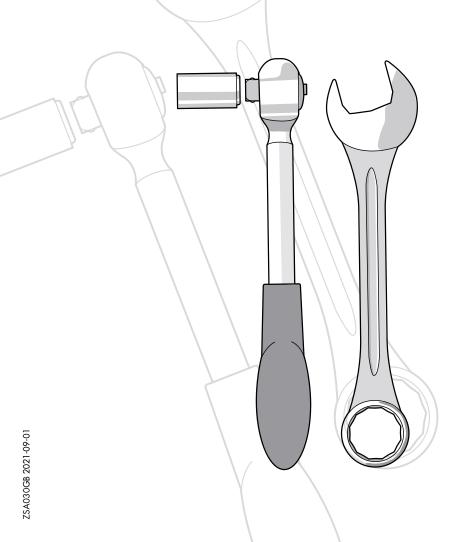






Conveyors



Thank you for choosing Skandia Elevator!

Your conveyor system must be assembled correctly and maintained thoroughly if it is to operate satisfactorily. These maintenance instructions and the separate assembly instructions for each machine must be followed for the warranty to apply.

We hope you will be pleased with your Skandia conveyor equipment for a long time.

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Safety information

The owner of the transport equipment is responsible for these maintenance instructions always being available to the maintenance technicians and engineering technicians concerned.

Inadequate maintenance and/or defective handling may lead to personal injury or damage to the conveyor equipment and/or other equipment. It can also cause malfunctions or a reduction in capacity.

Read these maintenance instructions carefully before maintenance or operation commences. If any part of these instructions should be difficult to comprehend, please get in touch with your reseller for assistance.

The safety information is presented and interpreted as follows:



riangle Warning!

Disregarding instructions given in warnings can cause serious personal injury or death.



⚠ IMPORTANT!

Ignoring the instructions given in important texts may cause damage to the conveyor equipment and/or other equipment. It can also cause malfunctions or a reduction in capacity.

NB! indicates that the text contains information that will simplify the assembly process.

General



riangle WARNING!

- Ensure that everyone responsible for assembly, electrical connection, maintenance and operation of the conveyor equipment has read and understood the instructions and safety information.
- Use protective gloves, helmet, steel-toed boots, ear defenders, protective goggles and high-vis vest when carrying out assembly, electrical connection, maintenance and operation of conveyor equipment.



- Stop the machinery and turn off electric power before attempting any type of assembly, electrical connection or maintenance work.
- Do not start the machinery without the lid, hatches, covers, guards and connections fitted in such a way they can only be opened with tools.

△ WARNING!

- The sweep conveyor's conveyor chain and forward driving wheel are not fully built-in for functional reasons. Do not remain in the vicinity of the machine while it is operating.
- The silo's centre and intermediate outlet hoppers are not protected for functional reasons. Do not remain in the vicinity of the outlet hoppers while the machine is operating.
- Connections to, from and between machinery must be permanently mounted and fully enclosed. If the design of the installation does not allow this at an outlet, finish off with a 1 m pipe.
- Ensure the machine is anchored and braced as described in the assembly instructions.

⚠ IMPORTANT!

- If the machine is being assembled outdoors, the motors and transmissions must be fitted with a weather cover.
- If a machine or part thereof in any way needs moving/dismantling, follow the directions given in the assembly instructions.
- The machine can be stopped and restarted when full of material but this option must not be used for intermittent operation.
- If a short circuit should occur, ensure that the electrical equipment is in working order before continuing operation.
- Ensure that the electrical equipment is kept free from dirt, dust, moisture and electrostatic charge.
- The machine is not designed to stand or walk on.

Electrical connection

Incorrect electrical connection may lead to personal injury or damage to the conveyor equipment and/or other equipment. It can also cause malfunctions or a reduction in capacity.

⚠ WARNING!

- All electrical equipment is to be connected by a qualified electrician.
 See separate connecting directions for electronics.
- The power switch must be permanently mounted and located to allow easy access when carrying out maintenance work.
- Ensure that sensors and switches for the pop up overloading flap/ inspection hatch (in the outlet hopper) & conveyor chain are active when in operation. NB! Certain sensors/switches are optional accessories only on certain machines.

⚠ IMPORTANT!

 Ensure the motor protection is set to the correct ampere setting for the motor.

Safety decals



△ WARNING!

The machine is supplied with safety decals on delivery. They must not be removed or defaced. If a safety decal becomes damaged, you can order a new one free of charge from Skandia Elevator AB. Specify the part number of the decal. See section below and the machine overview chapter in the machine's assembly instructions.

There are safety decals for:

- Mandatory (white symbol on round blue background).
- Forbidden (black strike-through symbol on round white background with red surround).
- Warning (black symbol on triangular yellow background with black surround).

⚠ WARNING!

The mandatory instruction, forbiddance or warning given on all safety decals must be considered or serious injury or death may follow.

Skandia Elevator machines may have the following safety decals:

Part number/Safety decal Refer to the "Machine Overview" chapter for location.	Written definition
DEK3090	Read the "Back stop" section in the elevator's assembly instructions before test starting the motor for the first time.
DEK3100	Do not place the valve with the motor side face down.
DEK3140	Changing settings and equipment is prohibited.
DEK3030	Warning for conveyor chain!
DEK3060	Warning for bucket belt!

	1
DEK3040	Warning for chain drive!
DEK3150	Warning for conveyor belt and idler!
DEK3070	Warning for rotating conveyor drive shaft!
DEK3080	Warning for rotating elevator drive shaft!
DEK3125 DEK3160	Warning for moving machinery!
DEK3120 DEK3110	
DEK3010	Warning for dust explosion!
DEK3130 MAX = 200 kg/440 lb	Warning, maximum 2 persons = 200 kg/440 lbs may be on the platform and ladders at one time!

riangle important!

All maintenance instructions in this chapter must be considered as important texts.

General

Check annually that the bolts are securely in place, that no components are missing and that there is no rust on the machinery. Replace damaged components.

Bearings

NB! All bearings are greased-for-life and do not require additional lubrication.

Return rollers chain conveyors / Belt conveyor carrying idlers, return idlers, snub idlers and tracking idlers

Check rollers/idlers annually. Replace them immediately if they are worn.

Belt conveyor return idlers, snub idlers, tail pulley and drive pulley

Ensure that material is not accumulated on return idlers, tail pulley, drive pulley or the lower pulley in the discharge tripper. Check regularly and clean if necessary. To reduce any problems, install a belt cleaner.

Transmission

Geared motor / Angle gear motor

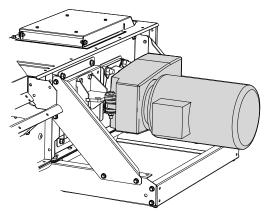
The geared motor is filled with mineral oil on delivery. For more information on oil grade on delivery, see the separate information attachment from the manufacturer Nord.

Check the oil level before taking into service and at regular intervals thereafter.

Change oil every 10,000 operating hours or at least every other year.

The interval between changes can be doubled if synthetic oil is used. When operating in severe conditions such as high humidity, aggressive environment or large temperature variations, the oil must be changed more often.

Clean the gear when changing oil.



Chain transmission - L-line

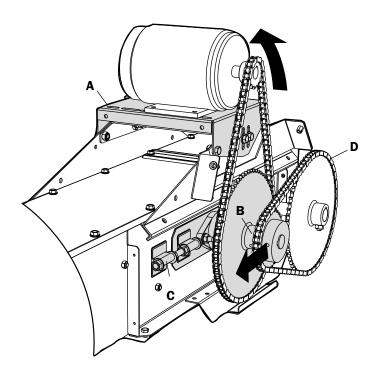
Adjust the tightness of the transmission chains continuously.

1.

Tension the intermediate shaft (B) laterally with tensioning bolts (C) so that the outer chain (D) is sufficiently tight.

2.

Tighten the motor bridge (A) by hand and secure it.



Oil the transmission chains annually.

Change transmission chains before they become noticeably worn.

Conveyor chain

Chain tensioning

Check continuously that the conveyor chain is centred, is running freely and is tensioned correctly. Also ensure that any clean out flights are intact, and replace with new ones if necessary. Check the first time after 50 operating hours and then according to the table:

Once a season or at least every 200 operating hours. L-line

Twice a year or at least every 400 operating hours. I-line

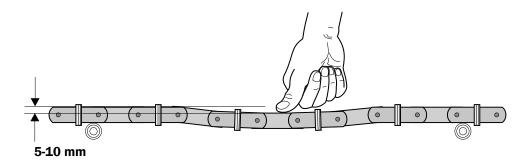
3 times a year or at least every 1000 operating hours. H-line



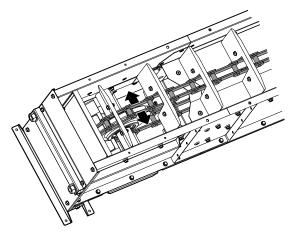
⚠ IMPORTANT!

When transport takes place in both directions, the conveyor chain tension must be checked twice as often.

On conveyors with return rollers, the conveyor chain tension is checked by pressing it down between the two return rollers. If it can be pressed down 5-10 mm it is tensioned correctly.



On conveyors with intermediate trays/guide rails, the chain tensioning is checked by pulling the conveyor chain sideways at the gear wheel in the tail end. It is too taut if it cannot be pulled sideways. Release the tension until it can be pulled slightly sideways.



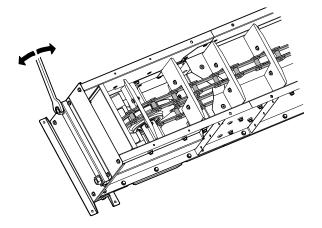
NB! If the lid and bottom plate of a bend section become warm during operation then the conveyor chain is too taut.

NB! Make a test run after adjusting and then check again.

If necessary, tighten by turning the tensioning bolts (2 or 4) in the tail end.

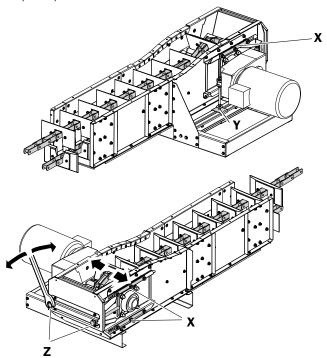
△ IMPORTANT!

Ensure the tail end shaft is at right angles to the conveyor chain.



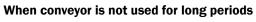
KTIBU

Undo the screws (X & Y). Adjust the tension of the conveyor chain with tensioning screws (Z) and then retighten the screws (X & Y).

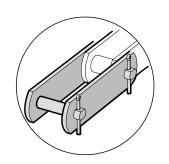


Joining links and split pins

Check joining links and split pins annually. Replace them immediately if they are worn.



Lubricate the conveyor chain with food grade oil when the conveyor is not to be used for long periods.



Conveyor belt

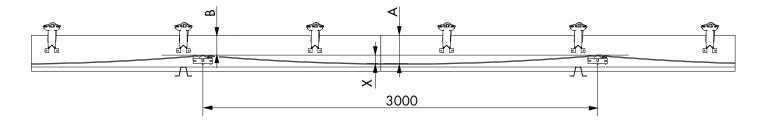
Conveyor belt steering and tension

Check continuously that the conveyor belt is properly tensioned; see picture and table below. Also check the belt steering and if adjustments need to be made, see instructions on the next page.

Check the first time after 50 operating hours and then twice a year or at least every 400 hours of operation.

⚠ IMPORTANT!

When conveying in both directions, more frequent checks of the belt steering are required.



Correct tension - Tail end with tension bolts

Measure how much the conveyor belt slackens (X) between 2 return idler sets that are 3 metres apart, X = A - B.

Motor output (kW)	BTI-xxx (mm)	Sag X (mm)
	400	39 mm
1,5 kW	500	44 mm
	650	30 mm
	400	26 mm
2,2 kW	500	40 mm
	650	30 mm
	400	19 mm
3,0 kW	500	34 mm
	650	30 mm
	400	22 mm
4,0 kW	500	37 mm
	650	30 mm
	400	18 mm
5,5 kW	500	30 mm
	650	28 mm
	400	14 mm
7,5 kW	500	23 mm
	650	21 mm

Correct tension - Tail end for counterweight tension

Use the correct counterweight.

Motor output (kW)	BTI-xxx (mm)	Counter weight (kg)
	400	170 kg
1,5 kW	500	200 kg
	650	380 kg
	400	260 kg
2,2 kW	500	220 kg
	650	380 kg
	400	340 kg
3,0 kW	500	260 kg
	650	380 kg
	400	300 kg
4,0 kW	500	240 kg
	650	380 kg
	400	380 kg
5,5 kW	500	300 kg
	650	400 kg
	400	500 kg
7,5 kW	500	380 kg
	650	520 kg

Belt steering adjustments

If the belt steering needs to be adjusted, it can be done using the following methods and prioritized accordingly. NB! Only use Methods 3 and 4 if absolutely necessary. The main principle is that you only adjust the position at one end of a idler to compensate for misalignment.

1.

Adjust the position of a return idler (M) by tapping on the bracket on one end of the idler. Start from the middle of the machine and then work toward the tail end. NB! A scribe line marks the bracket's original position.

2.

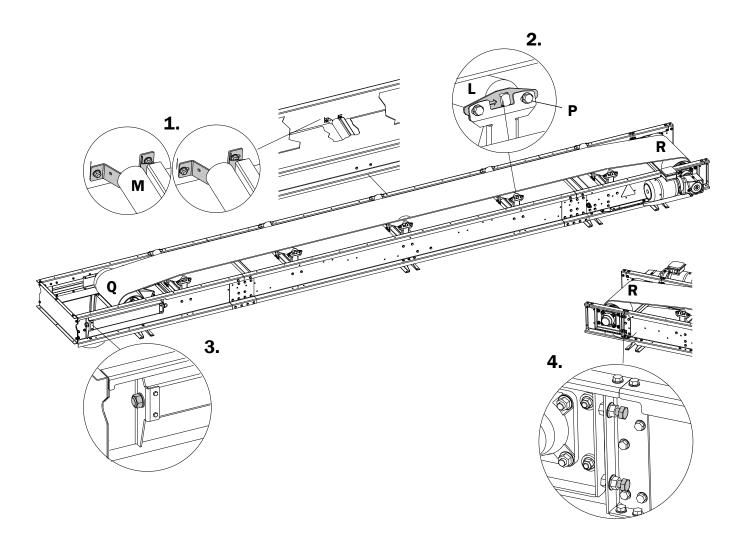
Adjust the forward-angled "knocked" position of the carrying idlers (L) that need adjustment. Loosen the screws (P), adjust the angle and tighten the screws again. The more of the arrow that is shown, the greater the angle. The adjustment can be done in both directions, and there is an arrow on each side.

3.

Adjust the position of the tail pulley (Q) by tensioning on one side.

4.

Adjust the position of the drive pulley (R) by tensioning on one side.



Forward driving end, sweep conveyor

⚠ WARNING!/IMPORTANT!

Lubricate moving parts in the forward driving end on a regular basis with food grade lubricants.

Lul	brication points	Oil	Grease
1	Ball joints		х
2	Set screw in nut cradle		х
3	Contact surfaces between the spring screws and the holes in the connecting rod	х	
4	Contact surfaces between the connecting rod's lower section and upper section	х	
5	Sliding surfaces by the spring's lower nut	х	
6	Crankshaft chain	х	

Crankshaft chain

Check the tension of the crankshaft chain (A) continuously.

If the chain needs to be tensioned:

Undo the screws (A1-8), 4 pcs, on each side plate of the forward driving end.

Tension the clamping nuts (A9-10) evenly until the crankshaft chain is moderately tensioned.

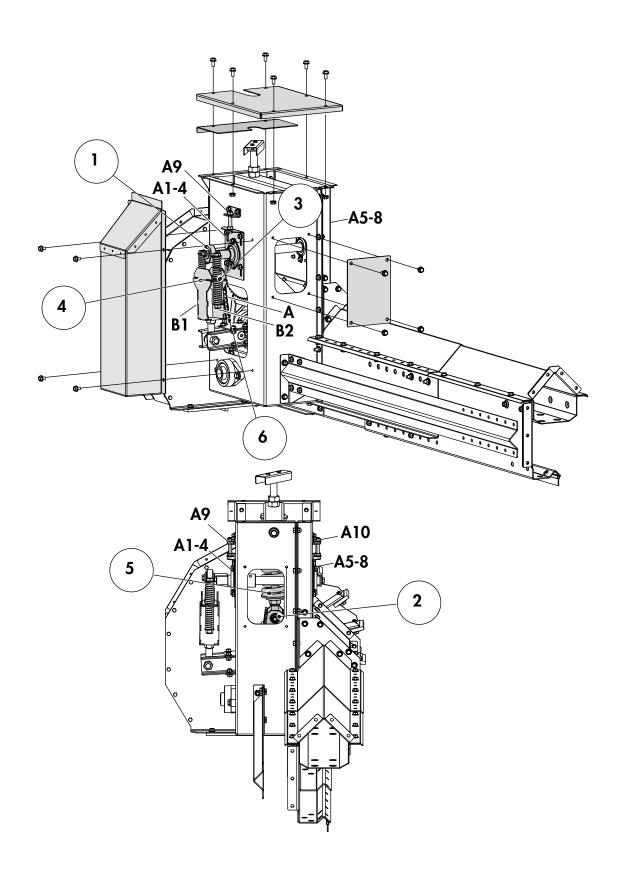
Tighten the bolts (A1-8).

Crankshaft springs

Check the crankshaft's spring screws (B1-2) if the forward driving is not working properly.

The forward driving wheel's tractive force can be increased/decreased by tensioning/slackening the connecting rod's spring screws (B1-2). If the wheel slips then the springs are tensioned too much. If the machine does not drive forward then they are too loosely tensioned.

NB! Tension/slacken evenly across the spring screws.



Poor capacity/stop

All the machines in the conveyor system must be correctly adapted to each other in order to provide the correct capacity for the given conditions.

Problems with capacity and stops can arise for different reasons:

General

Check:

- that capacity demands are realistic for the conditions in question. Capacity will be reduced if the water content in the grain is increased/raised. Reckon on a loss of capacity in the range 3-4% for every 1% water content above 15%. Especially installations with short trenches (2.5-4.5 m) will have problems if the water content is high.
- · that connections between machines are carried out correctly. See the assembly instructions for respective machine.
- · that the inlet is correctly assembled. See the assembly instructions for respective machine.
- that the ducting is sufficiently dimensioned. Ø160 mm for 30 t/h, Ø200 mm for 40 and 60 t/h, Ø250 mm for 80 and 100 t/h and Ø300 mm for 120 and 150 t/h.
- that the ducting is sufficiently inclined, greater than 45°.
- · that the machines and connections are free from waste.
- that the machines work at the correct speed in relation to the intended capacity. See the section "Technical specifications".
- that the electrician has connected the motors to the correct voltage and that the motor protection is set to the right values.
- that the machine feed rate is not too high. See the section "Technical specifications".



riangle important!

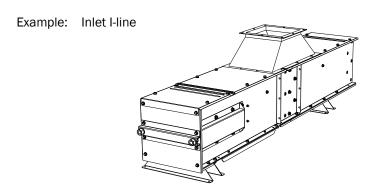
If there is a risk of overloading, ensure a pop up overloading flap (horizontal machines)/overload sensor (incline and bend machines) is connected.

If the material goes in reverse

Check:

 that the subsequent connection/machine is able to receive the capacity from the feeding conveyor.

Specific for feeding via (non-self regulating) inlet

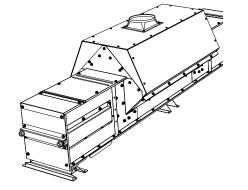


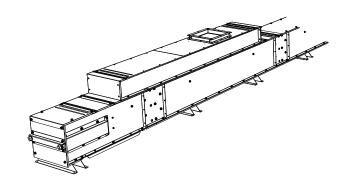
Check:

the capacity of the machine starting the chain of conveyors. A capacity of
a chain of conveyors is never higher than what is being input in the first
machine. NB! If feeding is done via an inlet from a silo/storage bin, the flow
must be controlled with a slide shutter.

Specific for feeding via (self regulating) side inlet/inlet in raised lid







Check:

• that the slide on the silo/storage bin can be fully opened.

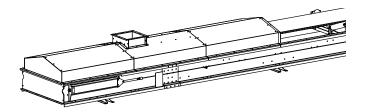
Specific for the sweep conveyor

Check:

- that the crankshaft's spring screws are correctly tightened and that the crankshaft chain is correctly tensioned. See the section "Maintenance".
- that the machine/sweep moulding is running horizontally along the silo
 floor. The machine's forward driving end, and sometimes also the drive end,
 may need to be raised/lowered. See the chapter "Settings for the forward
 driving end (height adjustment knob) and "Assembling the machine (shims
 for drive end)" in the sweep conveyor's assembly instructions..
 NB! The silo floor may have unevenness that is greater than the
 compensation available in the machine's height setting options.

Specific for belt conveyor

Example: Loading unit



Check:

the capacity of the machine starting the chain of conveyors. A capacity of
a chain of conveyors is never higher than what is being input in the first
machine. NB! If feeding is done via an inlet from a silo/storage bin, the flow
must be controlled with a slide shutter.

Machine noisy

Check:

- that overlapping lid on a conveyor with upward bend section is assembled from the drive to the tail end so that the inner joins are in the same direction as the conveyor chain return travel.
- that the conveyor intermediate trays are joined correctly so that the flights do not snag on the joins. See the assembly instructions for the conveyor.
- that the conveyor chain is not too taut or loose. See the section "Maintenance".
- that the chain sprocket in the tail end is clear of material.

Specific for the sweep conveyor

Check:

• that the forward driving end's moving parts are lubricated. See the section "Maintenance".

Plastic flight bends

Stops caused by overloading the machine can result in bent plastic flights. See the last point under the heading "General" in "Poor capacity/stop" in this section.

Check:

• that no foreign material has entered the conveyor.

Lid/bottom plate in bend section gets warm

The conveyor chain is tensioned too much. Relieve the tension as described in the section "Maintenance".

Motor stoppage

ImpulsesNB! The motors are designed for high operating temperatures.

If the motor stops:

- 1. check the cause of the stoppage. See the previous troubleshooting directions concerning this.
- 2. cut the power and clear away any blockages.

riangle important!

Do not try to remove a blockage by repeatedly attempting to restart.

3. check with the electrician that the motor has been connected to the correct voltage and that the motor protection is set to the right value.

Belt conveyor misalignment

Check:

- the belt tension and make belt steering adjustments according to section in previous maintenance chapter.
- that material is not accumulated on return idlers, tail pulley, drive pulley or the lower pulley in the discharge tripper. Check regularly and clean if necessary. To reduce any problems, install a belt cleaner.

2-3 way valve leaking

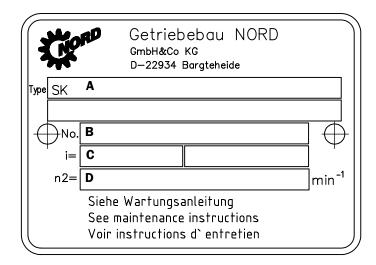
The valve is set correctly on delivery. If the setting has changed after delivery, it could cause leakage. Reset as instructed in the separate connecting directions for electronics.

Technical specifications

Geared motor rating plate/Angle gear motor

Each drive with geared motor is equipped with a rating plate that specifies:

- A. type of NORD gear.
- B. serial number.
- C. total gear ratio.
- D. nominal rpm for gear output shaft.



Density table

When transporting different material, the capacity can be converted to t/h using the volume capacity of the machine in m^3 and the density table shown below.

Material	Density kg/m³	Material	Density kg/m³
Wheat	700-800	Wheat flour	120-200
Rye	650-700	Wholemeal	400-600
Oats	500-600	Mashed cereal	300-400
Grain	600-700	Powdered milk	500-600
Rape	600-700	Grass seed	120-200
Rice	700-800	Coffee	350-450
Corn	600-700	Fishmeal	550-600
Peas	600-700	Fish pellets	500-900
Beans	700-800	Powdered lime	800-990

L-Line		ŀ	KTF & KTF/R			KTFb		
		30 t/h	40 t/h	60 t/h	30 t/h	40 t/h	60 t/h	
Capacity for 750 kg/m ³	t/h	30	48	73	27	39	58	
Capacity	m³/h	45	64	97	36	52	77	
Speed	rpm	75	106	159	75	106	159	
Chain speed	m/s	0.46	0.65	0.98	0.46	0.65	0.98	
Conveyor chain, type		S45V						
Pitch/ultimate tensile strength		mm/33 kN						
Flight, qty/m chain		3	4	6	3	4	6	
Flight, material				Plastic (P	olythene)			
Chain sprocket, teeth				()			
Intermediate section, width (lid)/height	mm			200 (25	50)/245			
Plate thickness drive, tail end	mm			1.50,	/2.50			
Plate thickness intermediate section	mm	1.50						
Plate thickness Inlet and outlet hoppers	mm	1.25						
Drive system			C	hain transmiss	on (std)/gearb	OX		

L-Line			KTA & KTB			KTAb		
		30 t/h	40 t/h	60 t/h	30 t/h	40 t/h	60 t/h	
Capacity for 750 kg/m ³	t/h	36	45	63	28	36	53	
Capacity	m³/h	48	60	84	37	48	71	
Speed	rpm	176	185	194	176	185	194	
Chain speed	m/s	1.08	1.14	1.19	1.08	1.14	1.19	
Conveyor chain, type		\$45V						
Pitch/ultimate tensile strength		mm/33 kN						
Flight, qty/m chain		3	4	6	3	4	6	
Flight, material				Plastic (P	olythene)			
Chain sprocket, teeth				(9			
Intermediate section, width (lid)/height	mm			200 (25	50)/245			
Plate thickness drive, tail end	mm			1.50,	/2.50			
Plate thickness intermediate section	mm	1.50						
Plate thickness Inlet and outlet hoppers	mm	1.25						
Drive system			C	hain transmiss	ion (std)/gearb	OX		

L-Line			KTG			KTBU	
		30 t/h	40 t/h	60 t/h	30 t/h	40 t/h	60 t/h
Capacity for 750 kg/m ³	t/h	29	41	58	30	41	59
Capacity	m³/h	39	55	77	40	55	79
Speed	rpm	88	123	176	88	123	176
Chain speed	m/s	0.54	0.76	1.08	0.54	0.76	1.08
Conveyor chain, type		S45V					
Pitch/ultimate tensile strength		mm/33 kN					
Flight, qty/m chain		3 4 6 3 4 6					6
Flight, material				Plastic (P	olythene)		
Chain sprocket, teeth				Ć)		
Intermediate section, width (lid)/height	mm			200 (25	50)/245		
Plate thickness drive, tail end	mm			1.50/	/2.50		
Plate thickness intermediate section	mm	1.50					
Plate thickness Inlet and outlet hoppers	mm	1.25					
Drive system			C	hain transmissi	on (std)/gearbo	OX	

I-Line KTIF. KTIFb & KTIFg		20/33 40 t/h	20/33 60 t/h	30/33 80 t/h	30/33 100 t/h	40/33 120 t/h	40/33 150 t/h
Capacity for 750 kg/m³ KTIF	t/h	49-54	66-71	89-96	110-117	135-148	158-164
Capacity for 750 kg/m³ KTIFb. KTIFg	t/h	41-45	56-60	76-82	94-100	111-122	145-150
Capacity KTIF	m³/h	65-72	88-95	119-128	147-156	180-197	211-218
Capacity KTIFb. KTIFg	m³/h	55-60	75-80	101-109	125-133	148-163	193-199
Speed	rpm	32-35	43-46	38-41	47-50	43-47	50-52
Chain speed	m/s	0.43-0.47	0.57-0.61	0.51-0.55	0.63-0.67	0.57-0.63	0.67-0.69
Conveyor chain, type			M80				
Pitch/ultimate tensile strength				100 mr	n/80kN		
Chain sprocket, teeth					3		
Flight, material				Steel/	Plastic		
Intermediate section, width/height	mm	200,	200/335 300/335 400/335		400/335		
Plate thickness drive, side plate/bottom plate	mm	5.00/2.50					
Plate thickness tail end and intermediate section	mm	2.50/2.50					
Inlet and outlet hoppers	mm	3.00/	′□180	3.00/	′□250	3.00/□300	3.00/□300

I-Line KTIA. KTIB. KTIBU* & KTIG		20/40(*33) 40 t/h	20/40(*33) 60 t/h	30/40(*33) 80 t/h	40/40(*33) 100 t/h	40/40(*33) 120 t/h
Capacity for 750 kg/m³ KTIA. KTIB	t/h	49-51	65-67	88-92	109-117	129-133
Capacity for 750 kg/m³ KTIBU. KTIG	t/h	40-42	54-57	77-83	91-97	113-118
Capacity KTIA. KTIB	m³/h	65-68	87-89	117-123	145-156	172-177
Capacity KTIBU. KTIG	m³/h	53-56	72-76	103-111	121-129	151-157
Speed KTIA. KTIB	rpm	48-50	64-66	58-61	54-58	64-66
Speed KTIBU. KTIG	rpm	43-45	58-61	54-58	47-50	58-61
Chain speed KTIA. KTIB	m/s	0.64-0.67	0.85-0.88	0.77-0.81	0.72-0.77	0.54-0.88
Chain speed KTIBU. KTIG	m/s	0.57-0.60	0.77-0.81	0.72-0.77	0.63-0.67	0.77-0.81
Conveyor chain, type				M80		
Pitch/ultimate tensile strength				100 mm/80kN		
Chain sprocket, teeth				8		
Flight, material				Plastic		
Intermediate section, width/height	mm	200/400(*335) 300/400(*335) 400/400(*335)				0(*335)
Plate thickness drive, side plate/bottom plate	mm	5.00/2.50				
Plate thickness tail end and intermediate section	mm	2.00/2.50				
Inlet and outlet hoppers	mm	3.00/	□180	3.00/	′□250	3.00/□300

I-Line KTIS		40 t/h	60 t/h	70 t/h		
Capacity for 750 kg/m ³	t/h	38-39	53-56	69 - 72		
Capacity	m³/h	51-52	71-75	92 - 96		
Rotation speed, drive shaft	rpm	100-102	149-159	194 - 202		
Chain speed	m/s	0.63-0.64	0.93-0.99	1.21 - 1.26		
Conveyor chain, type		S45V				
Pitch/ultimate tensile strength		41,5 mm/33kN				
Chain sprocket, teeth			9			
Number of flights per metre of chain		4	6			
Flight, material			Plastic			
Transport space, width/height	mm	150/165				
Plate thickness, transport channel/return channel	mm	3.0/2.0				
Plate thickness, outlet hoppers	mm		3.0			

I-Line BTI		BTI 400		BTI 500		BTI 650	
		40 t/h	60 t/h	80 t/h	1 00 t/h	120 t/h	150 t/h
Capacity for 750 kg/m ³	t/h	46-47	63-70	86-92	105-116	135-141	154-164
Capacity	m³/h	61-63	84-93	115-123	140-155	180-188	205-219
Rotation speed, drive shaft	rpm	126-131	175-194	143-153	175-194	126-149	143-153
Belt speed	m/s	1.65-1.71	2.29-2.54	1.87-2.00	2.29-2.54	1.65-1.71	1.87-2.00
Belt width	mm	400	400	500	500	650	650
Self supporting length	m	6	6	6	6	6	6
Connection loading unit/outlet hopper/two- way valve discharge tripper	mm	FK180	FK180	FK250	FK250	FK300	FK300
Belt type		EP250/2 3+1,5 Y					

H-Line KTH. KTHb & KTHg		20/33 60 t/h	30/33 80 t/h	30/33 100 t/h	30/40 120 t/h	
Capacity for 750kg/m³ KTH	t/h	66-70	89-96	110-117	139-146	
Capacity for 750 kg/m ³ KTHb KTHg	t/h	56-60	76-82	94-100	117-124	
Capacity KTH	m³/h	88-93	119-128	147-156	185-195	
Capacity KTHb KTHg	m³/h	75-80	101-109	125-133	156-65	
Speed	rpm	43-46	38-41	47-50	37-39	
Chain speed	m/s	0.57-0.61	0.51-0.55	0.63-0.67	0.62-0.65	
Conveyor chain, type		M80	M80-120	M80-	M160	
Pitch/ultimate tensile strength	mm/kN	100/80kN		100/80-112kN		
Chain sprocket, teeth		3	3	1	.0	
Flight, material			Sto	eel		
Intermediate section, width/height	mm		200/335		200/400	
Plate thickness drive, side plate/bottom plate	mm		6.0/8.0			
Plate thickness tail end and intermediate section	mm	2.5			3.0	
Thickness, plastic bottom	mm	8.0				
Inlet and outlet hoppers	mm	3.0/□180	3.0/	□250	3.0/□300	

KTH. KTHb & KTHg		40/40 150 t/h	40/51 200 t/h	50/51 250 t/h	50/51 300 t/h	
Capacity for 750 kg/m ³ KTH	t/h	161-176	209-226	262-284	317-338	
Capacity for 750 kg/m ³ KTHb KTHg	t/h	141-154	188-204	235-255	284-304	
Capacity KTH	m³/h	215-235	279-301	349-379	423-451	
Capacity KTHb KTHg	m³/h	188-205	251-272	313-340	379-405	
Speed	rpm	32-35	24-26	24-26	29-31	
Chain speed	m/s	0.53-0.58	0.51-0.55	0.51-0.55	0.62-0.66	
Conveyor chain, type		M80-M160 M112-M224				
Pitch/ultimate tensile strength	mm/kN	100-125/80-160 160/112-224				
Chain sprocket, teeth		10		8		
Flight, material			Ste	eel		
Intermediate section, width/height	mm	400/400	400/510	500/	510	
Plate thickness drive, side plate/bottom plate	mm	6.0/8.0				
Plate thickness tail end and intermediate section	mm	3.0 4.0				
Thickness, plastic bottom	mm	8.0				
Inlet and outlet hoppers	mm	3.0/□300	3.0/□350	3.0/□	1400	

KTH. KTHb & KTHg		50/64 400 t/h	70/64 500 t/h	70/64 600 t/h		
Capacity for 750 kg/m ³ KTH	t/h	419-472	589-663	614-663		
Capacity for 750 kg/m ³ KTHb KTHg	t/h	354-399	460-517	548-592		
Capacity KTH	m³/h	559-629	784-884	819-884		
Capacity KTHb KTHg	m³/h	472-532	613-689	731-789		
Speed	rpm	24-	-27	26-27		
Chain speed	m/s	0.64	0.64-0.72			
Conveyor chain, type		M112-M450				
Pitch/ultimate tensile strength	mm/kN		160-200/112-450			
Chain sprocket, teeth			10			
Flight, material			Steel			
Intermediate section, width/height	mm	400/640	700,	/640		
Plate thickness drive, side plate/bottom plate	mm		8.0/2.5			
Plate thickness tail end/intermediate section, side/bottom plate	mm	4.0/2.5				
Thickness, plastic bottom	mm	10				
Inlet and outlet hoppers	mm	4.0/⊔550 4.0/∪550 4.0/∪550				

H-Line KTHA. KTHB. KTHBU & KTHG		20/33 60 t/h	30/33 80 t/h	40/33 100 t/h	40/33 120 t/h
Capacity for 750kg/m ³ KTHA KTHB	t/h	65-67	88-92	109-117	129-133
Capacity for 750 kg/m ³ KTHBU KTHG	t/h	54-57	77-83	91-97	113-118
Capacity KTHA KTHB	m³/h	87-89	117-123	145-156	172-177
Capacity KTHBU KTHG	m³/h	72-76	103-111	121-129	151-157
Speed KTHA KTHB	rpm	64-66	58-61	54-58	64-66
Speed KTHBU KTHG	rpm	58-61	54-58	47-50	58-61
Chain speed KTHA KTHB	m/s	0.85-0.88	0.77-0.81	0.72-0.77	0.85-0.88
Chain speed KTHBU KTHG	m/s	0.77-0.81	0.72-0.77	0.63-0.67	0.77-0.81
Conveyor chain, type			M	80	
Pitch/ultimate tensile strength	mm/kN		100	/80	
Chain sprocket, teeth			8	3	
Flight, material			Ste	eel	
Intermediate section, width/height	mm	200/335	300/335	400/335	400/335
Plate thickness drive, side plate/bottom plate	mm		5.0/	2.50	
Plate thickness tail end and intermediate section	mm	2.0 / 2.00			
Thickness, plastic bottom	mm	8.0			
Inlet and outlet hoppers	mm	3.0/□180	3.0/	⊐250	3.0/□300

H-Line KTHA. KTHBU & KTHG		40/51 150 t/h	50/64 200 t/h	
Capacity for 750 kg/m ³ KTHA	t/h	168-175	213-222	
Capacity for 750 kg/m ³ KTHBU KTHG	t/h	148-151	198-202	
Capacity KTHA	m³/h	224-233	284-296	
Capacity KTHBU KTHG	m³/h	197-201	264-269	
Speed KTHA	rpm	50	-52	
Speed KTHBU KTHG	rpm	47-48		
Chain speed KTHA	m/s	0.83-0.87		
Chain speed KTHBU KTHG	m/s	0.78-0.80		
Conveyor chain, type		M80-M160		
Pitch/ultimate tensile strength	mm/kN	100-125	5/80-160	
Chain sprocket, teeth		8.	10	
Flight, material		Steel/	Plastic	
Intermediate section, width/height	mm	400/510	500/510	
Plate thickness drive, side plate/bottom plate	mm	8.0/2.5		
Plate thickness tail end/intermediate section, side/bottom plate	mm	4.0/2.5		
Thickness, plastic bottom	mm	8.0		
Inlet and outlet hoppers	mm	3.0/□300	3.0/□350	

