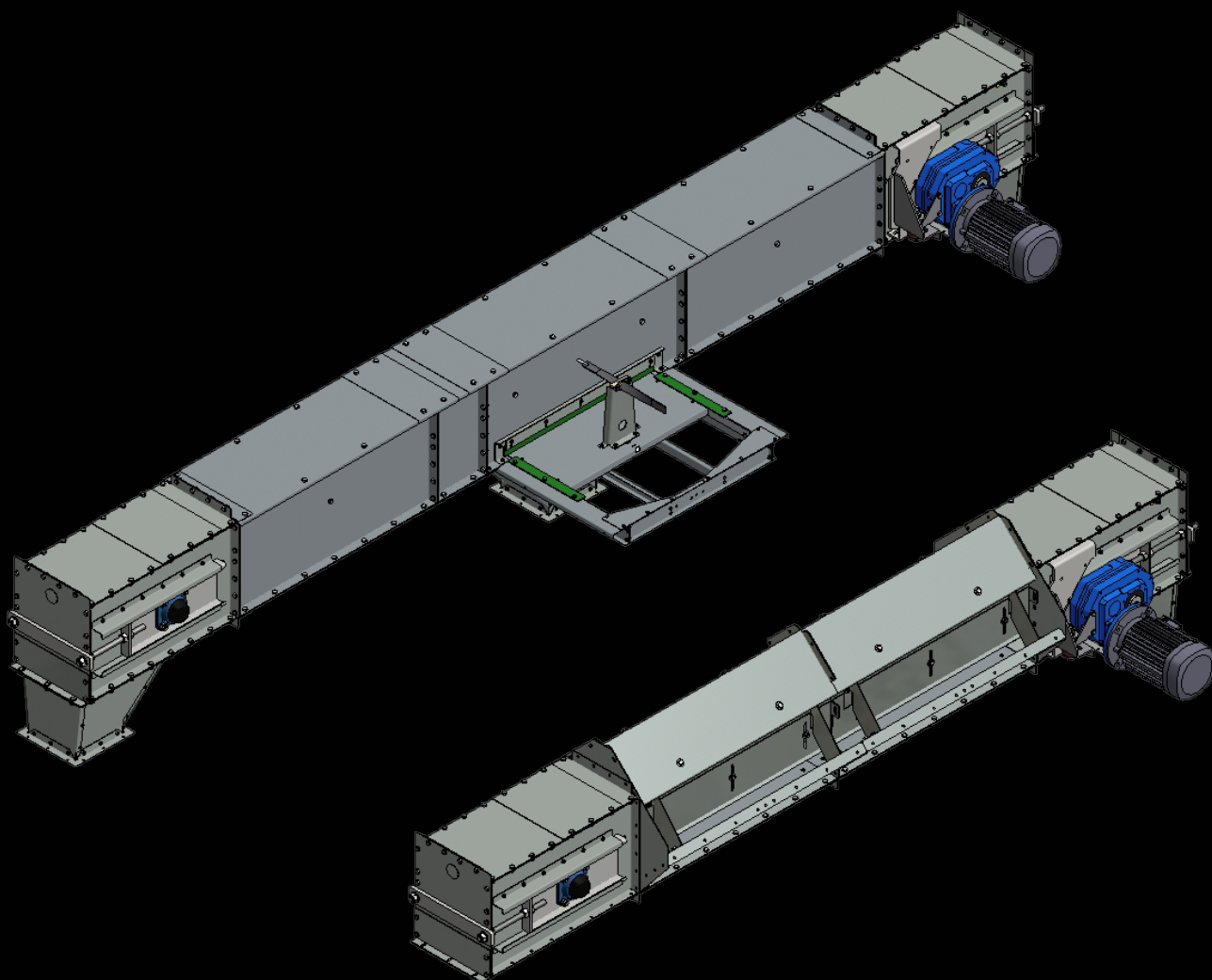


Manual Chain conveyor T49/T57

Version 70503.2



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Introduction

JEMA AGRO A/S is a modern factory, which specializes in producing and delivering equipment for transport systems for grain, seeds and granulates.

Our current product range is the result of more than 50 years experience in machine development especially for the agriculture in close collaboration with our customers – and our company is highly regarded in the industry due to the quality and versatility of our products

JEMA AGRO A/S conveyors and transport systems are compatible with ALL types of dryer- and silage systems.

Important!

Please read these instructions carefully before assembly and use.

EU Declaration of conformity



The manufacturer: JEMA AGRO A/S
Kløservejen 2, Sahl
DK-8850 Bjerringbro
Tlf. +45 86 68 16 55

Hereby declares that:

Product: Chain conveyor
Type: T49/T57
Year of production: 2014

- Conforms to the Machine directive 2006/42/EF with special reference to the directive appendix 1 regarding major health- and safety regulations regarding construction and production of the machines

The following standards have been applied:

EN ISO 12100-1:2005 Basic terminology and methodology
EN ISO 12100-2:2005 Technical principles
EN 1050:1997 Principles for risk assessment

- is in accordance with EMC-directive 04/108/EF of 15th December 2004 regarding electro-magnetic compatibility.

Director Jens-Peter Pedersen

Title Name

03.11.2014

Date Signature

A handwritten signature in black ink, appearing to be "Jens-Peter Pedersen", written over a horizontal line.

Conditions of use

JEMA AGRO A/S chain conveyors T49/T57 have been constructed for transport of grain, granular materials and seeds.

- The chain conveyors T49/T57 must only be used for the product(s) specified in the contract.
- The electrical connections must be done by a qualified electrician.
- The chain conveyors T49/T57 must be potential adjusted in accordance with the current local regulations
- The chain conveyor has been thoroughly controlled regarding maintenance, and a checklist has been drawn up containing regular cleaning- and maintenance intervals. If these intervals are not observed, the JEMA AGRO conditions for a trouble-free operation cease to exist and the warranty will be invalid.
- During installation, maintenance or repair the electric supply to the chain conveyors must be disconnected and secured against accidental reconnection.
- The user manual must be kept / be available in close proximity to the chain conveyor T49/T57

General information

Delivery

The chain conveyor is disassembled for shipment. Standard packing (pallet/wooden boxes, grid boxes, etc.) Regarding the actual transport there are no specific requirements apart from normal consideration.

The shipment includes the parts stated in the order confirmation.

Before installation and use, this manual must be read carefully.

Storage

There are no precautions regarding long-time storage.

After delivery the components must be kept in a suitable, dry storage area before installation.

Noise level

A noise level test was conducted for the chain conveyor. The level has been measured in a distance of 1 m from the conveyor surface and at a height of 1.6 m from the floor level. During the test the chain conveyor was without any load, which is the operational state of maximum noise level.

The measured noise level is not more than 70 dB

Type Plate

The type plated is fitted on the drive station.



Construction

The chain conveyor type T49/T57 is made up of standard elements, which can be combined and easily integrated into all grain conveyor systems. The chain conveyor is made of galvanized steel, which makes it perfectly suited for outdoor use.

The chain conveyor is available in two versions:

- Model A, closed transport chain system
- Model B, adjustable inlet troughs for intake pits

Both models work equally efficiently both horizontally and with an incline of 30° and have, compared to their capacity, very low power consumption.

The conveyor system is based on a steel chain fitted with plastic flights to obtain a quiet, smooth and soft operation. The chain conveyor can be fitted with one or more intermediate outlets, which can be controlled manually with a chain drive or via a motor for electric remote control.

The chain conveyor for intake pit has inlet plates that provide infinite adjustment of the desired conveyor capacity from 100% down to approx. 40% of the maximum performance.

The chain conveyor consists of:

- Drive station
- Tension section
- Intermediate outlet
- Inlet trough with adjustable side inlet
- Extensions from 0.25 m to 2.0 m
- Chain with plastic flights
- Motor.

And in some cases 30° bend.

Capacity

The table below shows the various density capacities:

Density	T49 (140 m ³ /h)	T57 (200 m ³ /h)
650 kg/m	91 t/h	130 t/h
700 kg/m	98 t/h	140 t/h
750 kg/m (wheat)	105 t/h	150 t/h

*Measured in cleaned, storable material at a power supply of 50 Hz
The capacity varies according to the nature of the material.*

Inlet trough adjustment

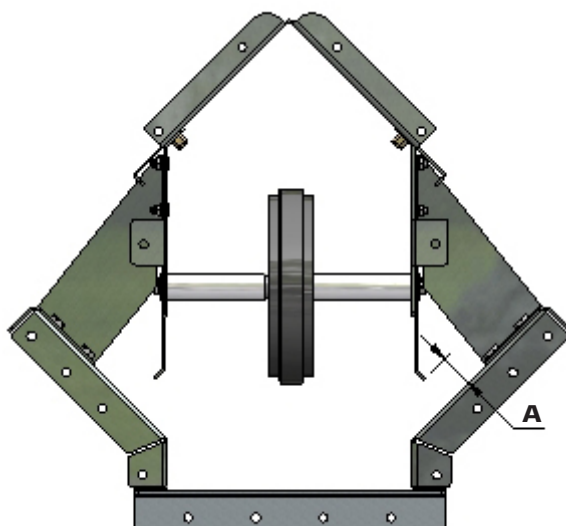


Table T49/T57

Standard setting for side plates is 40mm

The capacity is measured in storable wheat.

The actual capacities are dependant on the nature of the material.

T49

Capacity	80t/h	90t/h	100t/h
A	35 mm	40 mm	45 mm

T57

Capacity	120t/h	150t/h
A	35 mm	45 mm

Important! – The A dimension in the sketch is just for guidance.

Technical specifications – power consumption

Chain conveyor T49/T57 closed transport - power consumption in kW:

Type	3,0 kW	4,0 kW	5,5 kW	7,5 kW	11,0 kW
T49	0-8m.	9-13m.	14-21m.	22-32m.	32-34m.
T57		0-7m.	8-13m.	14-20m.	21-34m.

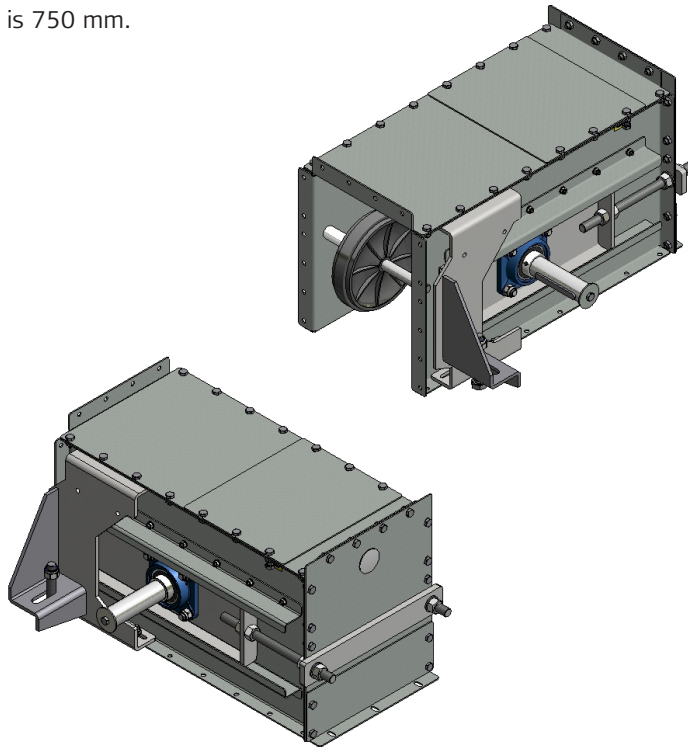
Chain conveyor T49/T57 grain pit - power consumption in kW:

Type	3,0 kW	4,0 kW	5,5 kW	7,5 kW	11,0 kW	15,0 kW	18,0 kW	22,0 kW
T49	0 - 5,5m.	6,5 - 7,5m.	8,5 - 9,5m.	10,5 - 13,5m.	14,5 - 20,5m.	21,5 - 25,5m.		
T57		0 - 4,5m.	5,5 - 6,5m.	7,5 - 9,5m.	10,5 - 14,5m.	15,5 - 19,5m.	20,5 - 24,5m.	25,5m.

Drive station

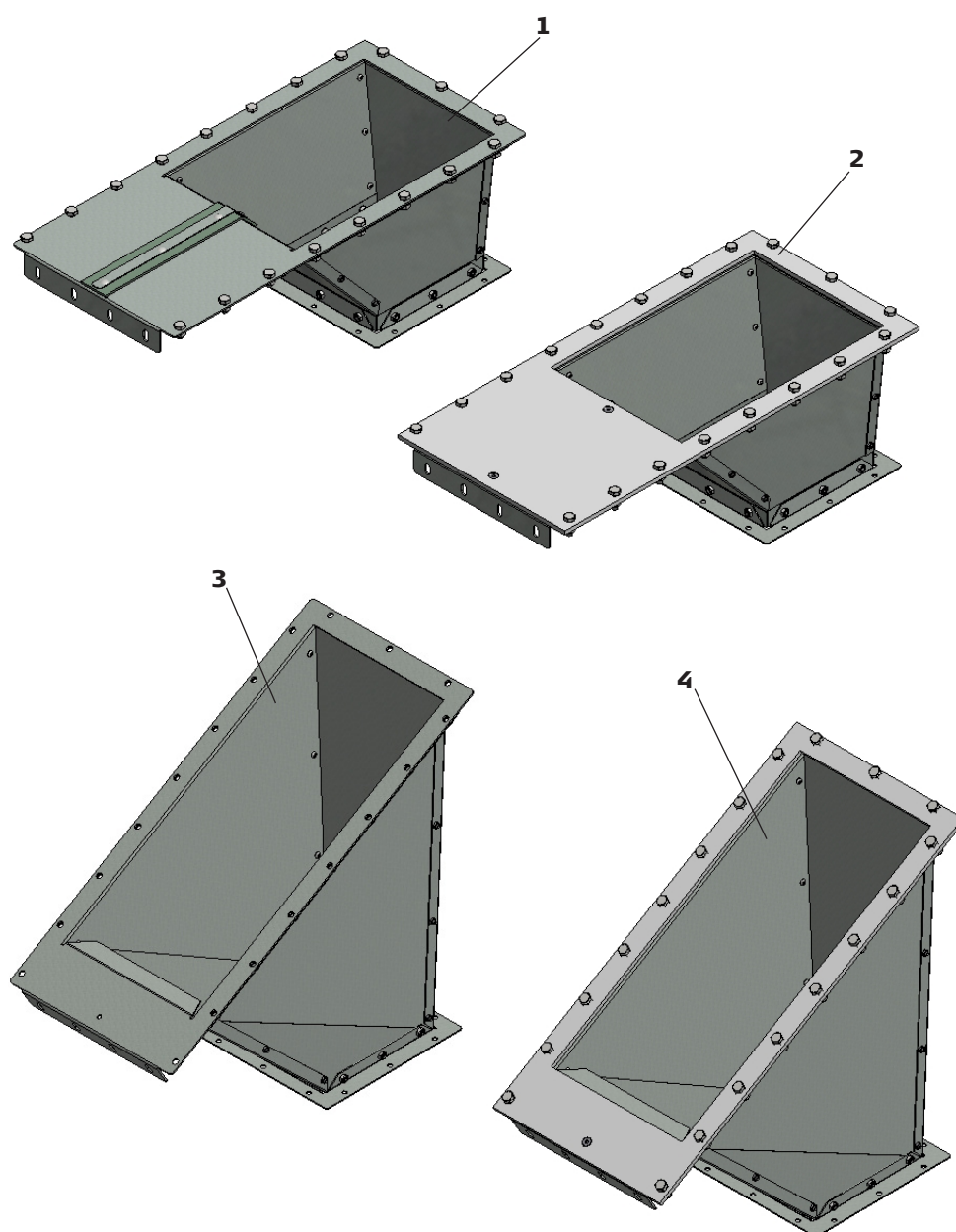
The drive stations for the closed transport and grain pit chain conveyor are identical. The drive station is delivered with shaft for hollow shaft gear. Delivered without outlethopper.

The drive station length is 750 mm.



Outlethopper

Outlet hopper with bottom plate for fitting on drive- and tightening section.

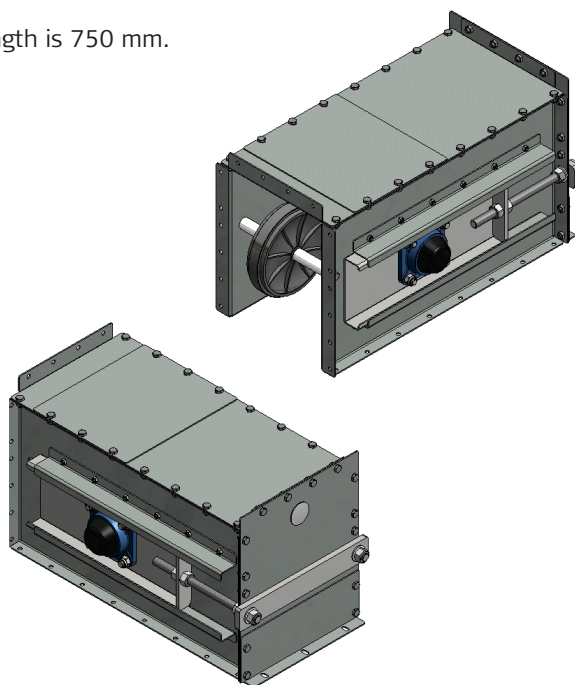


Pos.	Tekst	T49	Kg.	T57	Kg.
1	Outlethopper 90° with bottom plate for drive- and tightening section	49517	11,47	57517	13,75
2	Outlethopper 90° with PEHD bottom plate for drive- and tightening section	49517-P	17,50	57517-P	17,50
3	Outlethopper 30° with bottom plate for drive station	49644	16,29	57644	18,60
4	Outlethopper 30° with PEHD bottom plate for drive station	49644-P	19,00	57644-P	21,60

Tightening section

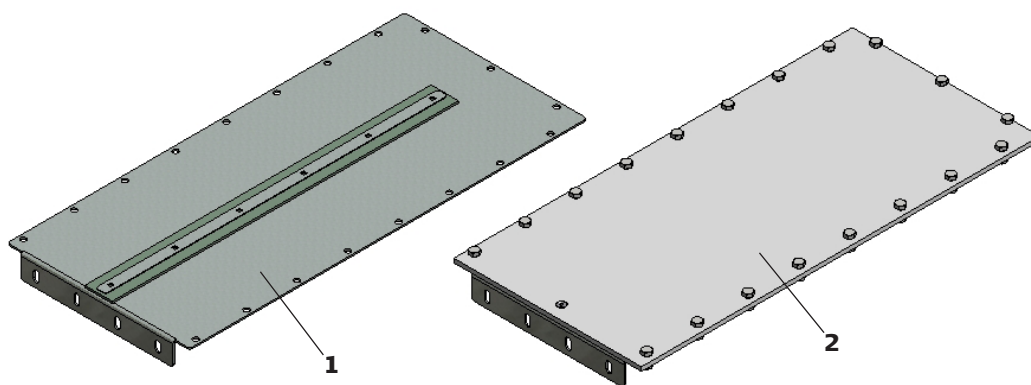
The tension section has fixed bearings in a rail system to secure easy retightening of the chain.
Delivered without bottom plate.

The tightening section length is 750 mm.



Base plate for drive- and tightening section

Base plate for fitting on drive- and tightening section where no outlet hopper is needed.

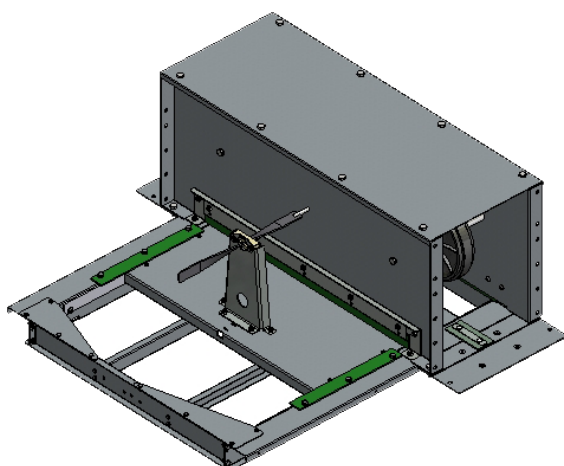


Pos.	Tekst	T49	Kg.	T57	Kg.
1	Base plate for drive- and tightening section	49675	7,12	57675	9,40
2	Base plate with PEHD for drive- and tightening section	49675-P	10,30	57675-P	13,30

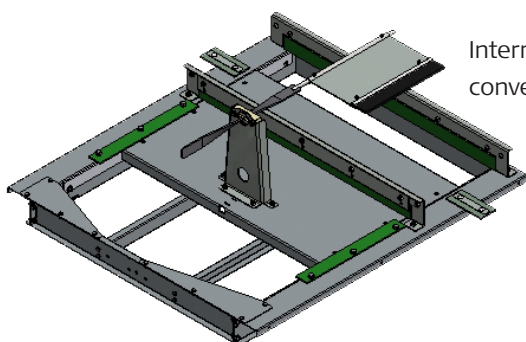
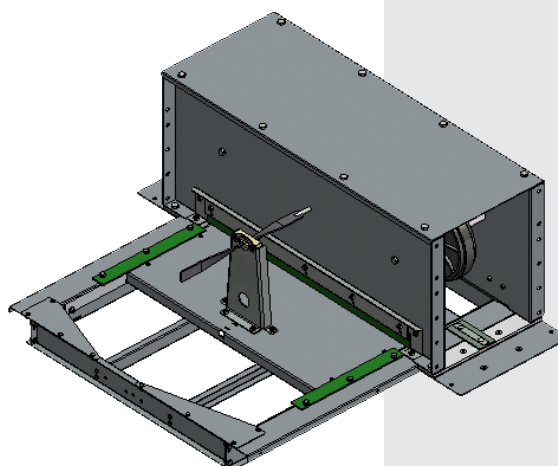
Intermediate outlet

The intermediate outlet is available in 3 versions as shown below. See page 45-48 for extra equipment for the intermediate outlet.

Intermediate outlet with 1,0m.
extension for conveyor with steel base.



Intermediate outlet with 1,0m.
extension for conveyor with PEHD base.



Intermediate outlet without extension for mounting anywhere on the
conveyor. See page 33 for installation on extension.

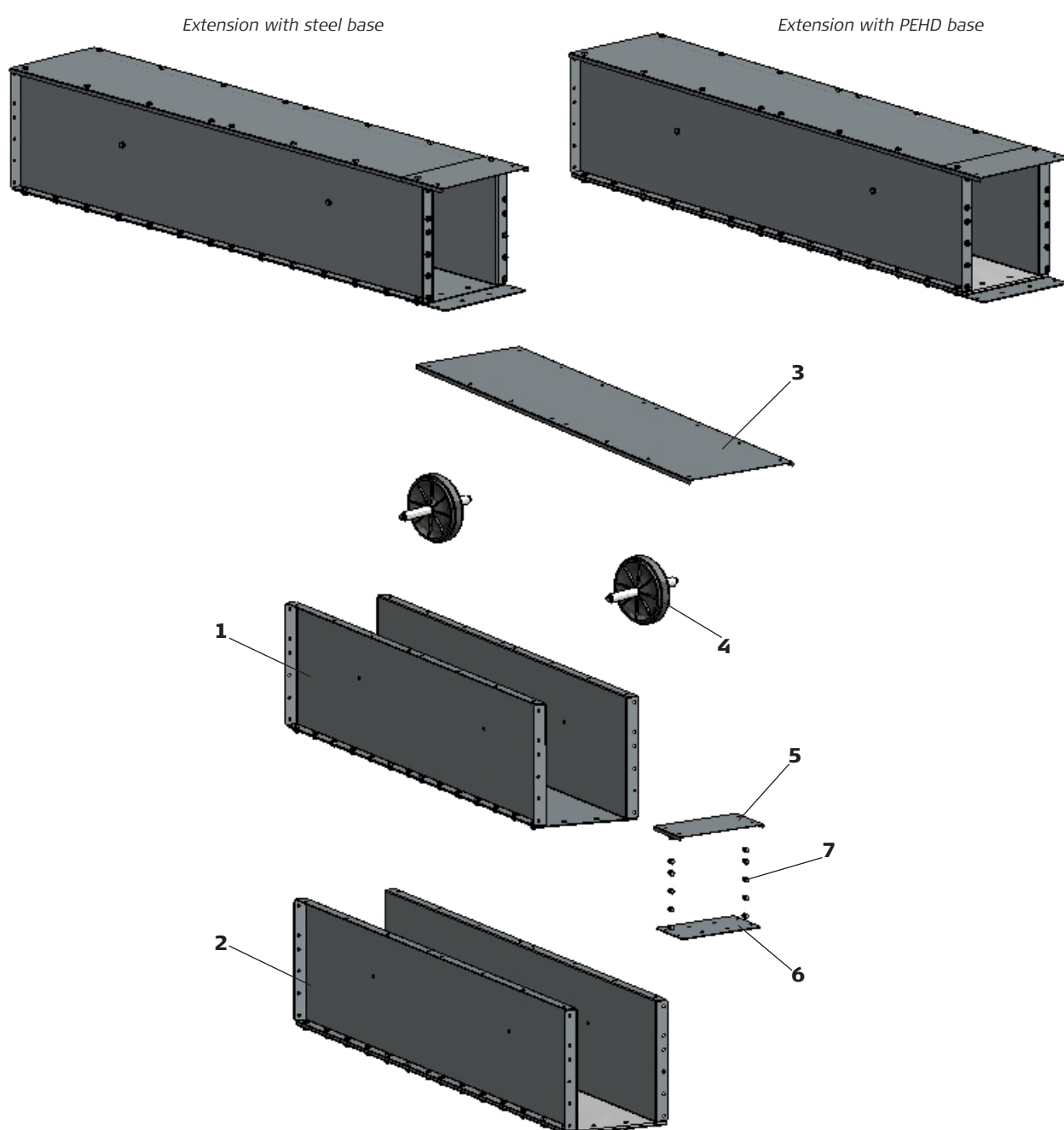
Extensions

Extensions are available in the lengths: 2.0m. – 1.0m. – 0.5m. – 0.25m.

They are available with a 3 mm steel base or 8 mm PEHD base.

Comes assembled with bottom plates and side plates.

Returning wheel, vover, assembly plates and bolt bag are included detached.



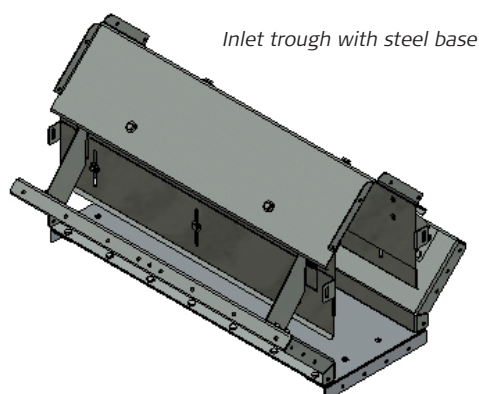
Pos.	Description	T49	Kg.	T57	Kg.
1	Extension 0,25m. with steel base without cover and returning wheel	49763-5	9,58	57763-5	10,30
1	Extension 0,5m. with steel base without cover and returning wheel	49762-5	17,54	57762-5	18,90
1	Extension 1,0m. with steel base without cover and returning wheel	49761-5	33,59	57761-5	36,20
1	Extension 2,0m. with steel base without cover and returning wheel	49760-5	65,68	57760-5	70,90
2	Extension 0,25m. with PEHD base without cover and returning wheel	49763-6	10,60	57763-6	11,50
2	Extension 0,5m. with PEHD base without cover and returning wheel	49762-6	19,45	57762-6	21,30
2	Extension 1,0m. with PEHD base without cover and returning wheel	49761-6	37,37	57761-6	41,00
2	Extension 2,0m. with PEHD base without cover and returning wheel	49760-6	73,16	57760-6	80,40
3	Cover for 0,25m. extension	49763-4	1,21	57763-4	1,54
3	Cover for 0,5m. extension	49762-4	2,42	57762-4	3,10
3	Cover for 1,0m. extension	49761-4	4,85	57761-4	6,14
3	Cover for 2,0m. extension	49760-4	9,70	57760-4	18,44
4	Returning wheel	49515	0,55	49515	0,55
4	Shaft for returning wheel	49514	1,08	57514	1,51
4	Distanzebushing for returning wheel	49513	0,06	57512	0,08
5	Assembly plate for cover for extension	49773	0,98	57773	1,24
6	Assembly plates for base for extension	49772	1,74	57772	2,26
7	Bolt bag for assembly plates for extension	49777-1	0,45	49777-1	0,45

Inlet trough

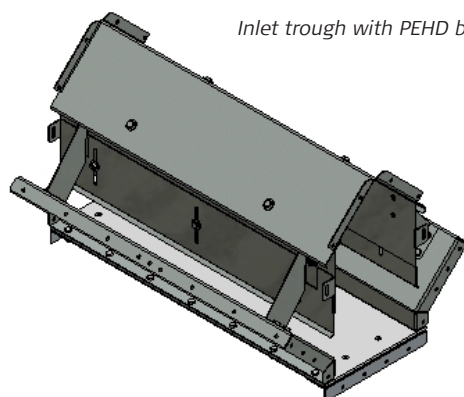
Inlet trough is available in the lengths: 2.0m. – 1.0m. – 0.5m.

They are available with a 3mm steel base or 8mm PEHD base.

Comes completely assembled.



Inlet trough with steel base

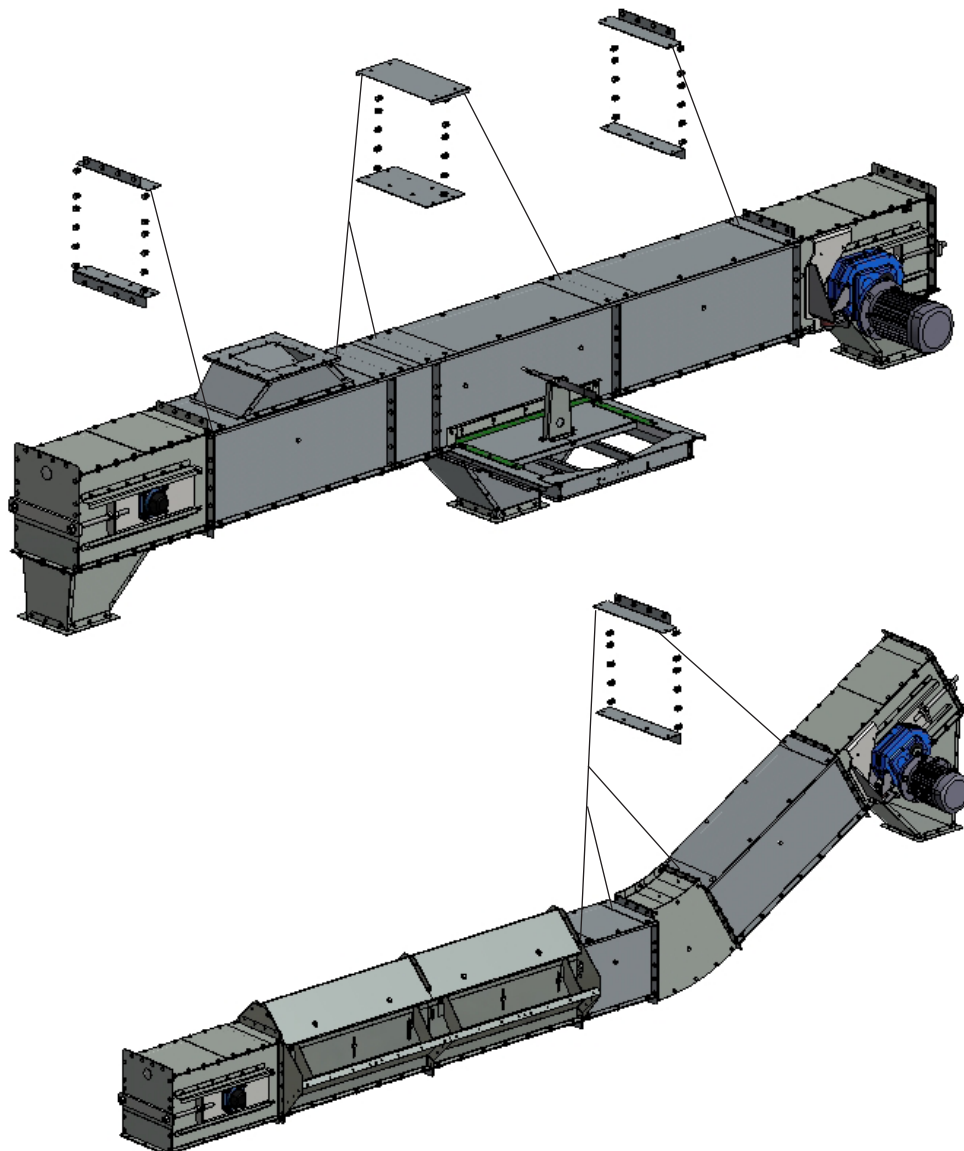
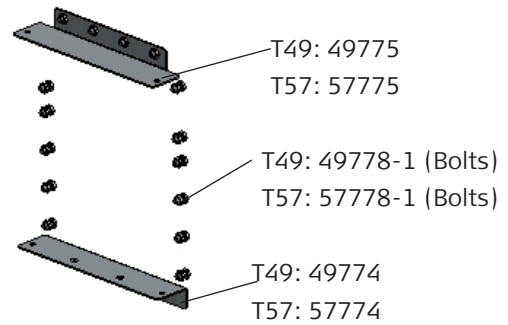
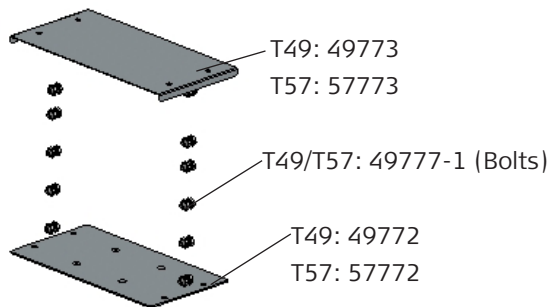


Inlet trough with PEHD base

Assembly plates

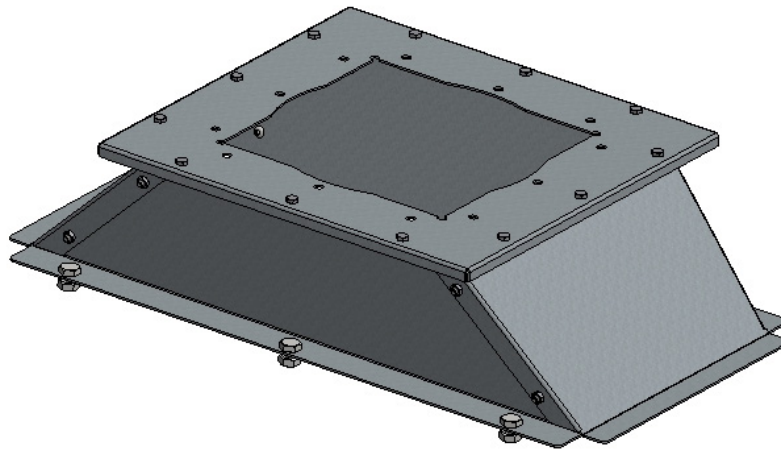
Assembly plates for connector
to drive station, tension section,
bend and inlet trough

Assembly plates for extensions.



Inlet

Inlet for random placing on the top of the chain conveyor.
See page 32 for assembly of the inlet.

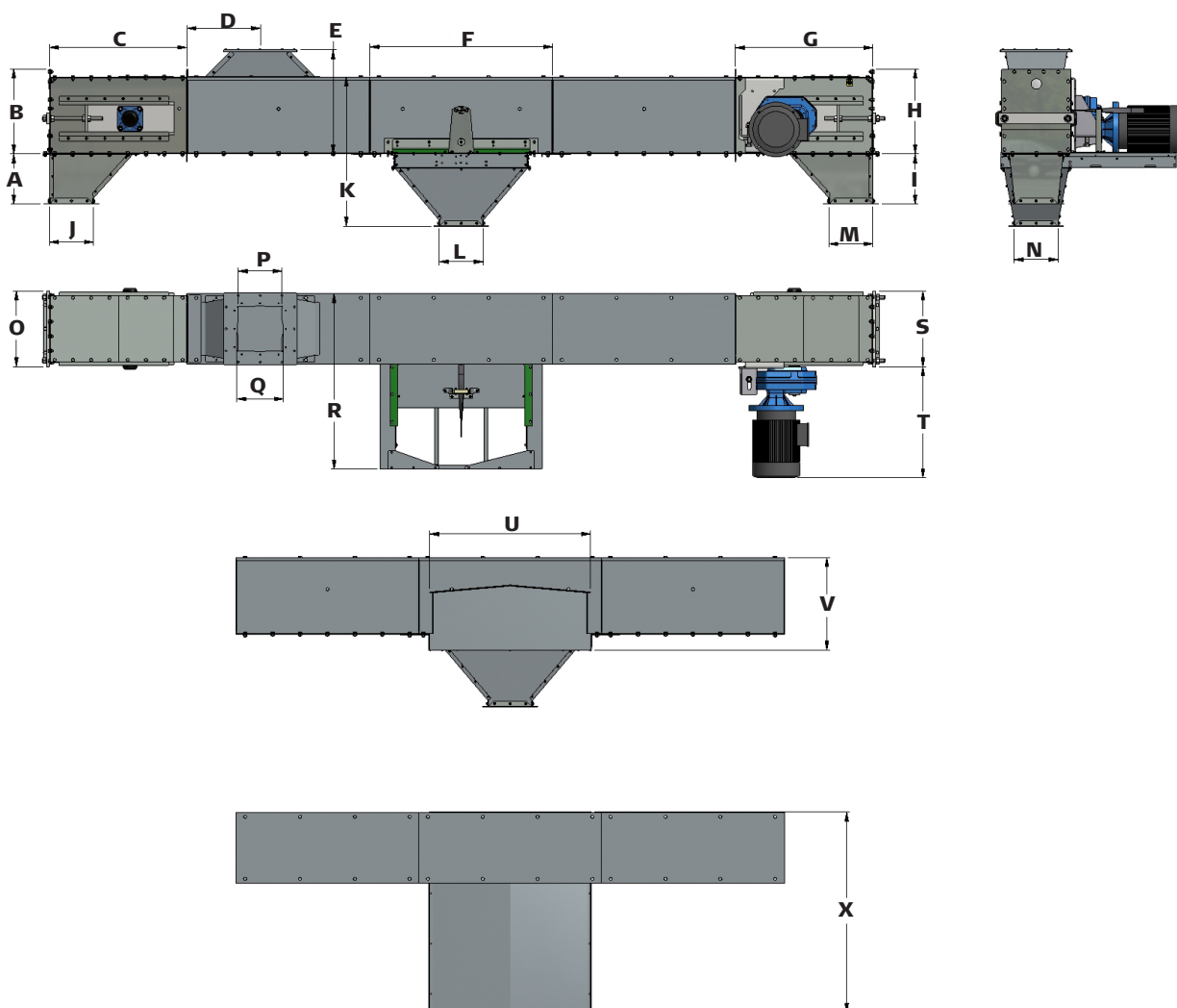


Scale drawing T49/T57 – closed transport

	A	B	C	D	E	F	G	H	I	J
T49	275	464	753	400	570	1000	753	464	275	240
T57	275	464	753	425	570	1000	753	464	275	300

	K	L	M	N	O	P	Q	R	S	T 3,0 kW
T49	820	240	240	240	414	240x240	Ø250	960	414	550
T57	820	300	300	300	524	300x300	Ø300	1070	524	550

	T 4,0 kW	T 5,5 kW	T 7,5 kW	T 11 kW	T 15 kW	U	V	X
T49	585	620	650	730	780	880	510	1095
T57	585	620	650	730	780	880	510	1205

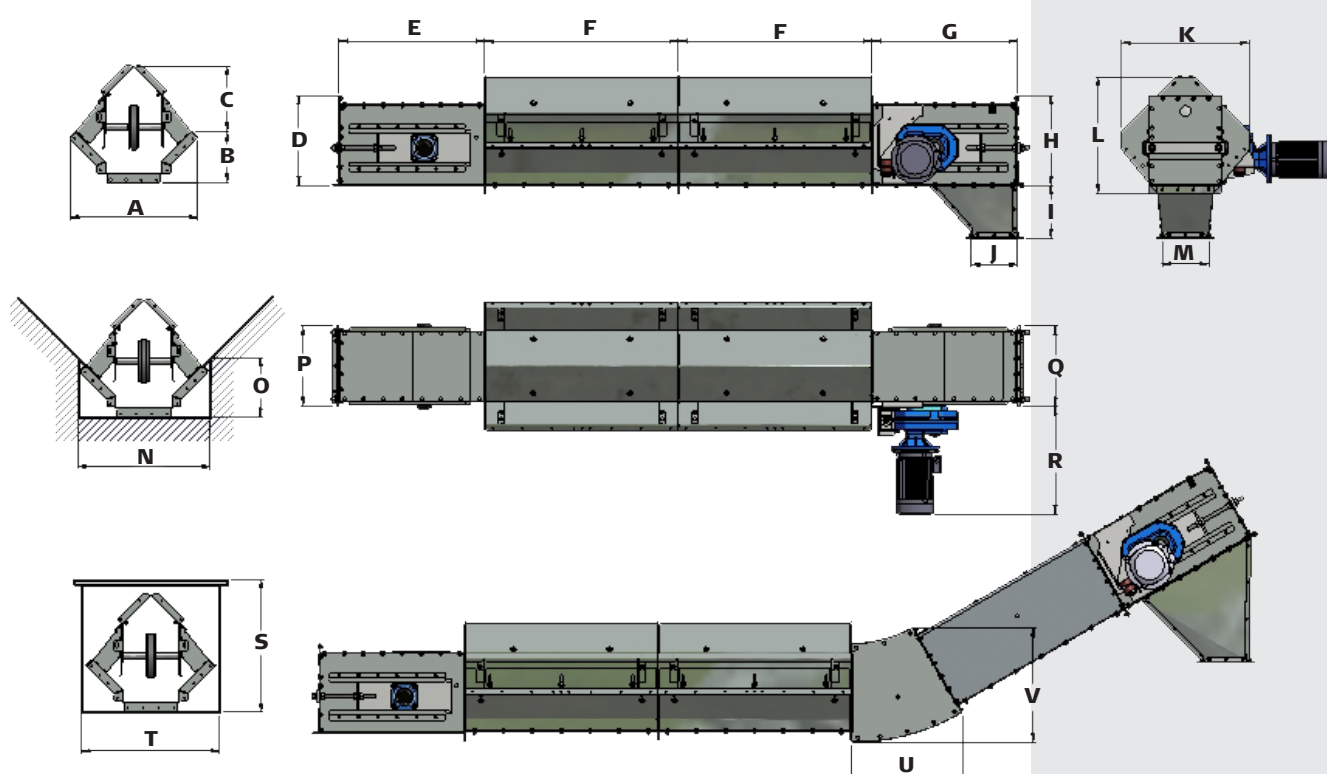


Scale drawing T49/T57 - intake pit

	A	B	C	D	E	F	G	H	I	J
T49	670	260	340	464	753	1000	753	464	275	240
T57	780	260	340	464	753	1000	753	464	275	300

	K	L	M	N	O	P	Q	R 3,0 kW	R 4,0 kW	R 5,5 kW
T49	670	605	240	690	310	400	414	550	585	620
T57	780	660	300	800	310	510	524	550	585	620

	R 7,5 kW	R 11 kW	R 15 kW	S	T	U	V
T49	650	730	780	680	690	580	595
T57	650	730	780	740	800	580	595



Upon receipt

Please check that all parts and components are included in the shipment and check for possible transport damages.

NB: Make sure that the relevant supplier documentation is attached.

In case of missing documentation, please contact JEMA AGRO A/S – remember to state the order no.

Remember all necessary safety equipment before installation.

Please read this manual carefully before assembly or installation work begins.

Warning labels

The chain conveyor is fitted with warning labels.

Warning!

The covers and shields must not be opened or removed, when the machine is working.



Foundation

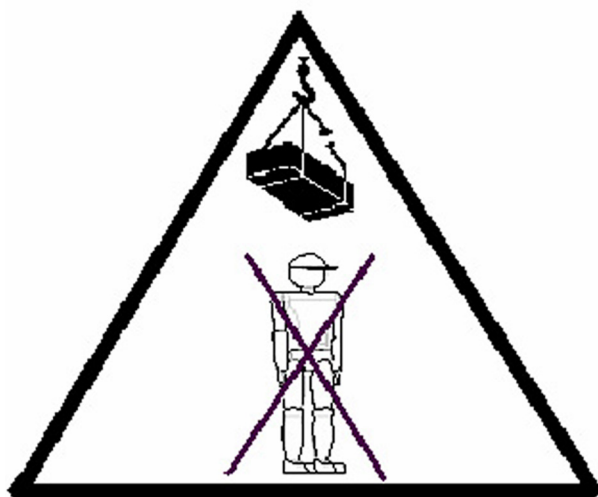
The chain conveyor should be placed on a sufficiently hard, level surface.

Lifting equipment

Make sure to have the required SWL-approved lifting equipment/crane, required for the actual job.

The lifting equipment must be approved to carry the load in question. The load on the individual components can be seen under "Parts list T49/T57" in this manual.

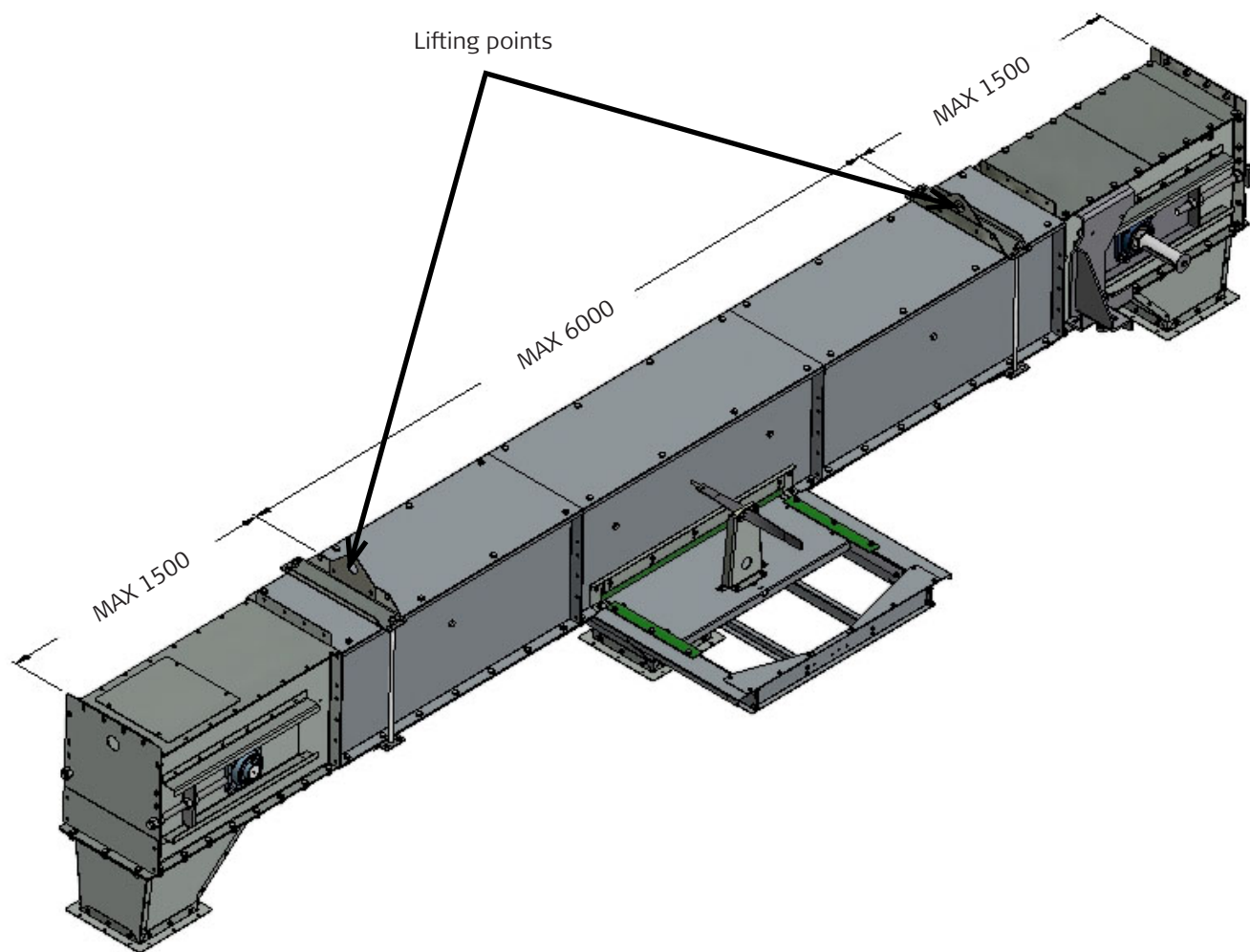
The total weight of the machine is stated in the section "Weight table chain conveyor T49/T57".



NB: Always make sure that nobody is standing under a suspended load.

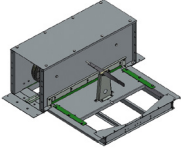
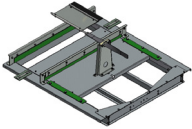
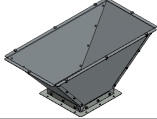
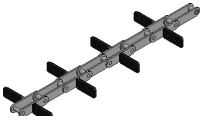
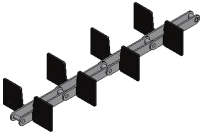
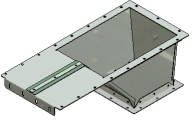
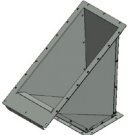
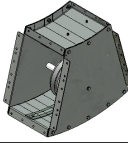
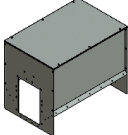
Lifting instructions

The drawing below shows how to lift the chain conveyor in the fitted brackets.



Weight table – individual components T49/57

	Description	T49 Part no.	Weight	T57 Part no.	Weight
	Drive station right	49634	79,67	57634	82,84
	Drive station left	49635	79,67	57635	82,84
	Tightening section	49611	71,26	57611	75,13
	Base plate for drive- and tightening section	49675	7,12	57675	9,25
	Base plate with PEHD for drive- and tightening section	49675-P	10,30	57675-P	13,30
	Extension 2,0m.	49760	84,40	57760	93,90
	Extension 1,0m.	49761	44,60	57761	49,80
	Extension 0,5m.	49762	26,00	57762	29,30
	Extension 0,25m.	49763	14,30	57763	16,00
	Extension 2,0m. with PEHD bottom	49760-P	91,80	57760-P	103,30
	Extension 1,0m. with PEHD bottom	49761-P	48,30	57761-P	54,50
	Extension 0,5m. with PEHD bottom	49762-P	27,90	57762-P	31,60
	Extension 0,25m. with PEHD bottom	49763-P	15,10	57763-P	17,10
	Assembly plates for drive/tightening section, bend and trough with bolts	49778	2,55	57778	3,26
	Inlet 240x240 / 300x300	49780	7,85	57780	9,62
	Transition piece for inlet SK250 / 290x290 SK300 / 400x400	49680	1,70	57680	3,20
	Inlet trough 1,0m.	49766	67,50	57766	75,00
	Inlet trough 1,0m. with PEHD bottom	49766-P	71,20	57766-P	79,80
	Inlet trough 0,5m.	49767	38,00	57767	42,50
	Inlet trough 0,5m. with PEHD bottom	49767-P	39,90	57767-P	44,90

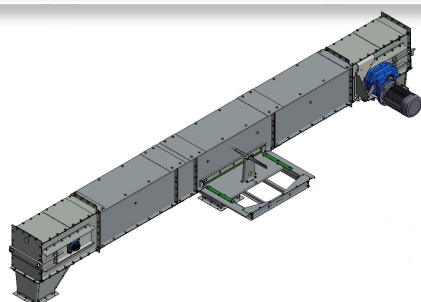
	Description	T49 Part no.	Weight	T57 Part no.	Weight
	Intermediate outlet with 1,0m. extension	49765	68,40	57765	75,50
	Intermediate outlet with 1,0m. extension and PEHD	49765-P	68,80	57765-P	76,20
	Intermediate outlet without extension	49750	31,30	57750	35,70
	Outlethopper for intermediate outlet 240x240 / 300x300	49752	10,50	57752	12,10
	Chain running metre compl.	49120	7,19	57120	7,41
	Chain with extra height on carriers running metre compl.	49124	7,87	57121	8,41
	Outlethopper 90° with bottom plate for drive- and tightening section 240x240 / 300x300	49517	11,47	57517	13,75
	Outlethopper 90° with PEHD bottom plate for drive- and tightening section 240x240 / 300x300	49517-P	15,00	57517-P	17,50
	Outlethopper 30° with bottom plate for drive station	49644	16,29	57644	18,60
	Outlethopper 30° with PEHD bottom plate for drive station	49644-P	19,00	57644-P	21,60
	Bend 30°	49567	26,60	57567	28,90
	Bend 30° with PEHD	49567-P	33,60	57567-P	38,10
	Hopper with cover for 0,5m. inlet	49686	35,70	57686	38,70
	Hopper with cover for 1,0m. inlet	49687	51,20	57687	54,70

Weight table – chain conveyor T49/T57

(horizontal, closed transport)

Complete with drive station, tightening section, 1 x intermediate outlet, extensions, chain and shaft geared motor(without grain).

Length in metres	T49		T57	
	Shaft geared motor 45 rpm		Shaft geared motor 45 rpm	
	kW	Kg.	kW	Kg.
3,0	3,0	332,000	3,0	355,300
4,0	3,0	386,200	3,0	409,500
5,0	3,0	440,400	4,0	468,700
6,0	3,0	499,600	4,0	522,900
7,0	3,0	553,800	4,0	577,100
8,0	3,0	607,900	5,5	631,200
9,0	4,0	662,100	5,5	696,400
10,0	4,0	716,300	5,5	750,600
11,0	4,0	770,500	5,5	804,800
12,0	4,0	824,700	5,5	859,000
13,0	4,0	878,800	5,5	913,100
14,0	5,5	944,000	7,5	967,300
15,0	5,5	998,200	7,5	1.038,500
16,0	5,5	1.052,400	7,5	1.092,700
17,0	5,5	1.106,600	7,5	1.146,900
18,0	5,5	1.160,700	7,5	1.201,000
19,0	5,5	1.214,900	7,5	1.255,200
20,0	5,5	1.269,100	7,5	1.309,400
21,0	5,5	1.323,300	11,0	1.363,600
22,0	7,5	1.394,500	11,0	1.450,800
23,0	7,5	1.448,600	11,0	1.504,900
24,0	7,5	1.502,800	11,0	1.559,100
25,0	7,5	1.557,000	11,0	1.613,300
26,0	7,5	1.611,200	11,0	1.667,500
27,0	7,5	1.665,400	11,0	1.721,700
28,0	7,5	1.719,500	11,0	1.775,800
29,0	7,5	1.773,700	11,0	1.830,000
30,0	7,5	1.827,900	11,0	1.884,200
31,0	7,5	1.882,100	11,0	1.938,400
32,0	7,5	1.936,300	11,0	1.992,600

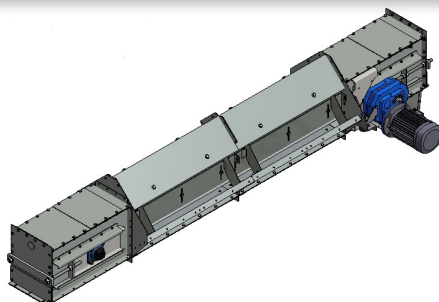


Weight table – chain conveyor T49/T57

(horizontal grain pit transport)

Complete with drive station, tension section, inlet trough, chain and shaft geared motor(without grain).

Length in metres	T49		T57	
	Shaft geared motor 45 rpm		Shaft geared motor 45 rpm	
	kW	Kg.	kW	Kg.
3,5	3,0	328,200	4,0	358,900
4,5	3,0	402,500	4,0	440,300
5,5	3,0	476,900	4,0	521,700
6,5	3,0	556,300	4,0	603,100
7,5	3,0	630,700	4,0	684,500
8,5	4,0	705,000	5,5	776,800
9,5	4,0	779,400	5,5	858,200
10,5	4,0	853,800	5,5	939,600
11,5	4,0	928,200	5,5	1.021,000
12,5	4,0	1.002,600	5,5	1.102,400
13,5	4,0	1.076,900	7,5	1.183,700
14,5	5,5	1.162,300	7,5	1.265,100
15,5	5,5	1.236,700	7,5	1.363,500
16,5	5,5	1.311,100	7,5	1.444,900
17,5	5,5	1.385,500	7,5	1.526,300
18,5	5,5	1.459,800	7,5	1.607,600
19,5	5,5	1.534,200	7,5	1.689,000
20,5	5,5	1.608,600	7,5	1.770,400
21,5	7,5	1.683,000	7,5	1.851,800
22,5	7,5	1.774,400	7,5	1.966,200
23,5	7,5	1.848,700	11,0	2.047,500
24,5	7,5	1.923,100	11,0	2.128,900



The procedure for assembly of chain conveyor is illustrated on the next page.

Before the fitting begins:

- Check the concrete and check the transport direction for the placing of inlet and outlet.
- For the assembly of the chain conveyor, correct and approved SWL lifting equipment must be used.
- Remember to use the necessary safety equipment such as gloves safety helmet, glasses and a possible life line – none of this is delivered with the goods.
- Read the assembly instructions thoroughly before the fitting begins.
- Check that there is sufficient space for the fitting.

The simplest way to assemble the chain conveyor is, if there is sufficient space, to assemble the conveyor on the floor in its full length, or in sections if needed. The conveyor should currently be fixed, see the section "attachment". For correct lifting of the chain conveyor, see the section "lifting instructions".

The extensions without lifting wheels and tops are to be bolted together with the supplied assembly plates. After this, the drive- and tightening section are fitted, and the chain is placed in the bottom of the extensions. When this is done, the chain returning wheels are to be fitted and the chain must be assembled with the supplied assembly link – after that the tops are fitted, and the inlet and outlet is to be fitted.

By the assembly of a chain conveyor with inlet trough or bend, the chain is put in as the last step, and therefore, a rope must be pulled through the forward trough and through the return trough. With this rope you pull the chain through the extensions.

The gearmotor is fitted on the drive section, and the chain is tightened with use of the tightening bolts on the drive- and tightening sections – remember that the torque arm must be loosened before tightening of the chain.

All connections must be sealed with silicone as stated in the section "sealing"

Important:

Remember to refit the inspection covers after the fitting of the chain conveyor.

Fig. 1

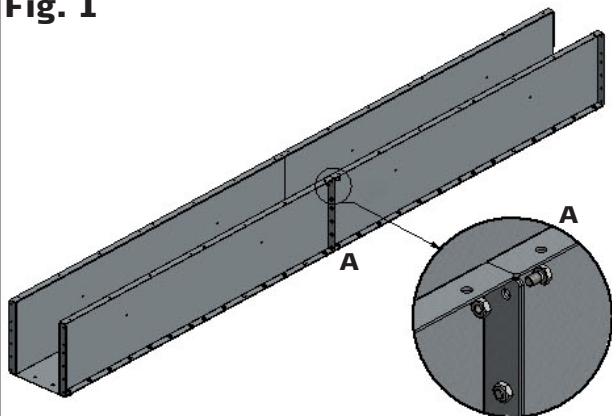


Fig. 2

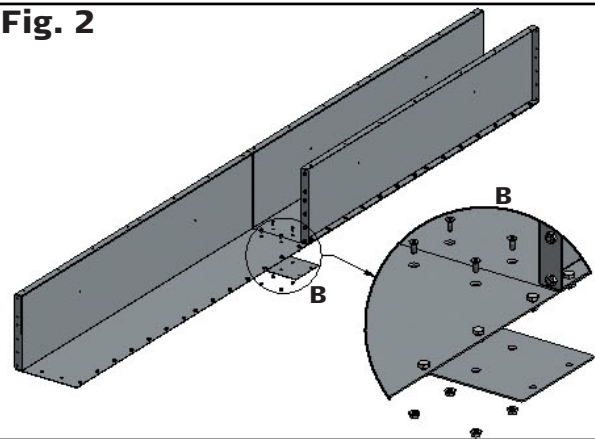


Fig. 3

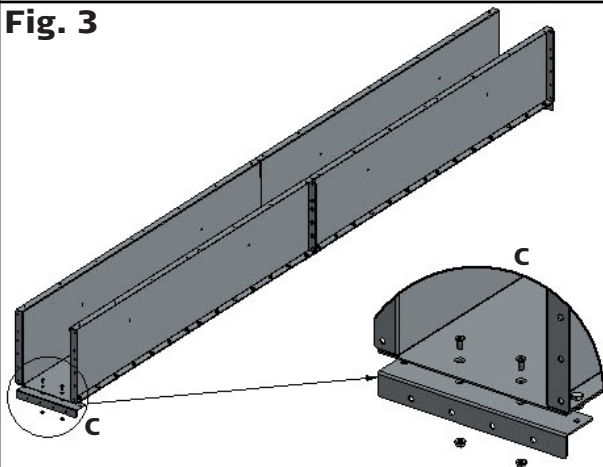


Fig. 4

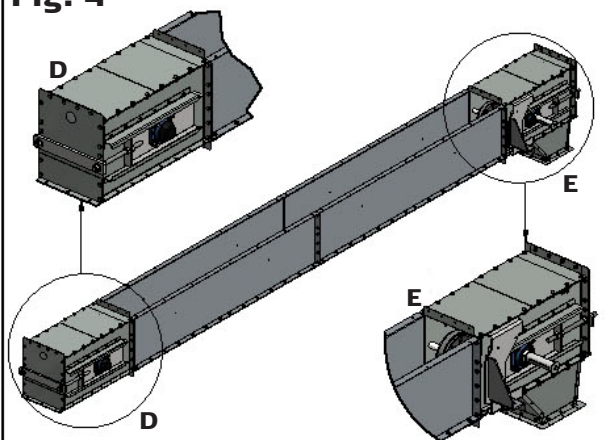


Fig. 5

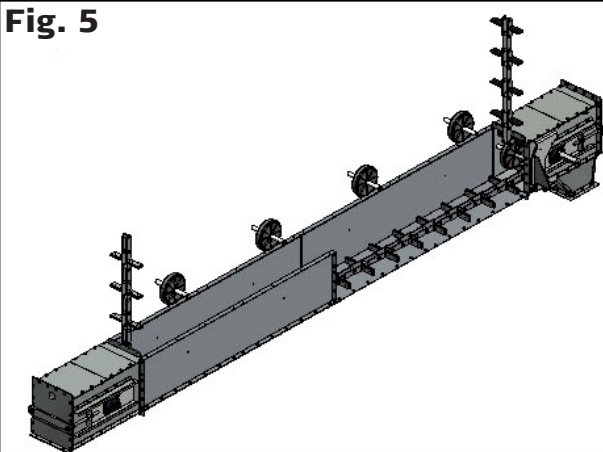


Fig. 6

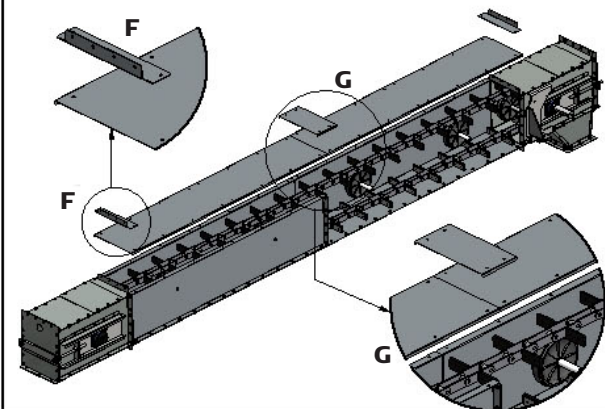
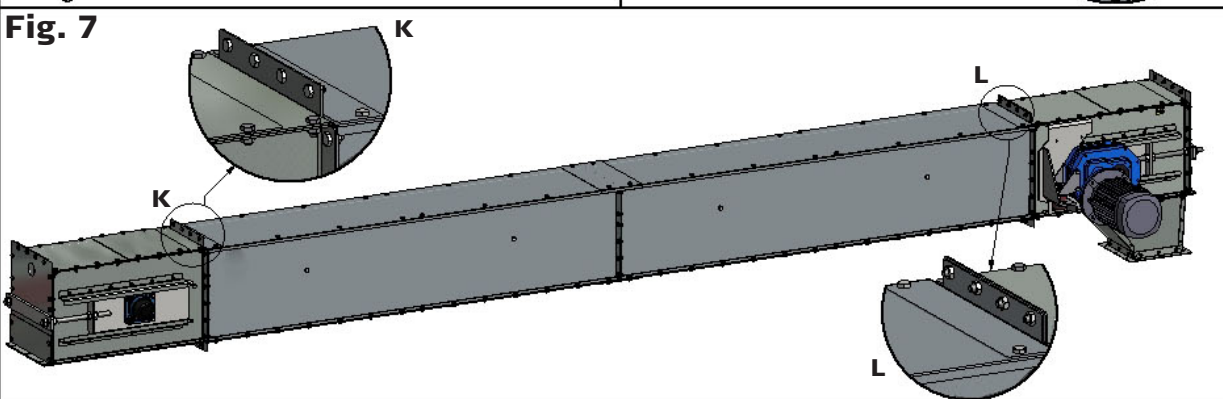


Fig. 7

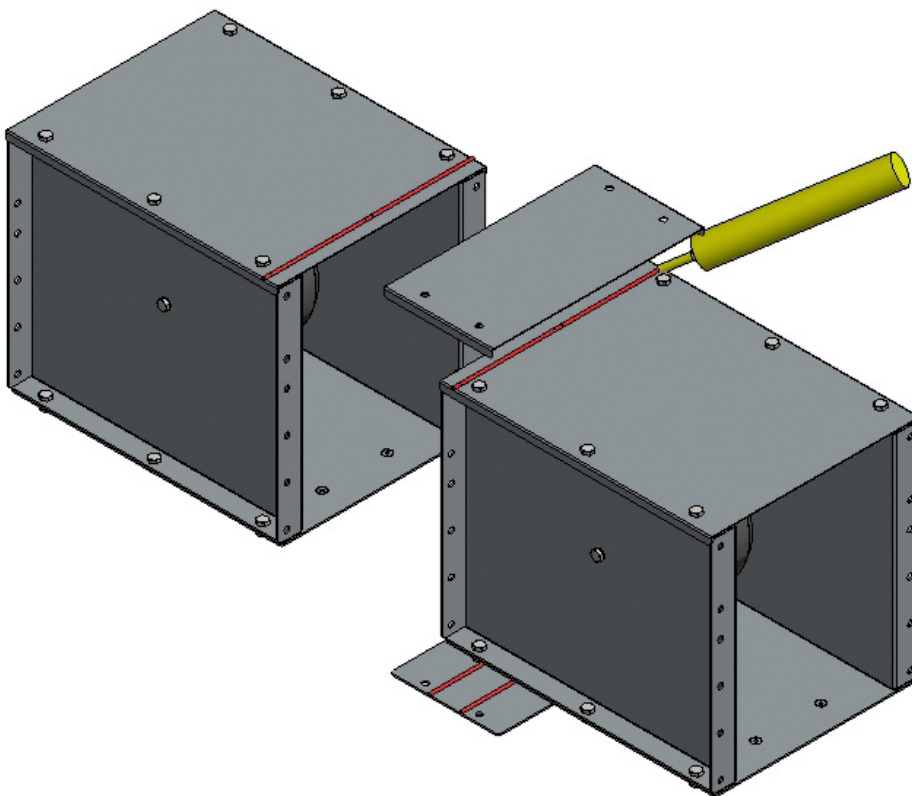


Sealing

It is important that all the joints are sealed with a sealing compound to prevent dust and moisture from entering near the flange joints.

The sealant must be placed as shown in the drawing.

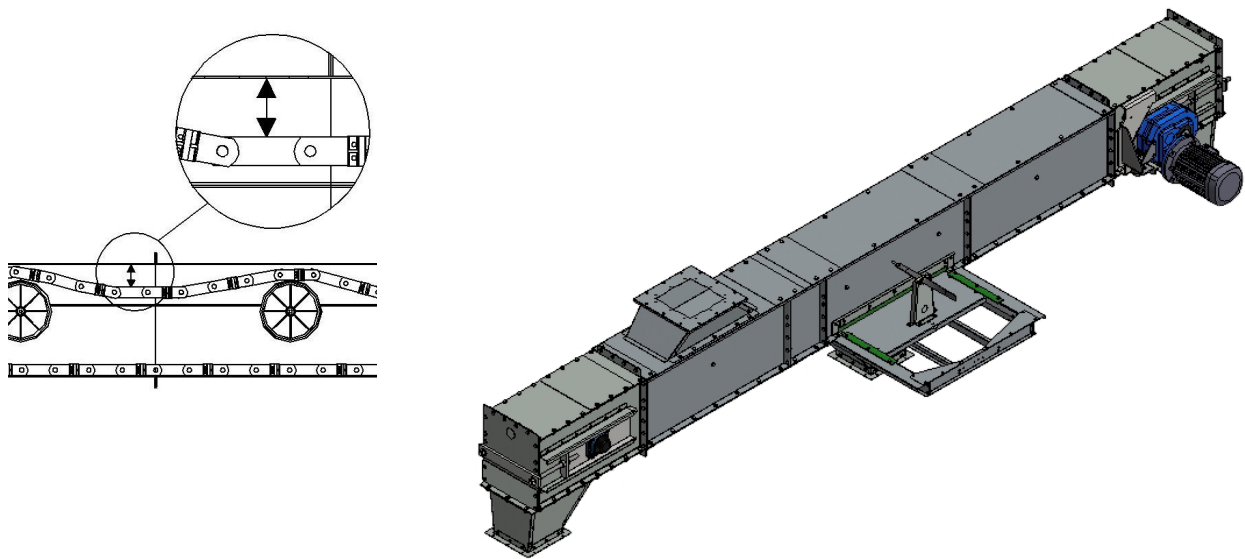
After sealing, the joints are bolted together.



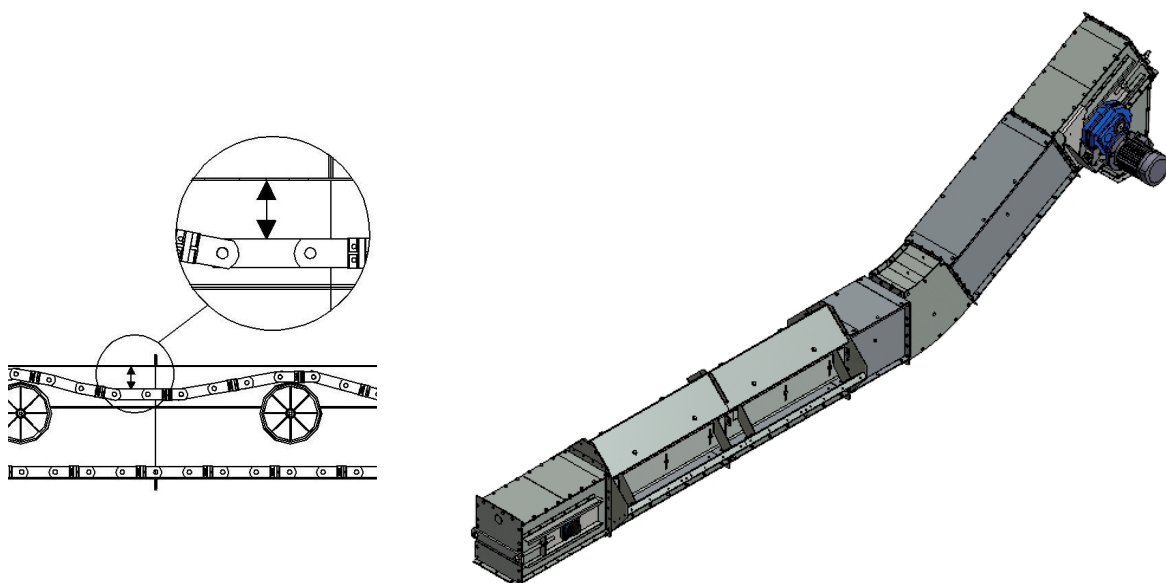
Assembly of chain

The chain is fitted with low carriers for horizontal transport, and with high carriers for inclined transport. The chain is to be assembled with the supplied assembly link, and after that the chain is to be tightened with the tightening bolts on the drive- and tightening sections. Remember to loosen the torque arm first.

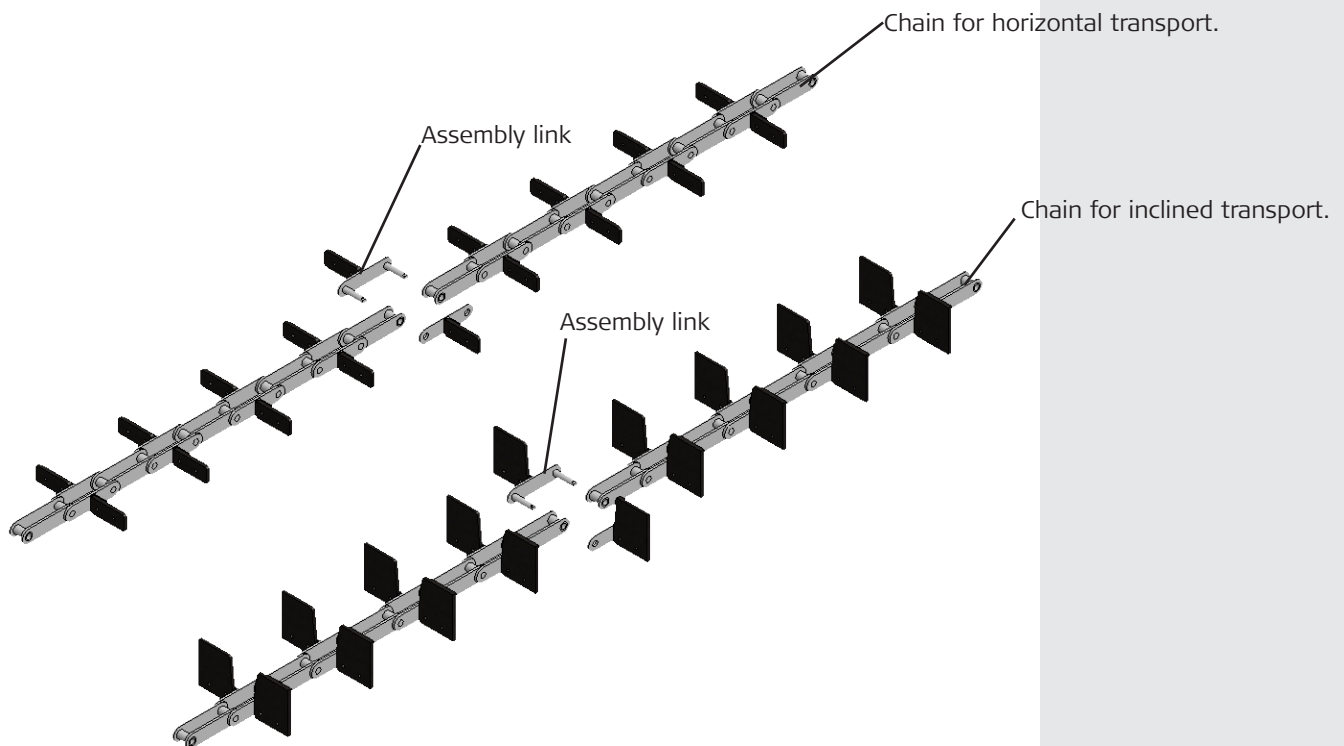
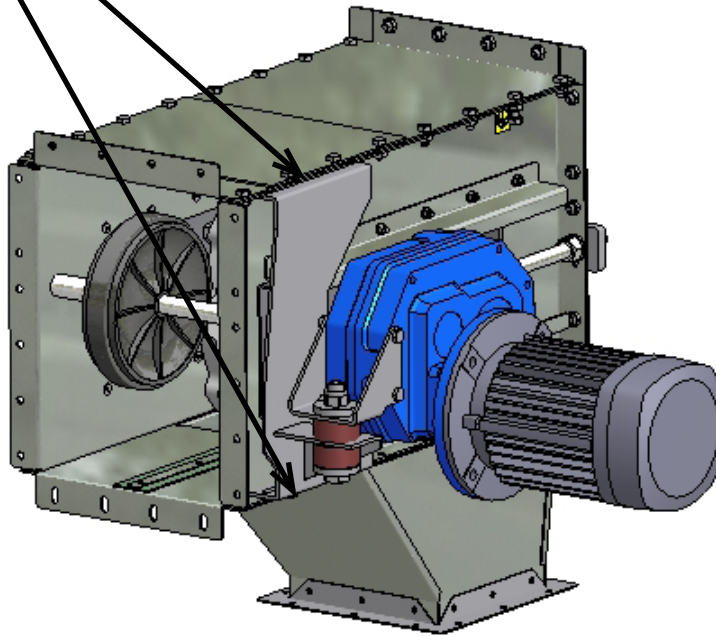
If the chain conveyor is without bend, the chain must "hang" between the returning wheels with 10-30 mm.



If the chain conveyor is with bend, the chain must "hang" between the returning wheels with 60-80 mm.



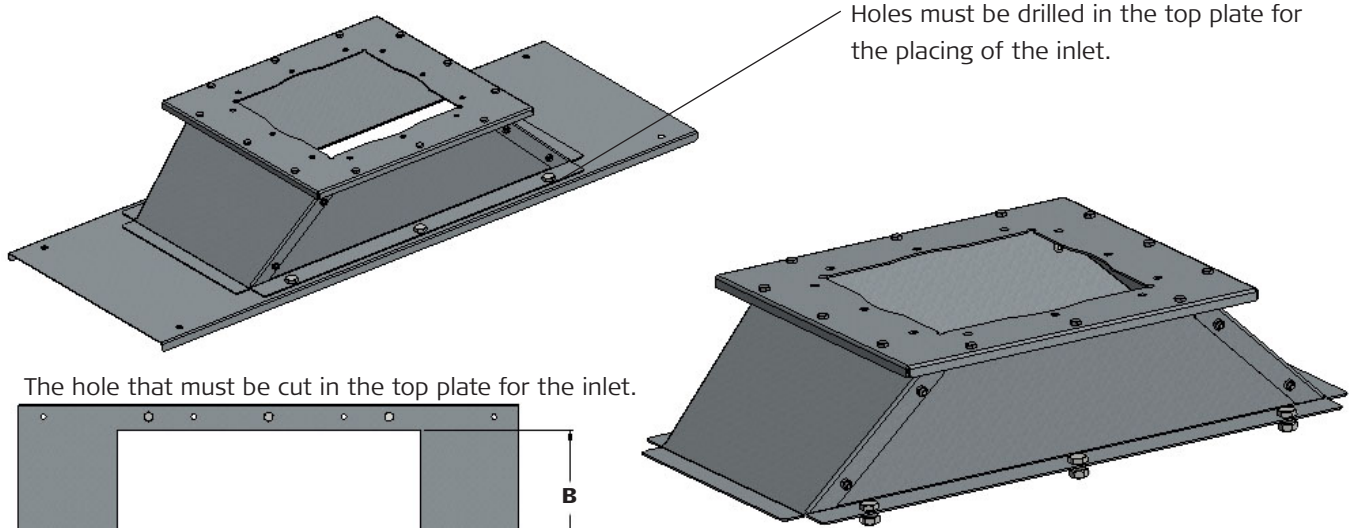
IMPORTANT! When tightening the chain, loosen the torque arm.



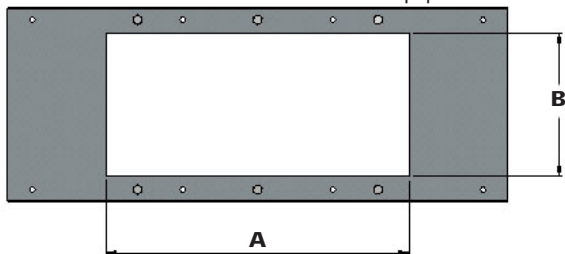
See inspection intervals in the maintenance summary.

Installation of inlet

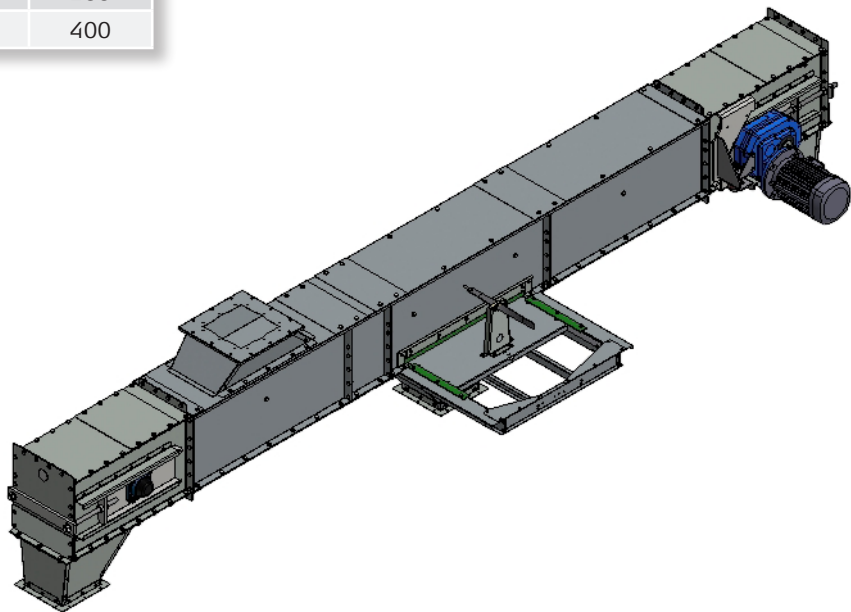
The inlet can be placed anywhere on top of the conveyor.



The hole that must be cut in the top plate for the inlet.

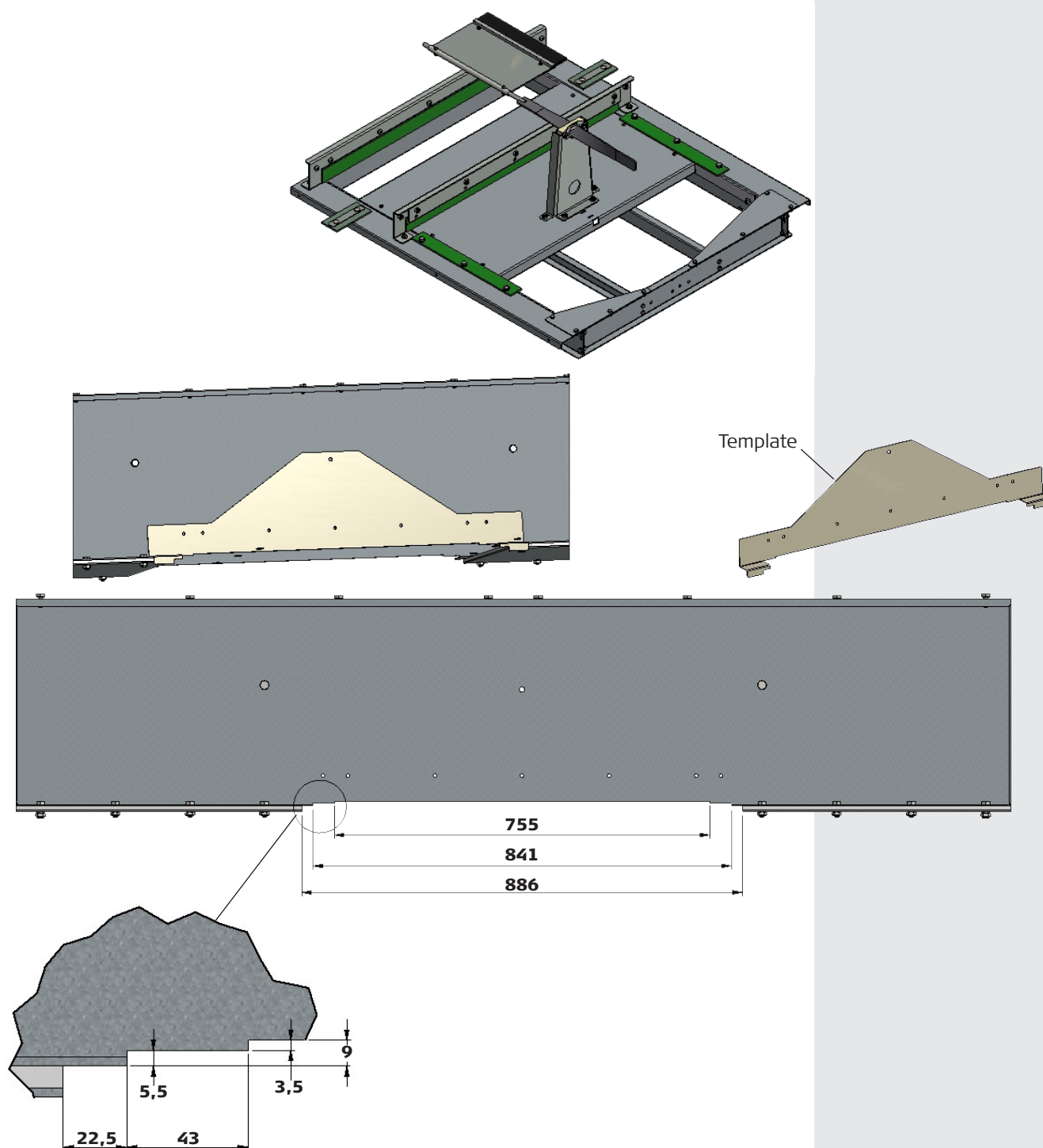


	A	B
T49	605	288
T57	655	400



Assembly of intermediate outlet for mounting anywhere on the conveyor

Using the supplied template, carefully cut off the base of the extension and drill the 8 holes on both sides from the template. Then fit the intermediate outlet on the extension.



Dimensions are the same for extensions with steel and PEHD bases.

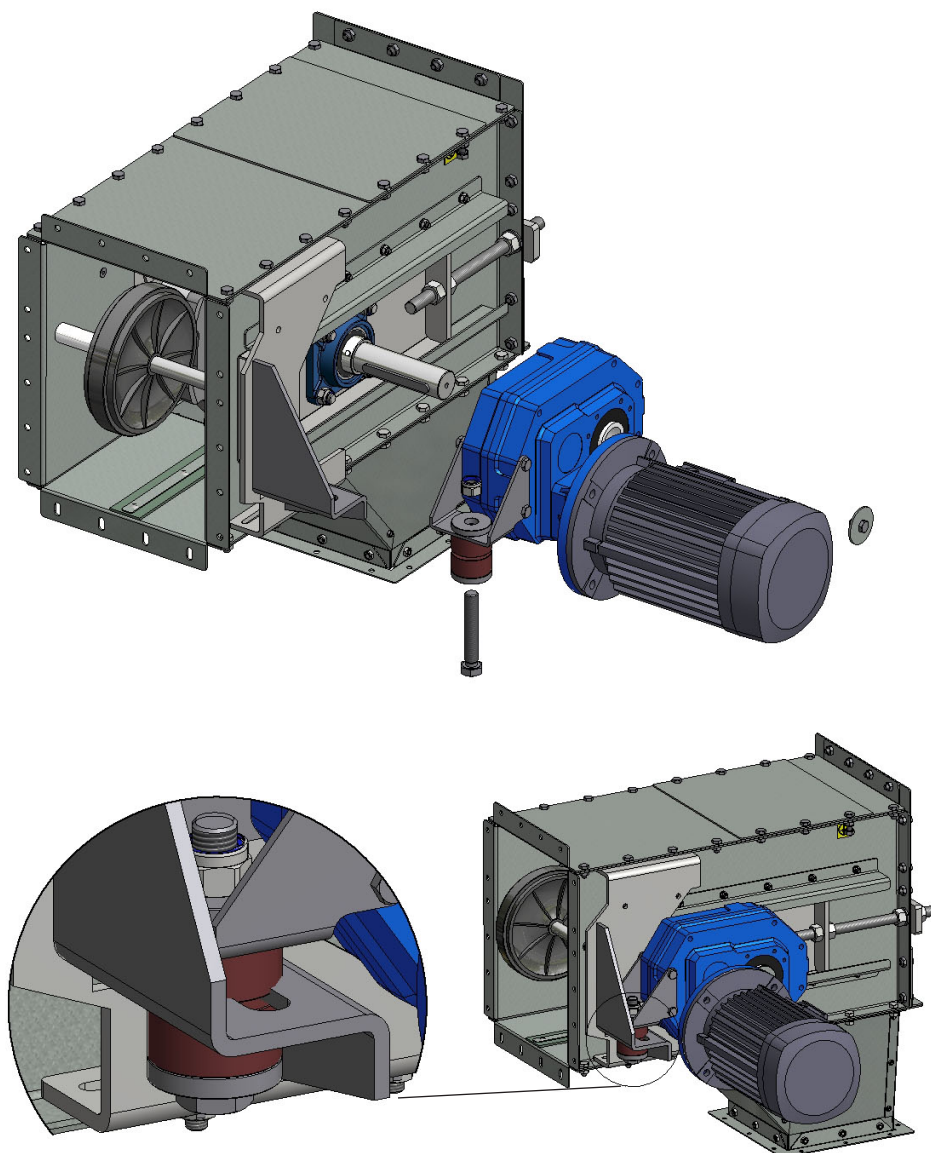
Motor

Fit the gear and motor on the drive shaft, as shown in below drawing.

For maintenance – please see the attached supplier documentation.

Important!

The bleed screw on the gear must always be fitted in the top position.

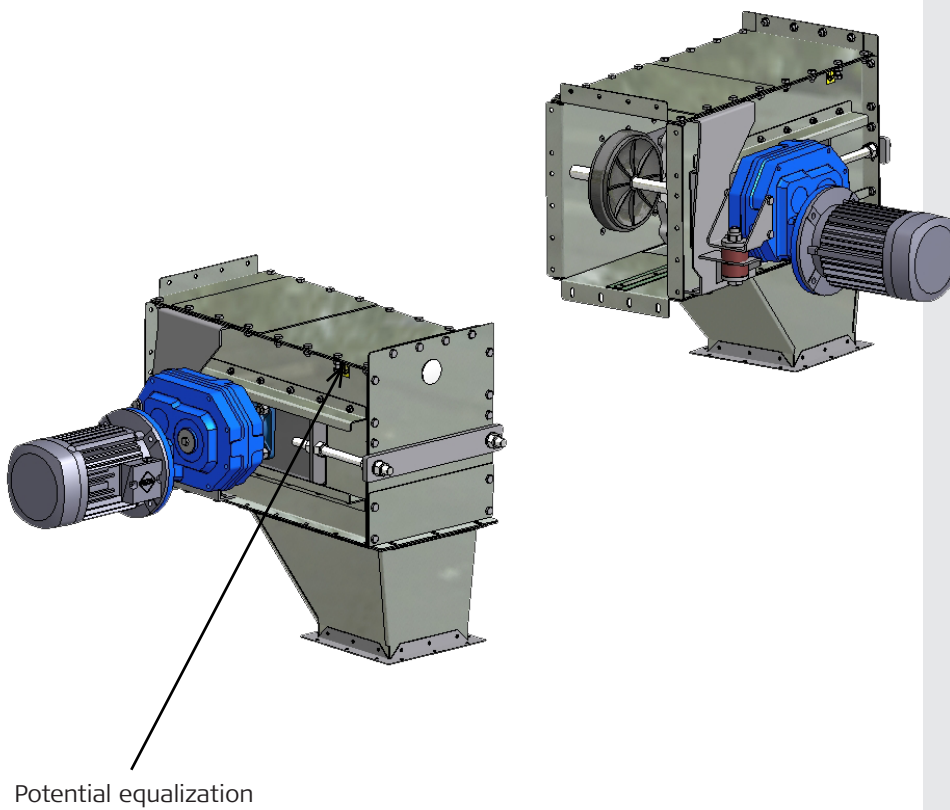


Potential equalization

The potential equalization must be carried out according to current regulations.

A label on the drive station indicates the point for the chain conveyor potential equalization.

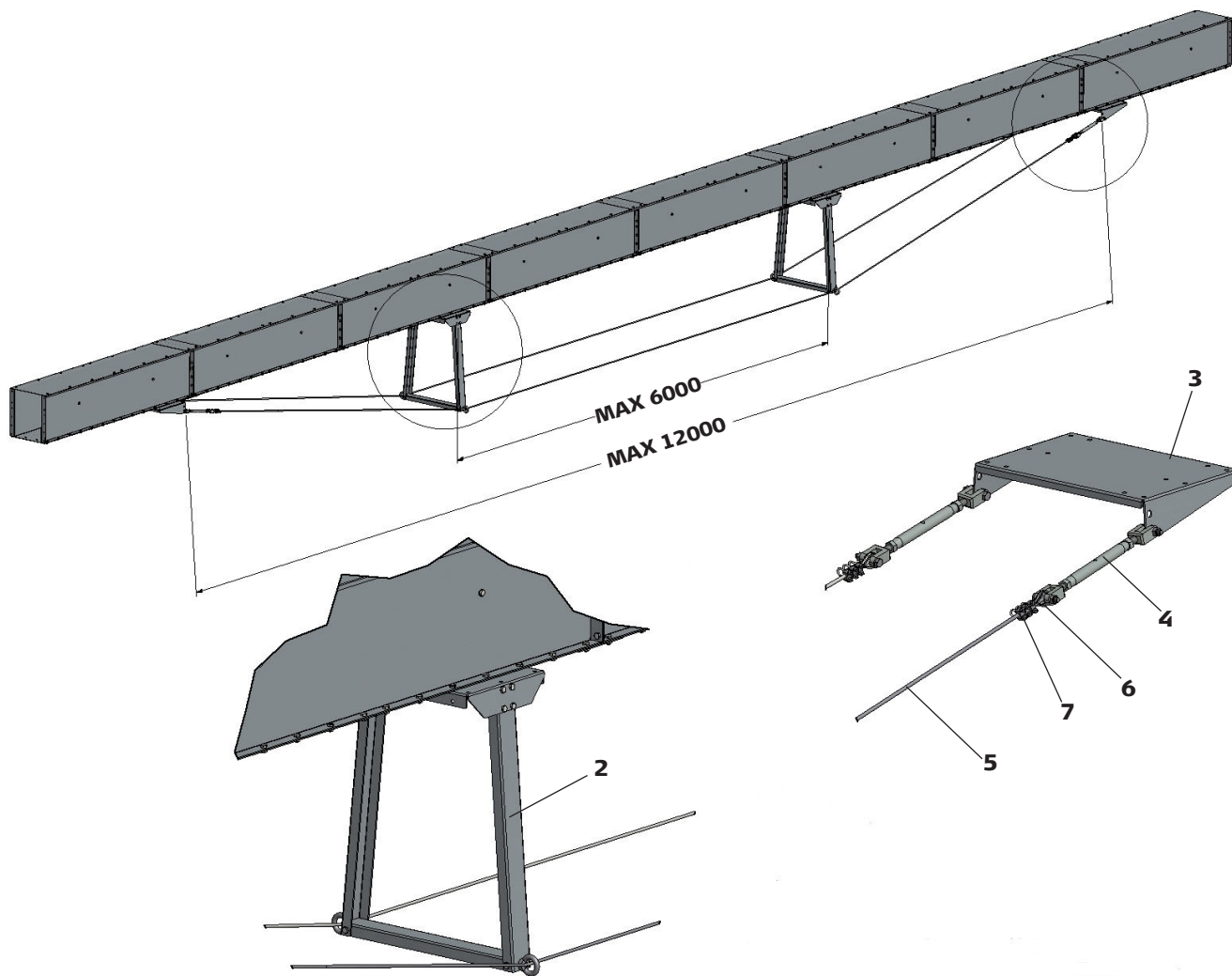
The label indicates the potential equalization point for the chain conveyor.



Attachment

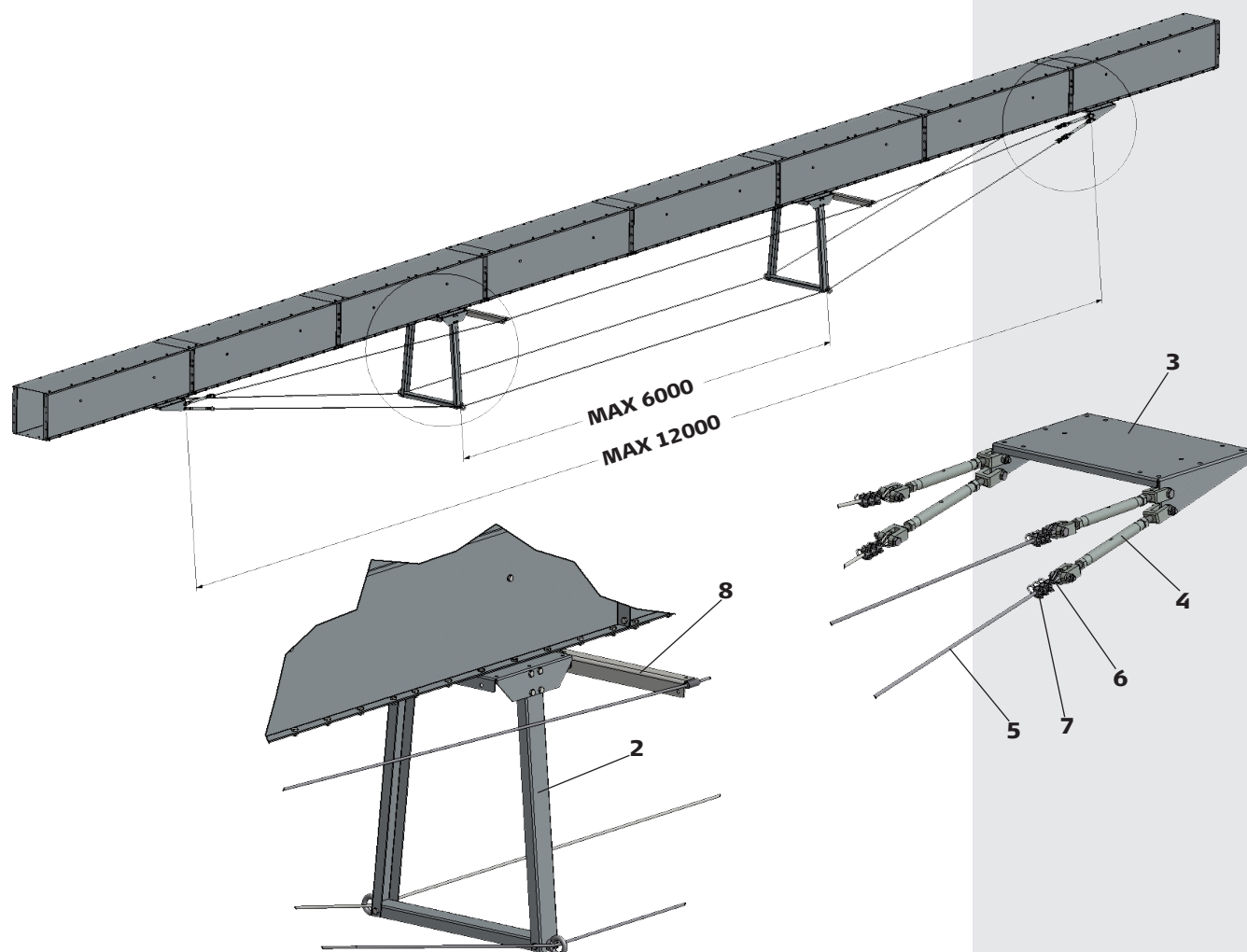
It is important to secure the chain conveyor for maximum stability. The max. distance between the supports is 6 m, if not it is necessary to fit turnbuckles.

Double wire suspension without side stabilization for maximum 12 m. length.



Pos.	Description	T49	Kg.	T57	Kg.
	Double set of stays with 31m. wire without side wire	49613	71,50	49613	71,50
2	2 off radius rod for stays	49678	18,70	49678	18,70
3	2 off fitting for wire	49679	7,21	49679	7,21
4	4 off wire suspension fork / fork 16 mm for 8 mm wire	92116	1,59	92116	1,59
5	31 m wire Ø8mm	92114	5,70	92114	5,70
6	4 off wireprotection for 8mm wire	92112	0,03	92112	0,03
7	12 off wirelock for 8mm wire	92113	0,03	92113	0,03

Double wire suspension with side stabilization for maximum 12 m. length.



Pos.	Description	T49	Kg.	T57	Kg.
	Double set of stays with side wire and 64m wire	49619	100,00	49619	100,00
2	2 off radius rod for stays	49678	18,70	49678	18,70
3	2 off fitting for wire	49679	7,21	49679	7,21
4	8 off wire suspension fork / fork 16 mm for 8 mm wire	92116	1,59	92116	1,59
5	64m wire Ø8	92114	12,16	92114	12,16
6	8 off wireprotection for 8mm wire	92112	0,03	92112	0,03
7	24 off wirelock for 8mm wire	92113	0,03	92113	0,03
8	2 off side wir	49617	4,75	49617	4,75

Starting up

Before starting to work with the chain conveyor, please check the following:

- All inspection doors are fitted
- No work must be carried out on/near the machine.
- The motor rotation direction is correct.
- All conveyor bolts are correctly fitted and tightened.
- All flight bolts are correctly fitted and tightened.
- The chain is correctly fitted and adjusted.
- The attachment and stability of the chain conveyor is correct.
- The attachment and stability of the chain conveyor is correct.

Conveyor stops – faultfinding

In case of stops, check first whether the conveyor is able to start again, when the relay has gone cold. If yes, the fault is either caused by low adjustment of the relay or lack of motor capacity.

If the conveyor is still not able to start without being emptied of material, it must be checked whether it's due to blockage of the conveyor drain (drain tubes too small or insufficient slope) or caused by blockade further ahead in the transport system.

Please see the maintenance summary and the attached supplier documentation for cleaning- and maintenance intervals.

Warning!

- During cleaning and maintenance work, the electric supply for the chain conveyor must be disconnected and secured against accidental reconnection.
- After repair and maintenance the inspection doors and shields must be refitted before the work is continued.

Always use original parts only

In case that original parts are not used, the warranty becomes void, and JEMA AGRO A/S can no longer be held liable for the EU Declaration of conformity.

Hollow shaft gear

Check the gear as described in the attached supplier documentation.

Important!

Check that the bleed screw is fitted in the top position on the gear.

Motor

Bearing noise from the motor: please see the attached supplier documentation.

Motor inspection: please see the attached supplier documentation.

Retorque the motor as indicated in the maintenance summary. Please see the assembly guidance for instructions.

Conveyor chain

Check that the chain is tensioned correctly. Se afsnittet "Montage af kæde"

Plastic flights

Defective or worn plastic slats must be replaced.

See the maintenance summary.

Bearings.

Check the bearings for wear/play, and lubricate as described in the maintenance summary.

Check for wear/play by lifting up the shaft and control manually.

Make sure that there is no water in the pit, as this will damage the bearings.

Lubrication of bearings

Important!

It is extremely important to use the correct amount of grease, as too much will damage the sealing of the bearing, which will result in leaks and subsequent overheating of the bearing.

Check the amount of grease per grease gun stroke.

Lubricate the drive station bearings with 4.0 g grease in accordance with the instructions.

Leaks

All leaks must be repaired immediately.

Nose and vibrations

Stop the chain conveyor immediately and identify the problem.

Disposal

The methods of disposal must comply with the current local regulations

Warning!

The electric supply to the motor must be disconnected during the disassembly.

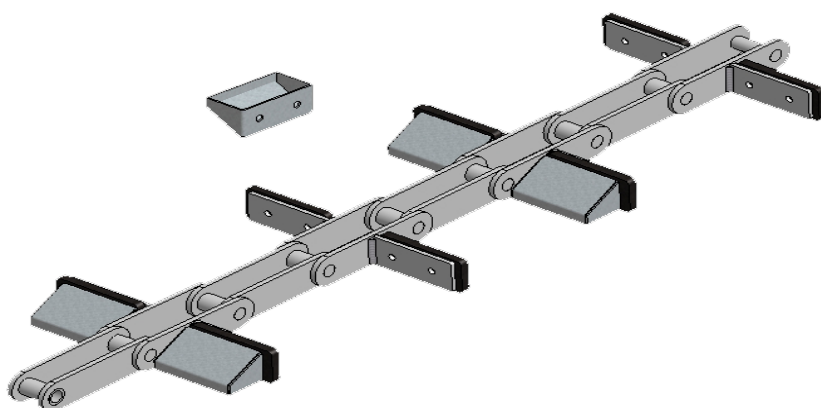
Disassemble the conveyor on the floor, if space allows, following the reverse order of the assembly procedure.

If the chain conveyor is disassembled at the premises, start by detaching the motor. The easiest way of detaching the chain is to dismantle the joint at the bottom of the conveyor and then pull out the chain through the bottom inspection door. Finally detach all extensions.

The chain conveyor contains various materials that can be reused. All metal parts should be delivered to a recycle industry.

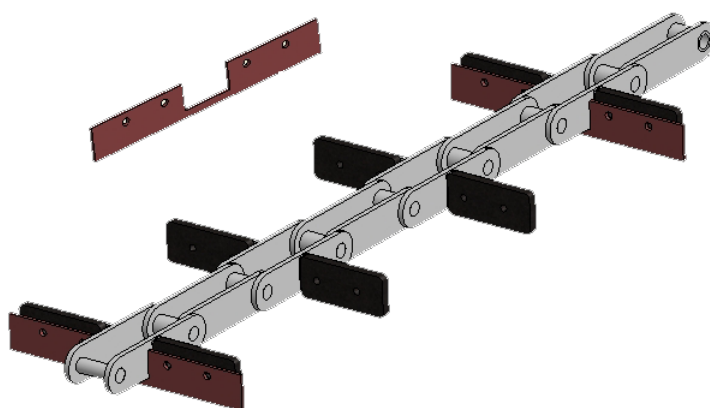
According to the individual requirements, a range of options/accessories is available for the chain conveyor.

Returnbuckets for chain

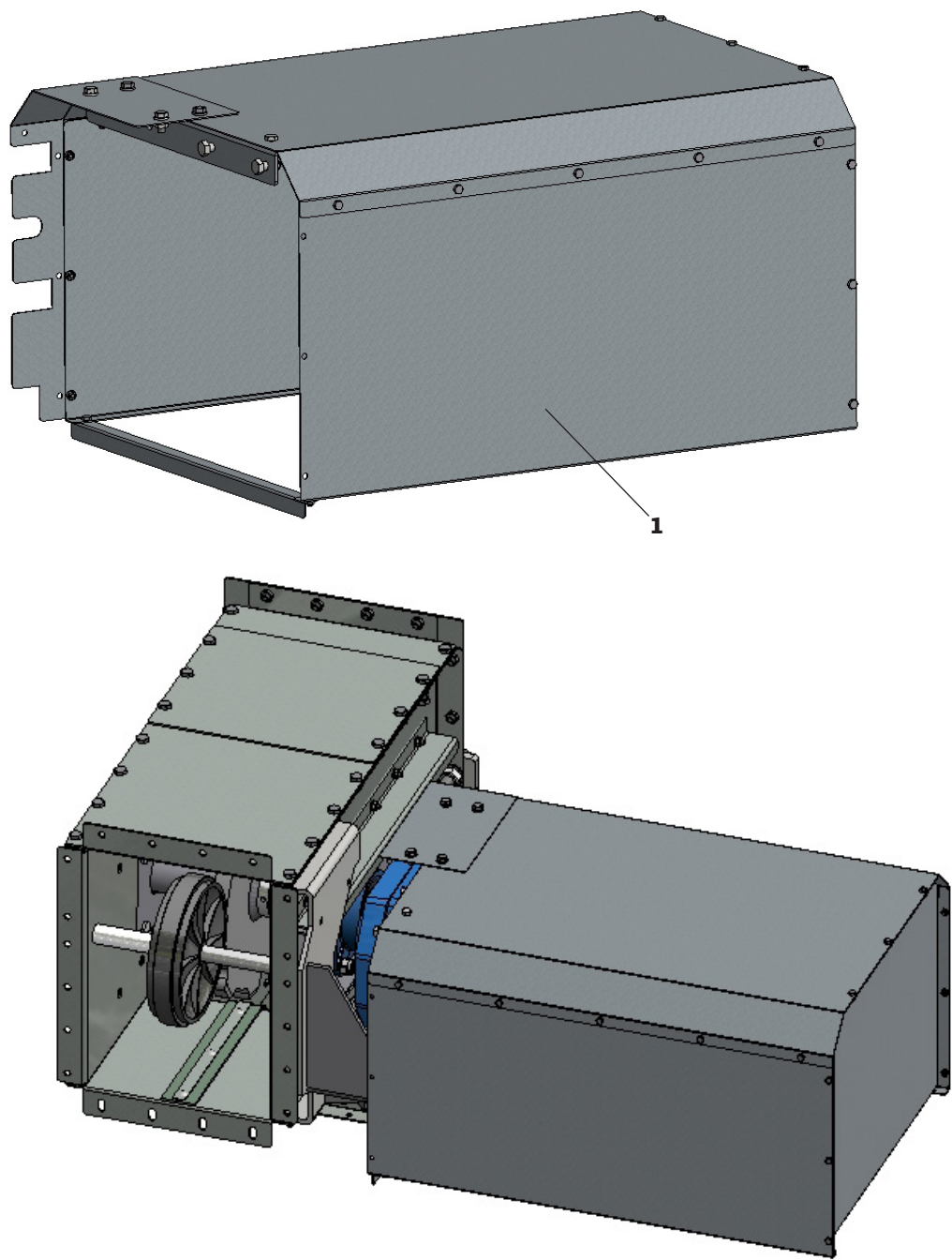


Scrapers for chain

30. Is to be fitted every 10 m.



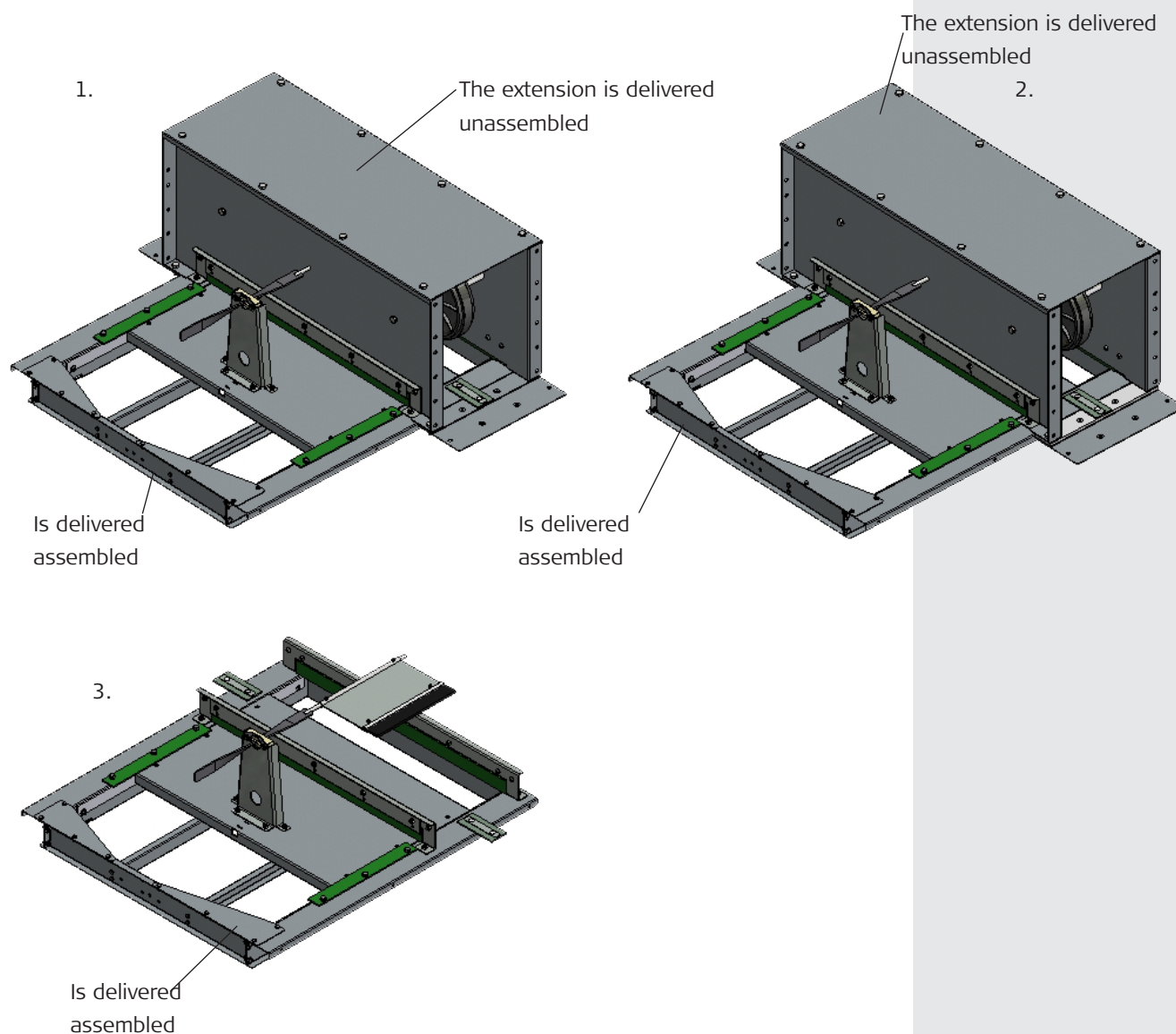
Cover for geared motor



Pos.	Description	T49	Kg.	T57	Kg.
1	Cover for geared motor 3-7,5 kW	49715	16,83	49715	16,83
1	Cover for geared motor 11-15 kW	49716	20,16	49716	20,16

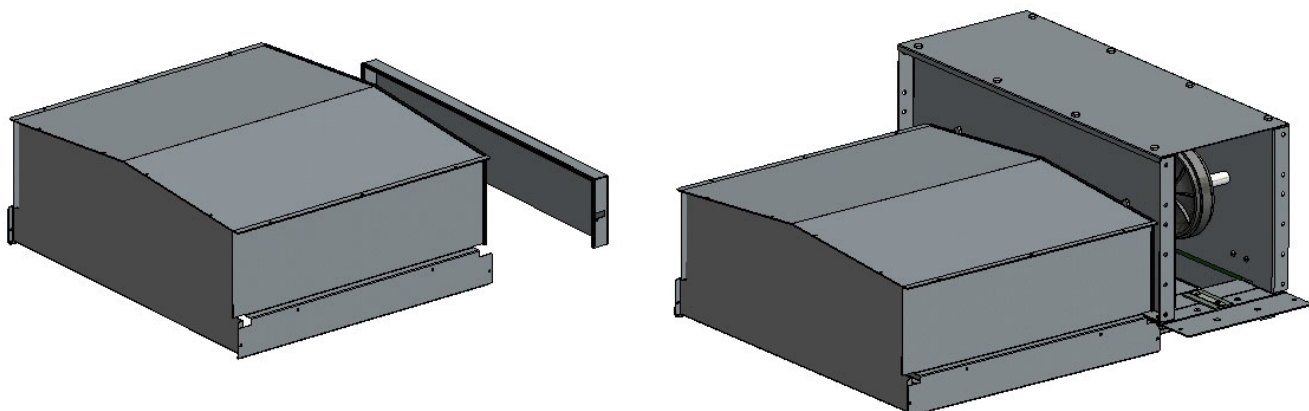
Intermediate outlet

The intermediate outlet is available in 3 versions as shown below.

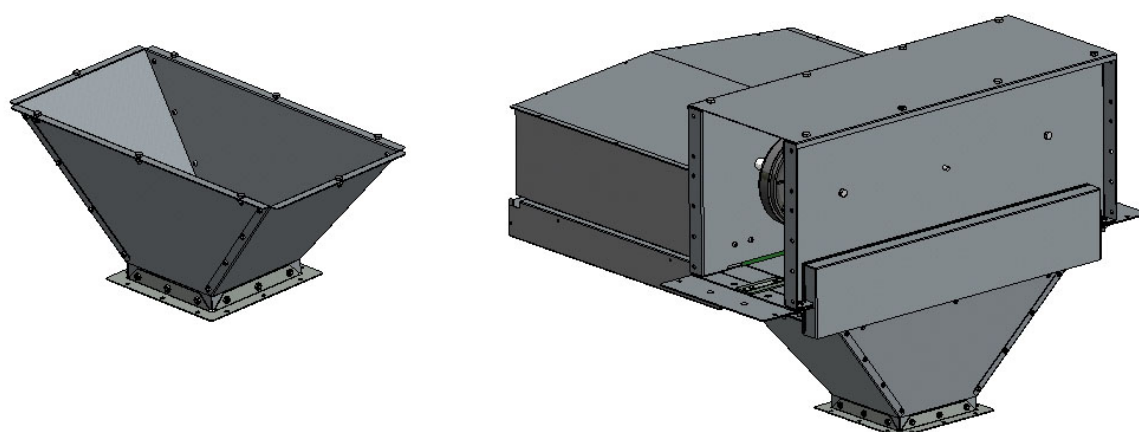


Pos.	Description	T49	Kg.	T57	Kg.
1	Intermediate outlet with 1,0m. extension	49765	68,40	57765	75,50
2	Intermediate outlet with 1,0m. extension and PEHD	49765-P	68,80	57765-P	76,20
3	Intermediate outlet without extension	49750	31,30	57750	35,70

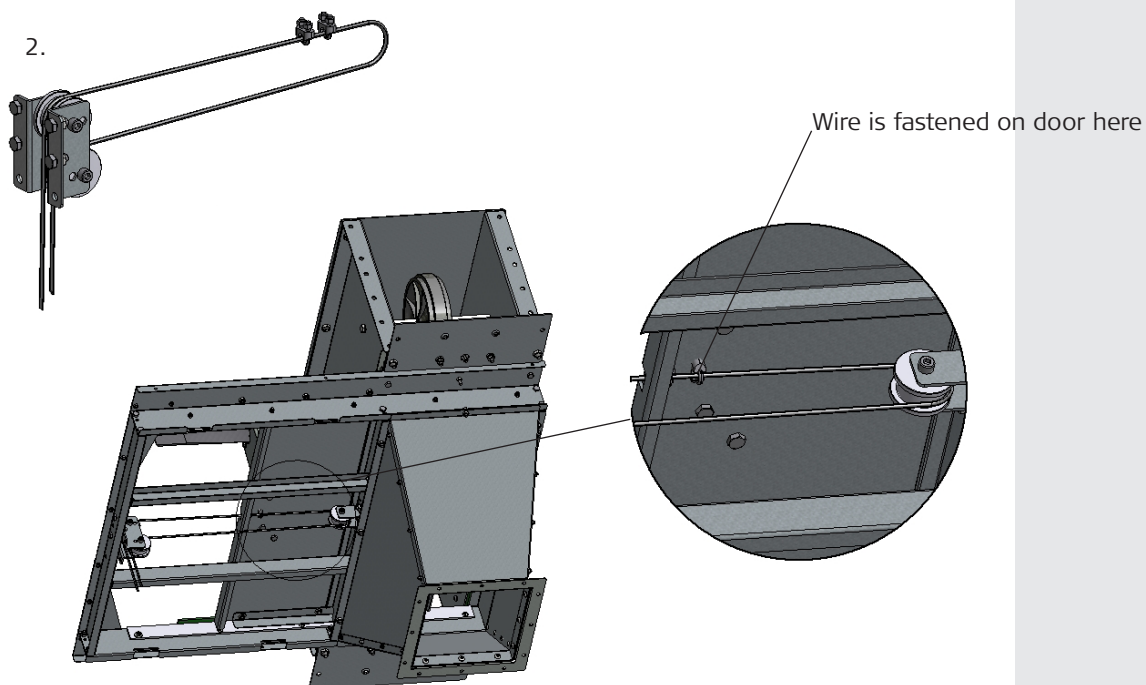
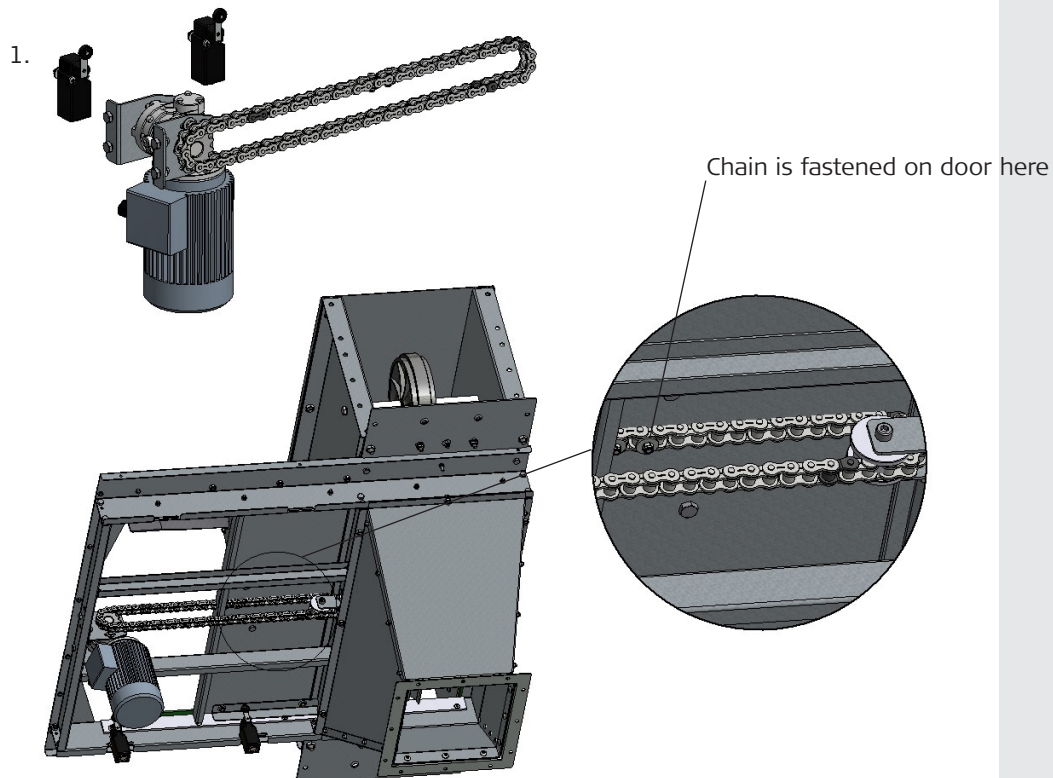
1.



2.

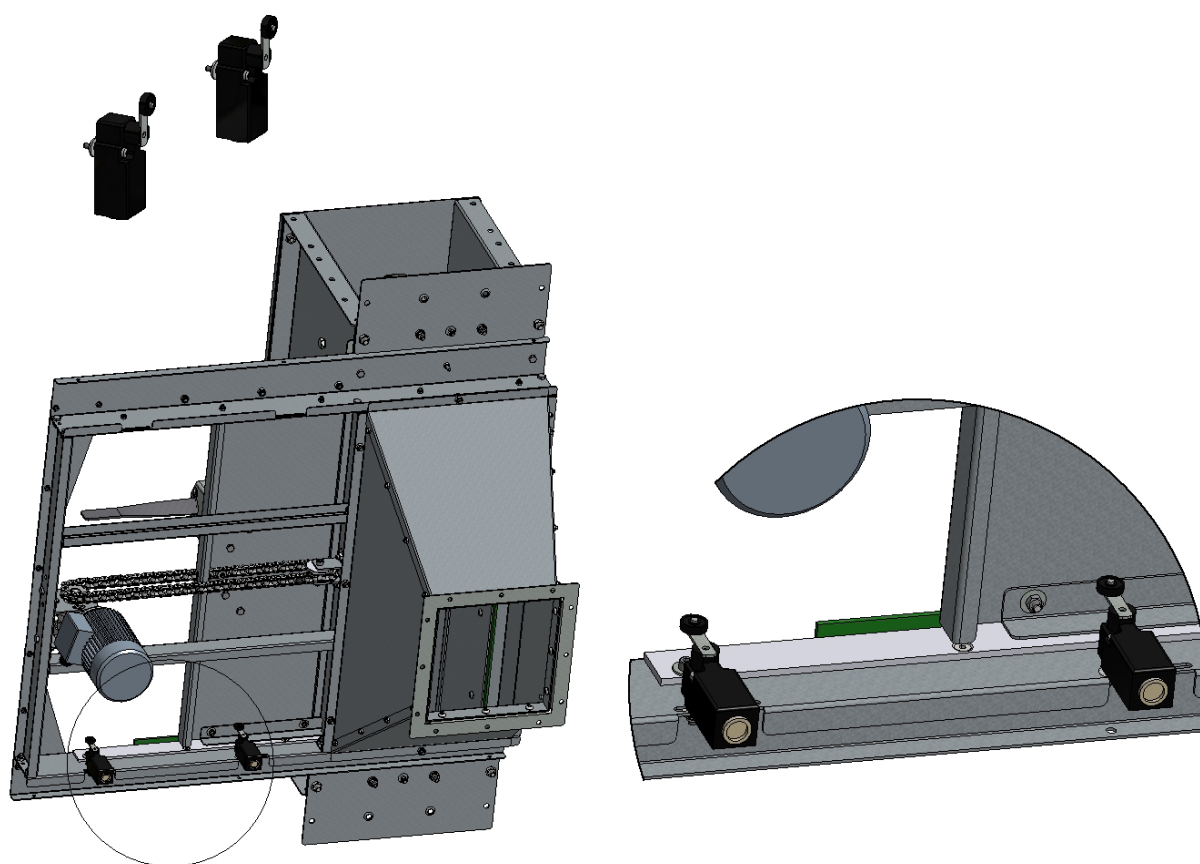


Pos.	Description	T49	Kg.	T57	Kg.
1	Cover for intermediate outlet	49753	21,29	49753	21,29
2	Outlethopper for intermediate outlet	49752	10,50	57752	12,10



Pos.	Description	T49	Kg.	T57	Kg.
1	Motor with limit stop for intermediate outlet	49754	6,85	57754	6,85
2	Manual pull for intermediate outlet	45105	6,00	45105	6,00

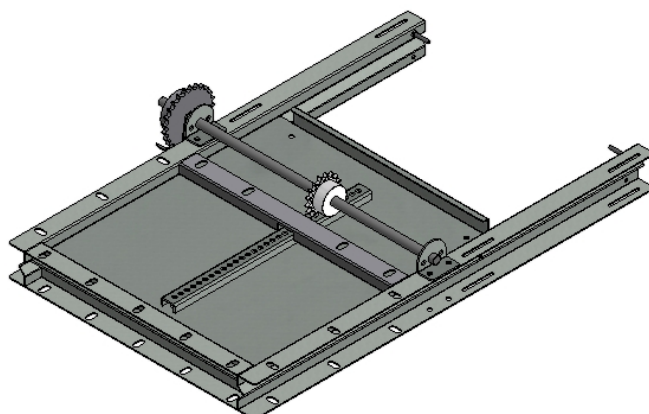
1.



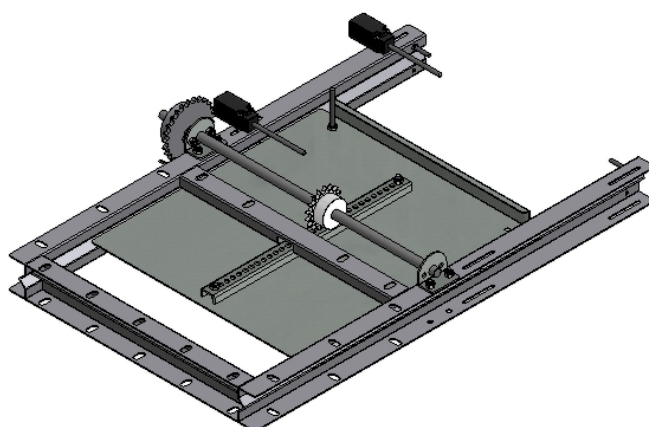
Pos.	Description	T49	Kg.	T57	Kg.
1	2 limit stop for intermediate outlet	88115	0,16	88115	0,16

Shutter

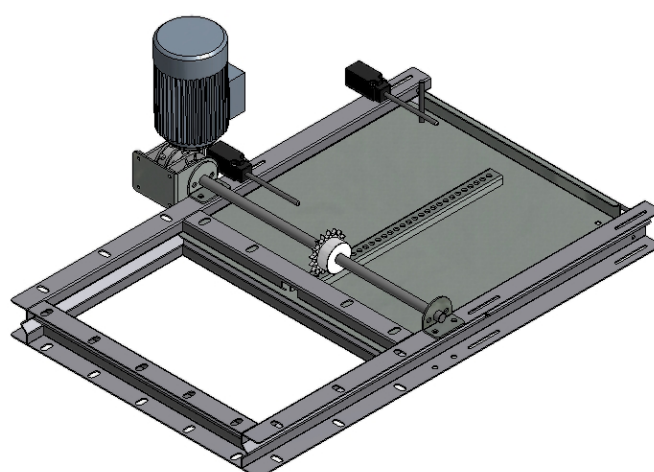
1.



2.



3.

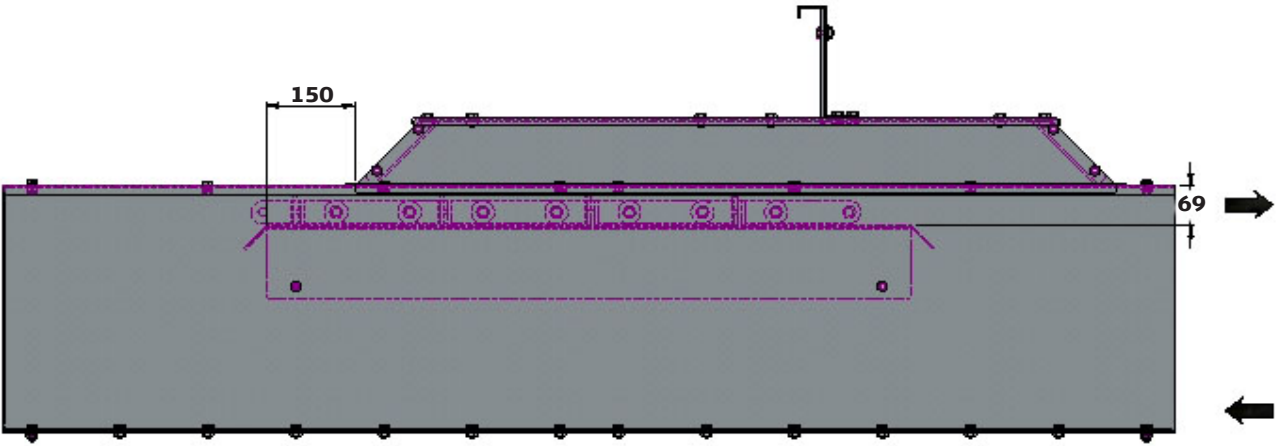
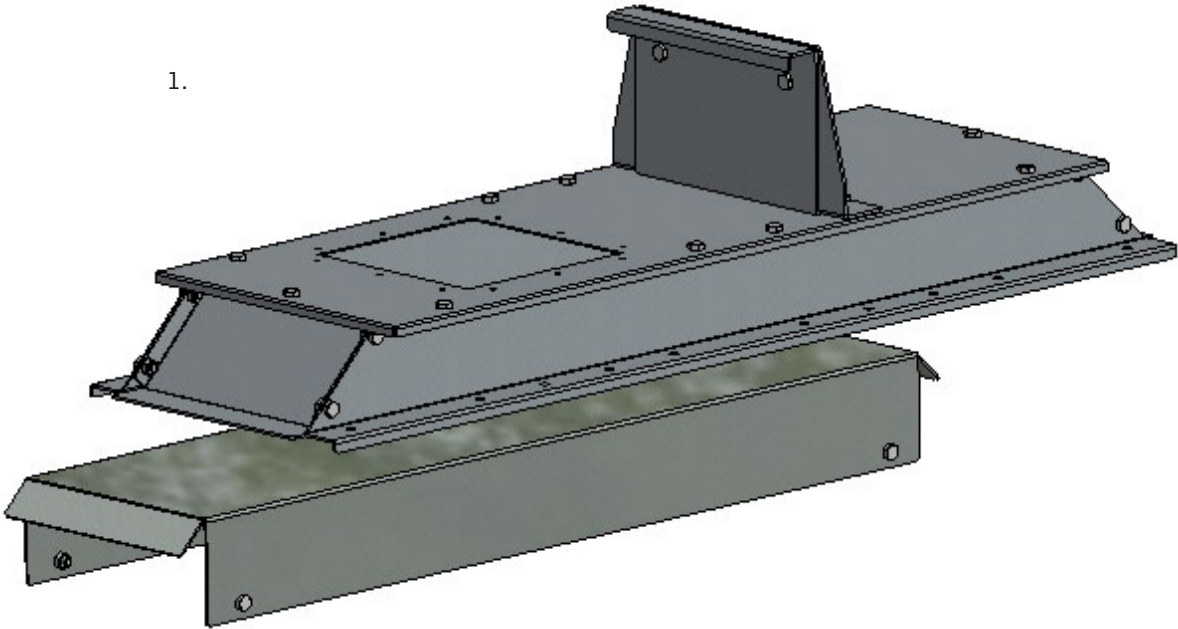


Pos.	Description	T49	Kg.	T57	Kg.
1	Shutter for drive- tightening section	49063	15,30	57112	17,30
2	Shutter for drive- tightening section with 2 limit stop	49066	15,50	57066	17,50
3	Shutter for drive- tightening section with motor and 2 limit stop	49064	18,40	57113	20,40

Flow regulation with middle plate

Is used by uncontrolled flow in to a horizontal chain conveyor. For example under a silo.

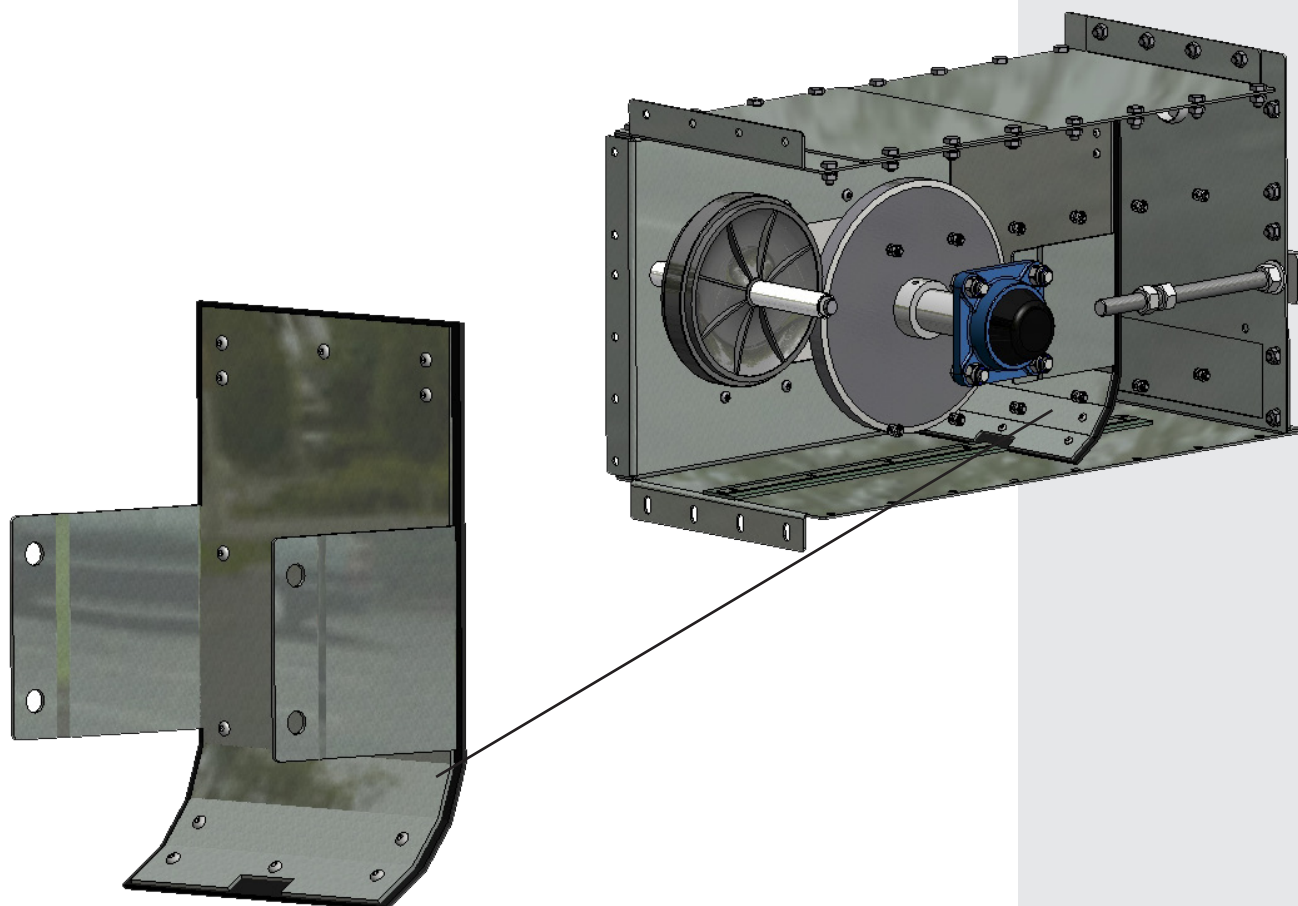
1.



Pos.	Description	T49	Kg.	T57	Kg.
1	Flow regulation with middle plate	49782	41,50	57782	48,90

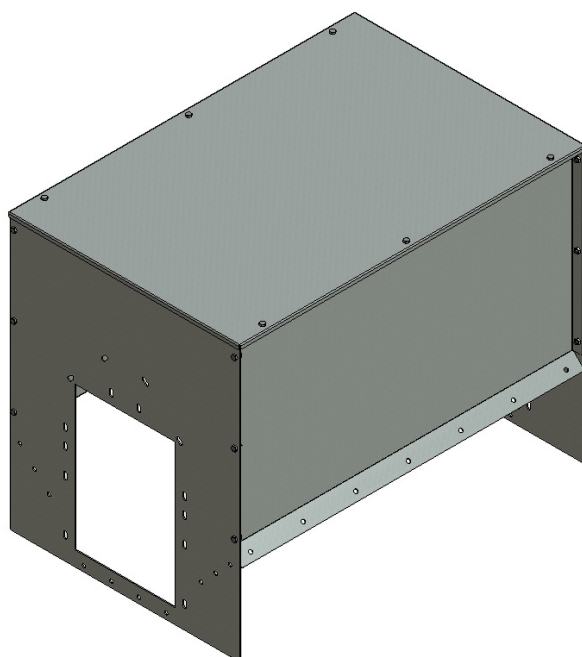
Cover plate

For optimal purity in the tightening section.



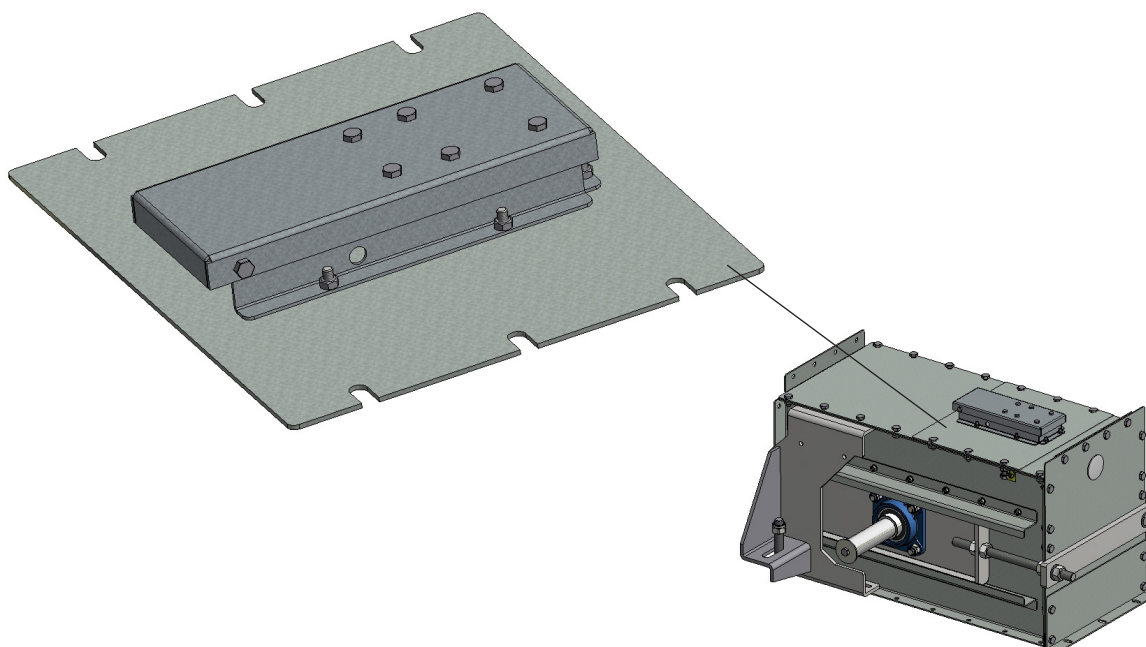
Pos.	Description	T49	Kg.	T57	Kg.
1	Cover plate for tightening section	49674	4,70	57674	6,10

Hopper



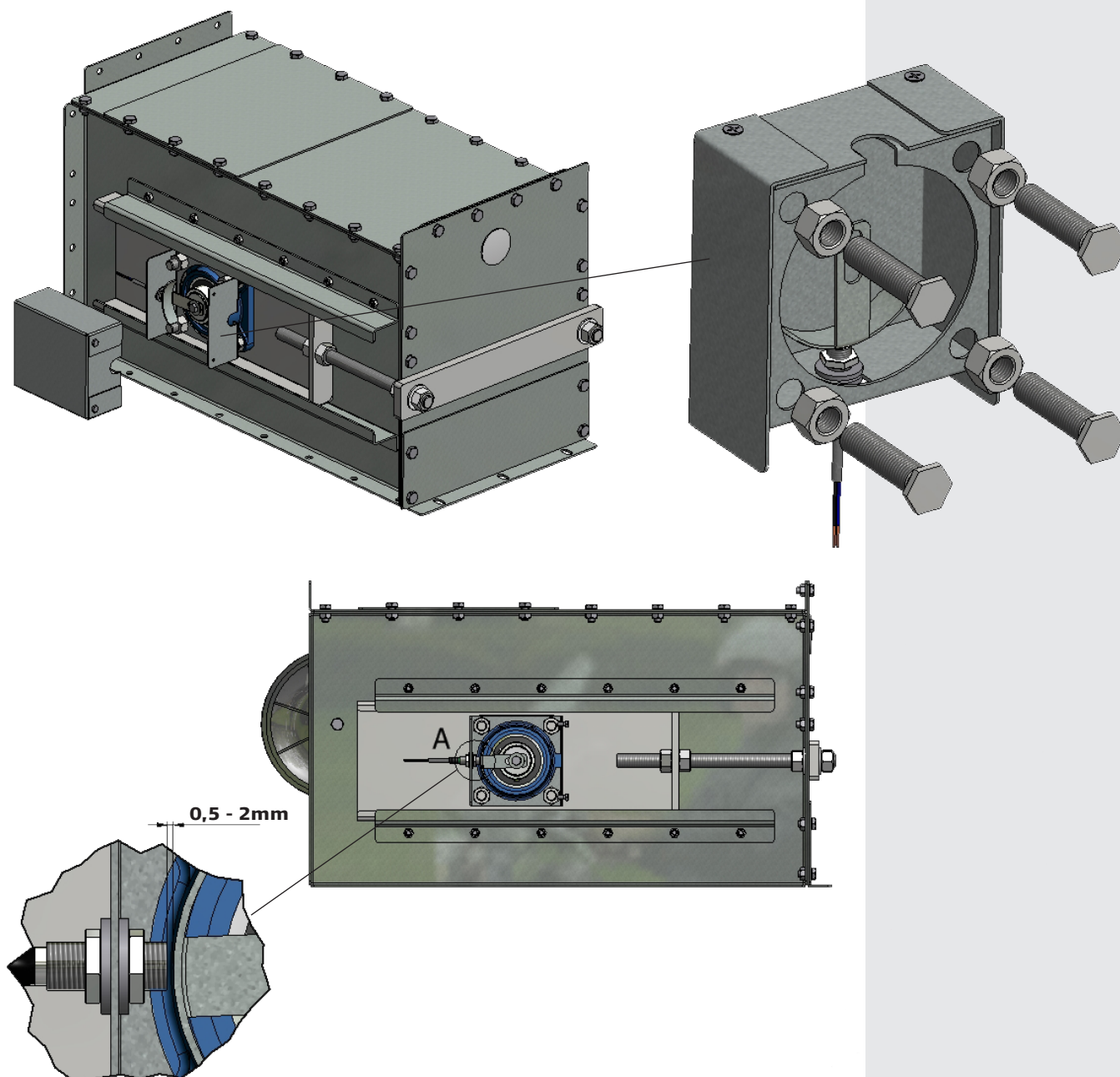
Pos.	Description	T49	Kg.	T57	Kg.
1	Hopper with cover for 0,5m. inlet	49686	35,70	57686	38,70
2	Hopper with cover for 1,0m. inlet	49687	51,20	57687	54,70

Blockits sensor



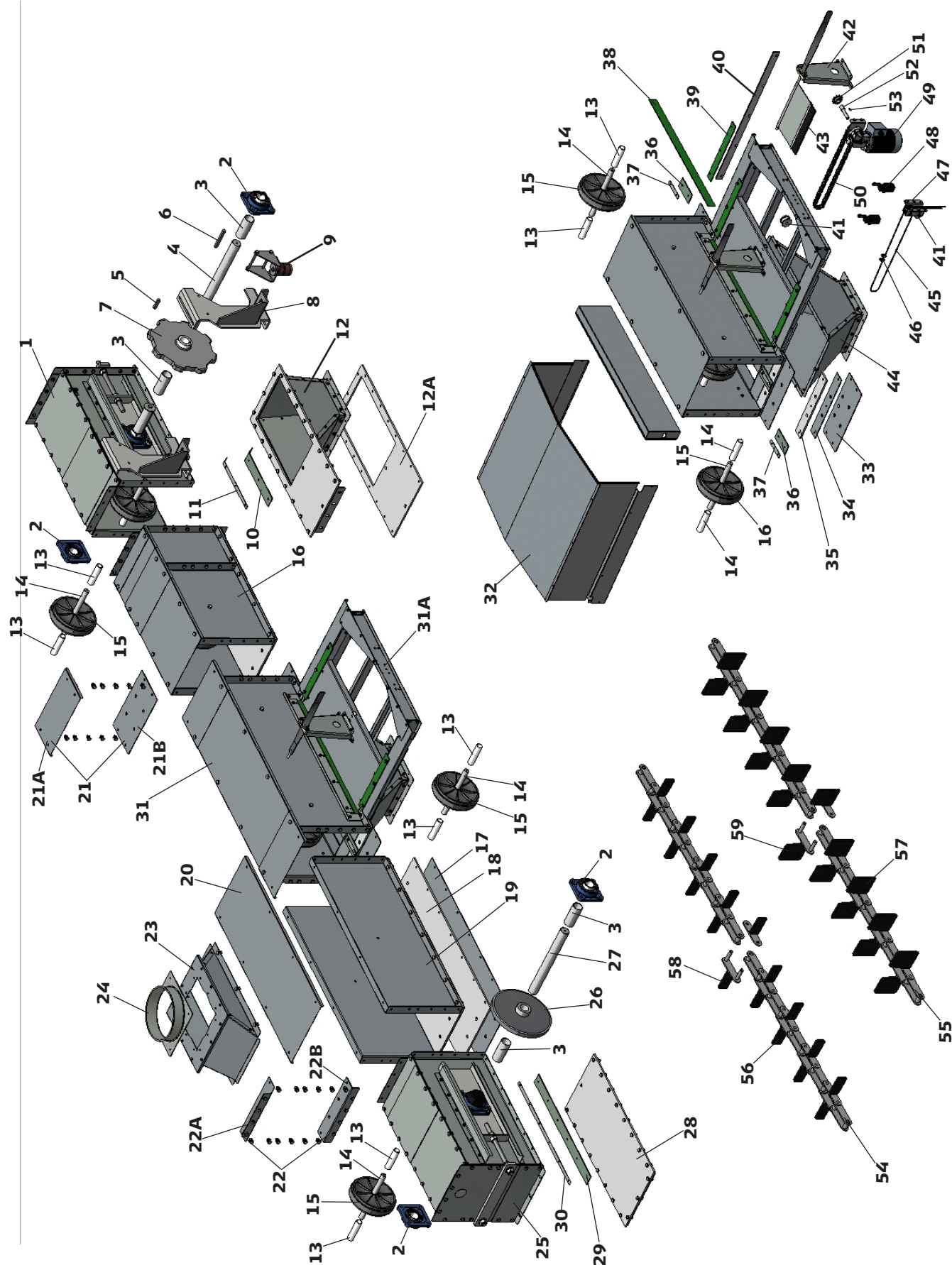
Pos.	Description	T49	Kg.	T57	Kg.
1	Blockits sensor	49222	3,90	57222	5,30

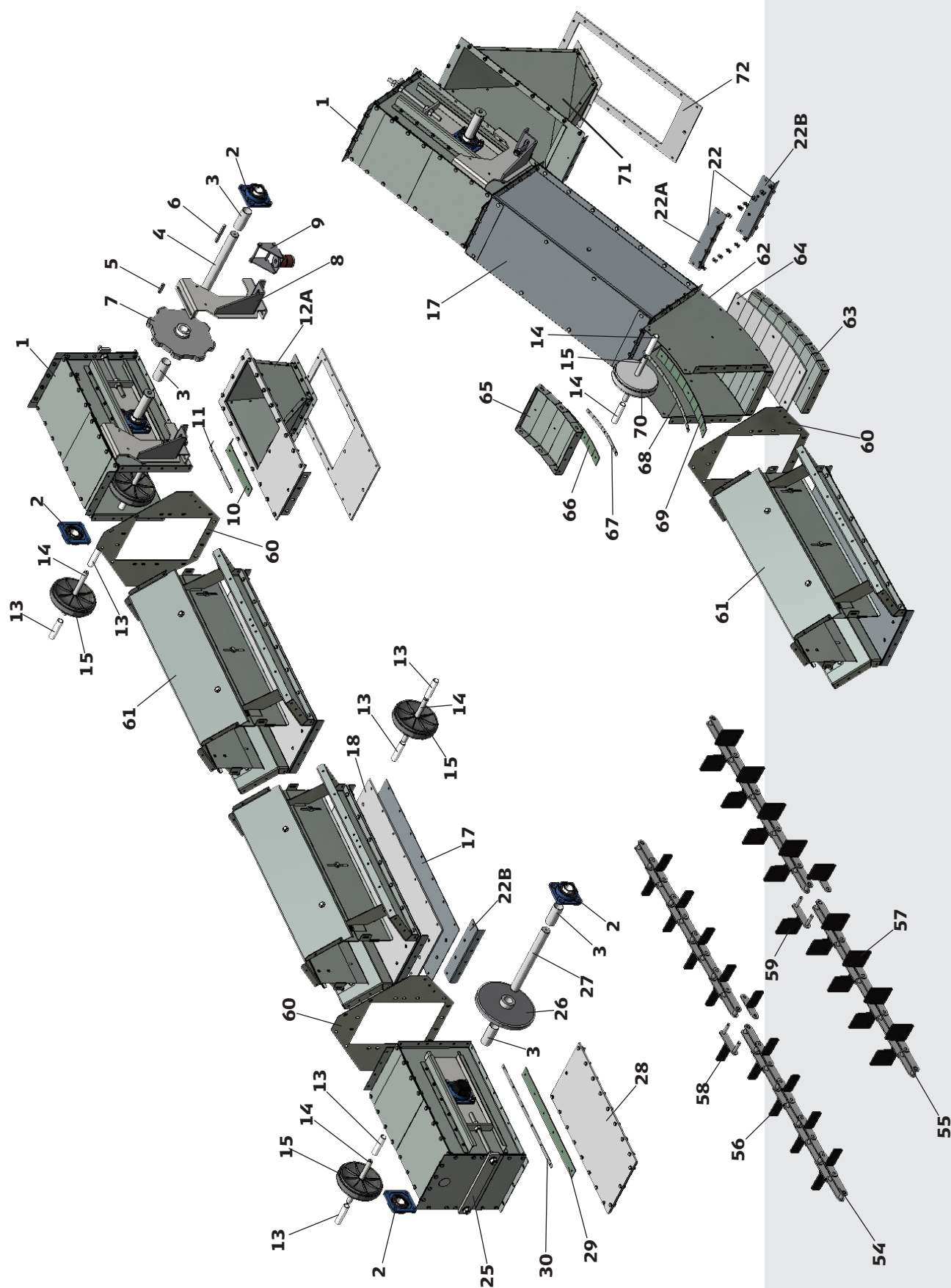
Speed control monitor



Pos.	Description	T49	Kg.	T57	Kg.
1	Speed control monitor for PLC-control (3 poles)	49200	2,10	49200	2,10
2	Speed control monitor for Relay-control (2 poles)	49201	2,10	49201	2,10

Parts T49/T57





Parts list T49/T57

Pos.	Description	T49	Kg.	T57	Kg.
1	Drive station, right	49634	79,67	57634	82,84
1	Drive station, left	49635	79,67	57635	82,84
2	Flanged bearing UCF 209-45 mm	85145	2,20	85145	2,20
3	Spacer bush for drive/tension section	49507	0,10	57507	0,14
4	Shaft for drive station d45	49509	6,90	57509	8,25
5	Feather key 14x9x63 mm	49574	0,06	49574	0,06
6	Feather key 14x9x120 mm	49573	0,12	49573	0,12
7	Sprocket for drive station	49508	16,85	49508	16,85
8	Bracket for torque arm PC100BN Right	49516	3,81	49516	3,81
8	Bracket for torque arm PC100BN Left	49622	3,81	49622	3,81
9	Torque arm for PC 100 BN	81316	1,50	81316	1,50
10	Rubber sheeting for drive/tension section	49511	0,04	49511	0,04
11	Rail for rubber sheeting	49512	0,08	49512	0,08
12	Outlethopper 90° with bottom plate for drive- and tightening section	49517	11,47	57517	13,75
	Outlethopper 90° with PEHD bottom plate for drive- and tightening section	49517-P	15,00	57517-P	17,50
12A	PEHD bottom for outlethopper 90°	49517-6	1,50	57517-6	1,80
13	Spacer bush	49513	0,06	57512	0,06
14	Shaft for chain lift wheel	49514	1,10	57514	1,50
15	Chain lift wheel	49515	1,34	49515	1,34
16	Extension 2,0m.	49760	84,40	57760	93,90
	Extension 1,0m.	49761	44,60	57761	49,80
	Extension 0,5m.	49762	26,00	57762	29,30
	Extension 0,25m.	49763	14,30	57763	16,00
	Extension 2,0m. with PEHD bottom	49760-P	91,80	57760-P	103,30
	Extension 1,0m. with PEHD bottom	49761-P	48,30	57761-P	54,50
	Extension 0,5m. with PEHD bottom	49762-P	27,90	57762-P	31,60
	Extension 0,25m. with PEHD bottom	49763-P	15,10	57763-P	17,10
17	Bottom plate for 2,0m. extension	49760-1	17,36	57760-1	22,54
	Bottom plate for 1,0m. extension	49761-1	8,68	57761-1	11,30
	Bottom plate for 0,5m. extension	49762-1	4,34	57762-1	5,64
	Bottom plate for 0,25m. extension	49763-1	2,17	57763-1	2,82
18	PEHD bottom 2,0m. extension	49760-2	6,70	57760-2	8,66
	PEHD bottom 1,0m. extension	49761-2	3,33	57761-2	4,33
	PEHD bottom 0,5m. extension	49762-2	1,67	57762-2	2,18
	PEHD bottom 0,25m. extension	49763-2	0,83	57763-2	1,08
19	Side plate for 2,0m. extension	49760-3	23,65	49760-3	23,65
	Side plate for 1,0m. extension	49761-3	12,21	49761-3	12,21
	Side plate for 0,5m. extension	49762-3	6,49	49762-3	6,49
	Side plate for 0,25m. extension	49763-3	3,63	49763-3	3,63
20	Cover for 2,0m. extension	49760-4	9,70	57760-4	18,44
	Cover for 1,0m. extension	49761-4	4,85	57761-4	6,14
	Cover for 0,5m. extension	49762-4	2,42	57762-4	3,10
	Cover for 0,25m. extension	49763-4	1,21	57763-4	1,54
21	Assembling plates with bolts for extensions	49777	3,15	57777	3,93
21A	Assembling plates for cover for extensions	49773	0,98	57773	1,24

Pos.	Description	T49	Kg.	T57	Kg.
21B	Assembling plates for bottom for extensions	49772	1,74	57772	2,26
22	Assembling plates for drive- and tightening section, with bolts	49778	2,55	57778	3,26
22A	Assembling plates for cover for drive- and tightening section	49775	0,90	57775	1,19
22B	Assembling plates for bottom for drive- and tightening section	49774	0,93	57774	1,27
23	Inlet 240x240 / 300x300	49780	7,85	57780	9,62
24	Transition piece for inlet SK250 290x290 / SK300 400x400	49680	1,70	57680	3,20
25	Tension section	49611	71,26	57611	75,13
26	Sprocket for tension section	49532	14,80	4532	14,80
27	Shaft for tension section d45	49531	5,03	57531	6,40
28	Base plate for drive and tightening section	49675	7,12	57675	9,25
	Base plate for drive and tightening section with PEHD	49675-P	10,30	57675-P	13,30
29	Rubber sheeting for tension section	49565	0,07	49565	0,07
30	Rail for rubber sheeting	49566	0,16	49566	0,16
31	Intermediate outlet with 1,0m. extension	49765	68,40	57765	75,50
	Intermediate outlet with 1,0m. extension and PEHD	49765-P	68,80	57765-P	76,20
31A	Intermediate outlet without extension	49750	31,30	57750	35,70
32	Cover for intermediate outlet	49753	21,29	49753	21,29
33	Assembling plates for bottom intermediate outlet	49776	1,35	57776	1,76
34	Base plate for intermediate outlet	49765-1	0,49	57765-1	0,64
35	PEHD bottom for intermediate outlet	49765-2	0,19	57765-2	0,25
36	Rubber sheeting for intermediate outlet	49552	0,02	49552	0,02
37	Rail for rubber sheeting	49551	0,03	49551	0,03
38	Non-fric PEDH 1000 rail for intermediate outlet	91503	0,09	91503	0,09
39	Non fric slide bar for intermediate outlet	45100-9	0,1	45100-9	0,1
40	Sliding rail for intermediate outlet PEHD 1000	49750-8	0,14	57750-8	0,17
41	Roller for pull, intermediate outlet	45100-10	0,03	45100-10	0,03
42	Brush for intermediate outlet	49114	3,35	57105	4,19
43	Brush	49550	0,30	57550	0,42
44	Outlethopper for intermediate outlet	49752	10,50	57752	12,10
45	Wire for intermediate outlet	45105-2	0,20	45105-2	0,20
46	Wirelock for 5mm wire	92105	0,02	92105	0,02
47	Bracket for manual pull, intermediate outlet	45105-1	0,15	45105-1	0,15
48	Switch with roller FR 531-M2	88004	0,08	88004	0,08
49	Worm geared motor RMI 28	81189	5,86	81189	5,86
50	Chain for intermediate outlet	49754-1	0,80	57754-1	0,80
51	Sprocket wheel 12 Z 1/2" Ø20	37014	0,04	37014	0,04
52	Drive shaft for intermediate outlet	45104-2	0,12	45104-2	0,12
53	Key 5x5x20mm	87061	0,01	87061	0,01
54	Chain running metre compl.	49120	7,19	57120	7,41
55	Chain with extra height on carriers running metre compl.	49124	7,87	57121	8,41
56	Carrier low	49640	0,06	57640	0,06
57	Carrier extra high	49641	0,12	57641	0,19
58	Connecting link low	49121	1,22	57122	1,26
59	Connecting link high	49134	1,36	57123	1,43
60	Transition piece inlet trough/extension	49558	3,56	57558	4,16
61	Inlet trough 1,0m.	49766	67,50	57766	75,00

Pos.	Description	T49	Kg.	T57	Kg.
61	Inlet trough 0,5m.	49767	38,00	57767	42,50
	Inlet trough 1,0m. with PEHD bottom	49766-P	71,20	57766-P	79,80
	Inlet trough 0,5m. with PEHD bottom	49767-P	39,90	57767-P	44,90
62	Bend 30°	49567	26,60	57567	28,90
	Bend 30° with PEHD	49567-P	33,60	57567-P	38,10
63	Bottom plate for 30° bend	49570	5,42	57570	6,91
64	PEHD bottom for 30° bend	49567-2	1,50	57567-2	2,10
65	Top plate for 30° bend	49569	3,52	57569	4,52
66	Rubber sheeting for 30° bend 340mm	49673	0,04	49673	0,04
67	Rail for rubber sheeting for 30° bend 320mm	49672	0,10	49672	0,10
68	Rail for rubber sheeting for 30° bend 562mm	49572	0,13	49572	0,13
69	Rubber sheeting for 30° bend 573mm	49571	0,08	49571	0,08
70	Returning wheel for 30° bend	49515-2	1,89	49515-2	1,89
71	Outlethopper 30° with bottom plate for drive station	49644	16,29	57644	18,60
	Outlethopper 30° with PEHD bottom plate for drive station	49644-P	19,00	57644-P	21,60
72	PEHD bottom for outlethopper 30°	49644-6		57644-6	1,10

When ordering please state type (T49-T57) and parts number.

Maintenance T49/T57



Maintenance				Log	
Description	Daily	Every 200 Hours	Yearly	Date	Initials
Check for unusual sounds	x				
Check for unusual vibrations	x				
Check for arisen leaks	x				
Check that the motor is not covered with dust	x				
Check the tensioning of the chain		x			
Check the chain for damages			x		
Retensioning of flights			x		
Retightening of motor			x		
Check motor bearings for noise	x				
Check oil level			x		
Change of gear oil			x		
Greasing of bearings		x			
Check bearings on the drives station + greasing		x			
Check bearings at the tension end + greasing		x			

Only original spare parts must be used.

Usage of not original parts leads to a loss of warranty as well as JEMA's responsibility regarding the CE marking.

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