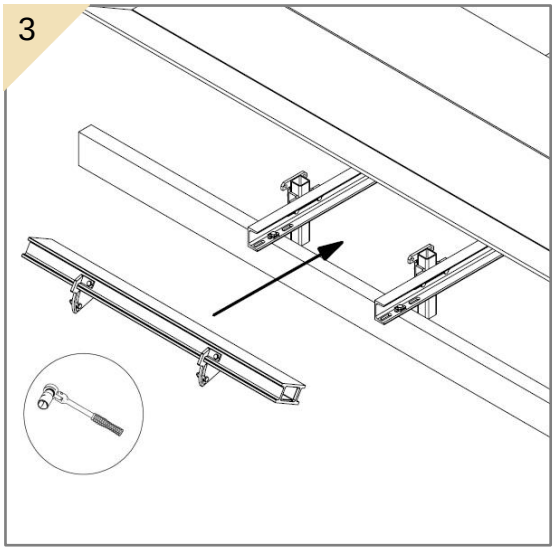
3.5 Mounting the Impact Cradles



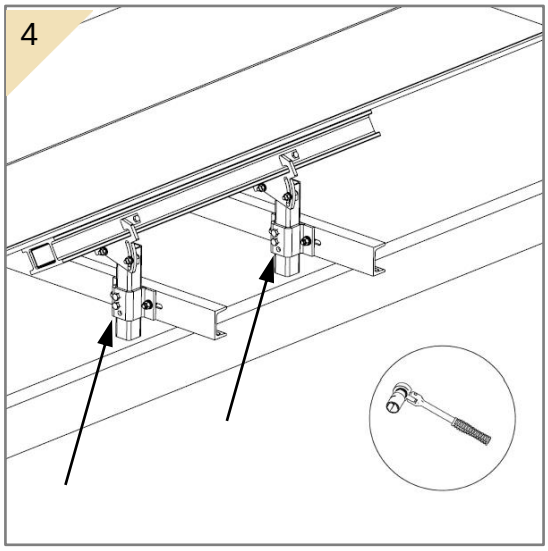
Mounting the cross bars (Mainframes)



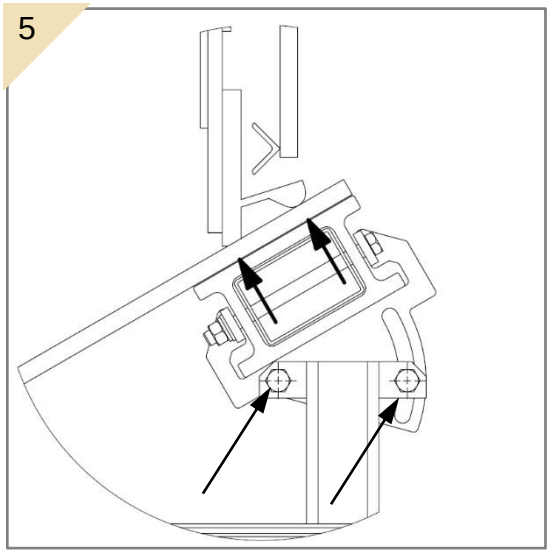
Attaching the cross bars (Mainframes)



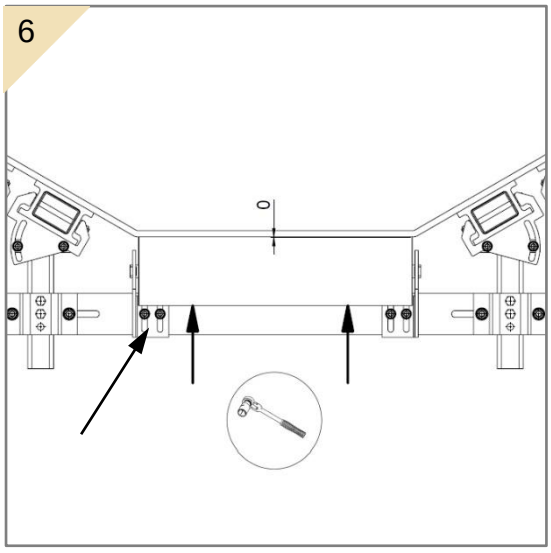
Mounting the bars



Adjusting the height



Adjusting the angle



Adjusting the height of the idler (if req.)

3.6 Placing labels

3.6.1 Safety label

The safety label below must be attached to the conveyor system in the immediate vicinity of the Martin® Slider Cradles:

3.6.2 Other labels

The labels below are attached to the product:

1. Sticker showing the address of the Martin Engineering branch and the designation of the product
2. A sticker containing the tension values for the respective tensioner

4 Maintenance / Repair

WARNING

Danger of injury due to unapproved component parts

Unapproved parts can directly or indirectly cause personal injury or damage to property.

- *Only use accessories and spare parts that are distributed by the manufacturer or are explicitly approved (in writing)!*

4.1 Maintenance

Interval	task
weekly	Check that all securing parts are tightened. Tighten any loose connections as required.
	Clean all warning labels. Replace any warning labels which are illegible.
	Check slider bars for wear.

NOTE

Remove equipment from service if there is any indication it is not functioning properly. Call Martin Engineering or representative for assistance. Do NOT return equipment to operation until the cause of the problem has been identified and corrected.

5 Disassembly / Recycling / Disposal

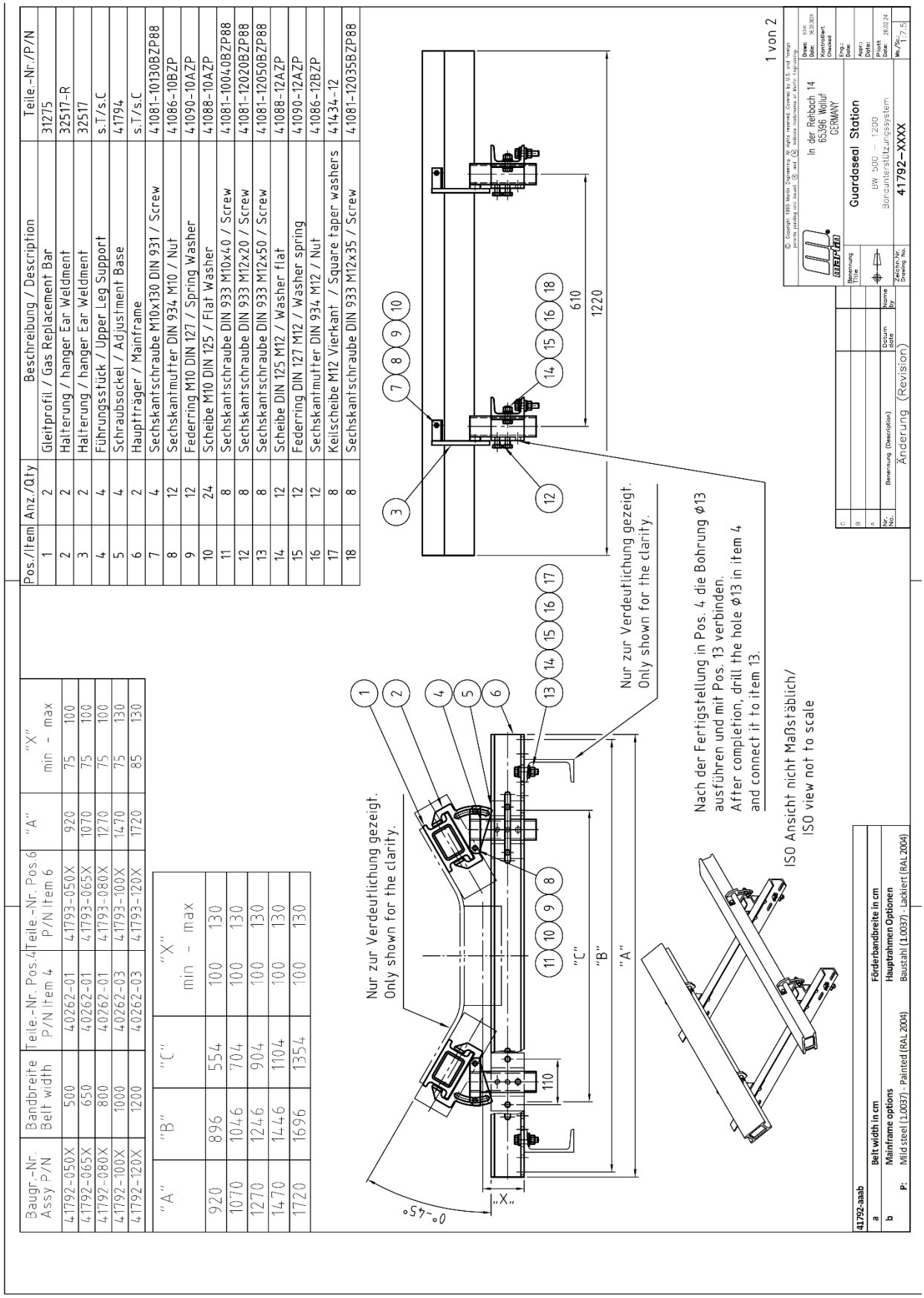
1. Disassemble Guardaseal by material groups as far as possible.
2. Contact official bodies (disposal centres, authorities) and request information about proper disposal or recycling possibilities.
3. Recycle the different materials.

Only materials that cannot be reasonably recycled may be disposed of. Disposal must be carried out professionally.

Material groups that can be fed into a recycling process include:

- Sheet steel
- Steel profiles
- Plastics
- Rubber
- Non-ferrous metals
- Electrical cables
- Electrical components (with copper content)
- Lubricants

6 Scope of delivery and spare parts



Pos./Item	Anz./Qty	Beschreibung / Description	Teile-Nr./P/N
1	2	Gleitprofil / Gas Replacement Bar	31275
2	2	Halterung / hanger Ear Weldment	32517-R
3	2	Halterung / hanger Ear Weldment	32517
4	4	Führungsstück / Upper Leg Support	s.T/s.C
5	4	Schraubsockel / Adjustment Base	41794
6	2	Hauptträger / Mainframe	s.T/s.C
7	4	Sechskantschraube M10x130 DIN 931 / Screw	41081-10130BZP88
8	12	Sechskantmutter DIN 934 M10 / Nut	41086-10BZP
9	12	Federring M10 DIN 127 / Spring Washer	41090-10AZP
10	24	Scheibe M10 DIN 125 / Flat Washer	41088-10AZP
11	8	Sechskantschraube DIN 933 M10x40 / Screw	41081-10040BZP88
12	8	Sechskantschraube DIN 933 M12x20 / Screw	41081-12020BZP88
13	8	Sechskantschraube DIN 933 M12x50 / Screw	41081-12050BZP88
14	12	Scheibe DIN 125 M12 / Washer flat	41088-12AZP
15	12	Federring DIN 127 M12 / Washer spring	41090-12AZP
16	12	Sechskantmutter DIN 934 M12 / Nut	41086-12BZP
17	8	Keilscheibe M12 Vierkant / Square taper washers	41434-12
18	8	Sechskantschraube DIN 933 M12x35 / Screw	41081-12035BZP88

Baugr.-Nr. Assy P/N	Bandbreite Belt width	"B"	"C"	Teile-Nr. Pos.4 P/N Item 4	"X" min - max	Teile-Nr. Pos.6 P/N Item 6	"A"	"X" min - max
41792-050X	500	896	554	40262-01	100 - 130	41793-050X	920	75 - 100
41792-065X	650	1046	704	40262-01	100 - 130	41793-065X	1070	75 - 100
41792-080X	800	1246	904	40262-01	100 - 130	41793-080X	1270	75 - 100
41792-100X	1000	1446	1104	40262-03	100 - 130	41793-100X	1470	75 - 130
41792-120X	1200	1696	1354	40262-03	100 - 130	41793-120X	1720	85 - 130

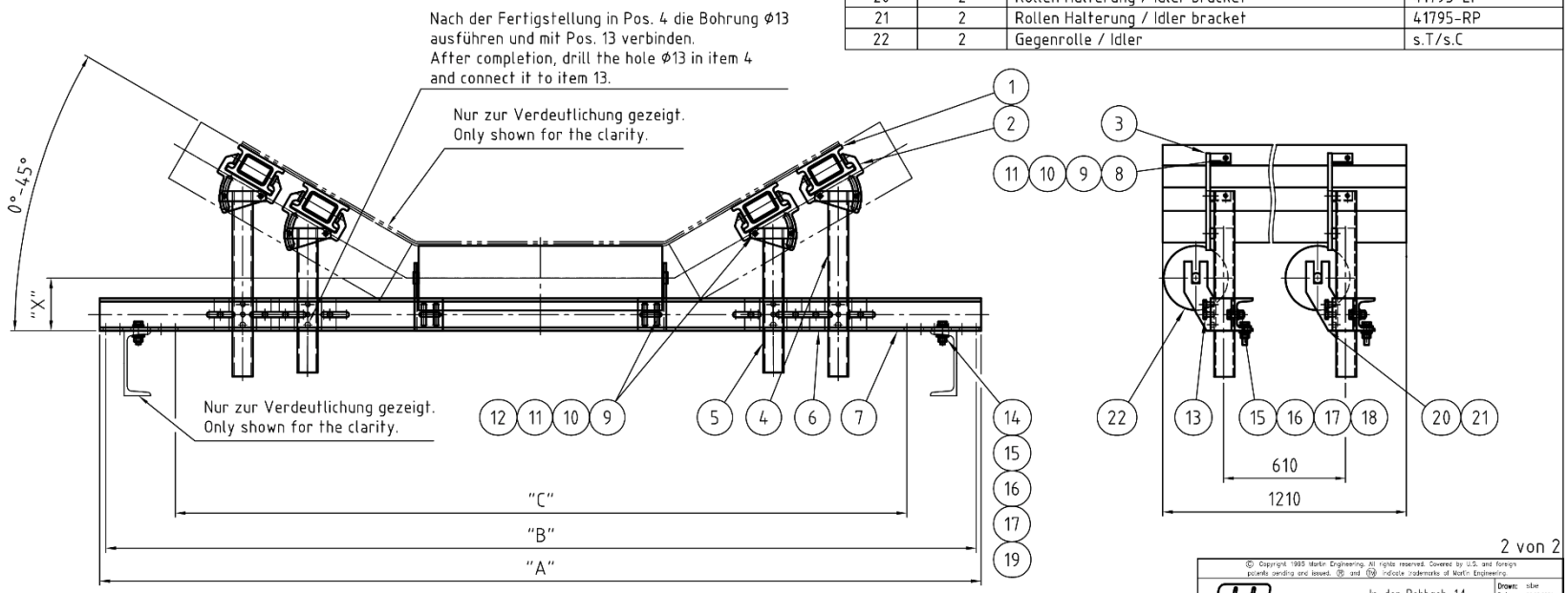
41792-aaab

a	Belt width in cm	Förderbandbreite in cm	
b	Mainframe options	Hauptrahmen Optionen	
P:	Mild steel (1.0037) - Painted (RAL 2004)	Baustahl (1.0037) - Lackiert (RAL 2004)	

Baugr.-Nr. Assy P/N	Bandbreite Belt width	Teile.-Nr. Pos.4 P/N Item 4	Teile.-Nr. Pos.5 P/N Item 5	Teile.-Nr. Pos.7 P/N Item 7	Teile.-Nr. Pos.22 P/N Item 22
41792-140X	1400	40262-04	40262-03	41793-140X	41321-133N053-2518
41792-160X	1600	40262-05	40262-04	41793-160X	41321-159N060-2518
41792-180X	1800	40262-21	40262-05	41793-180X	41321-159N067-2518

"A"	"B"	"C"	"X" min - max
1920	1896	1554	100 130
2170	2146	1804	100 130
2370	2346	2004	100 130

Pos./Item	Anz./Qty	Beschreibung / Description	Teile.-Nr./P/N
1	4	Gleitprofil / Gas Replacement Bar	31275
2	4	Halterung / Hanger Ear Weldment	32517-R
3	4	Halterung / Hanger Ear Weldment	32517
4	4	Führungsstück / Upper Leg Support	s.T/s.C
5	4	Führungsstück / Upper Leg Support	s.T/s.C
6	8	Schraubsockel / Adjustment Base	41794
7	2	Hauptträger / Mainframe	s.T/s.C
8	8	Sechskantschraube M10x130 DIN 931 / Screw	41081-10130BZP88
9	32	Sechskantmutter M10 DIN 934 / Nut	41086-10BZP
10	32	Federring M10 DIN 127 / Spring Washer	41090-10AZP
11	64	Scheibe M10 DIN 125 / Flat Washer	41088-10AZP
12	24	Sechskantschraube DIN 933 M10x35 / Screw	41081-10035BZP88
13	16	Sechskantschraube DIN 933 M12x20 / Screw	41081-12020BZP88
14	8	Sechskantschraube DIN 933 M12x50 / Screw	41081-12050BZP88
15	36	Scheibe DIN 125 M12 / Washer flat	41088-12AZP
16	20	Federring DIN 127 M12 / Washer spring	41090-12AZP
17	20	Sechskantmutter DIN 934 M12 / Nut	41086-12BZP
18	16	Sechskantschraube DIN 933 M12x35 / Screw	41081-12035BZP88
19	8	Keilscheibe M12 Vierkant / Square taper washers	41434-12
20	2	Rollen Halterung / Idler bracket	41795-LP
21	2	Rollen Halterung / Idler bracket	41795-RP
22	2	Gegenrolle / Idler	s.T/s.C



41792-aaab		
a	Belt width in cm	Förderbandbreite in cm
b	Mainframe options	Hauptrahmen Optionen
P:	Mild steel (1.0037) - Painted (RAL 2004)	Baustahl (1.0037) - Lackiert (RAL 2004)

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Guardaseal Station

BW 1400 – 1800
Bandunterstützungssystem

41792–XXXX

Änderung (Revision)

2 von 2

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