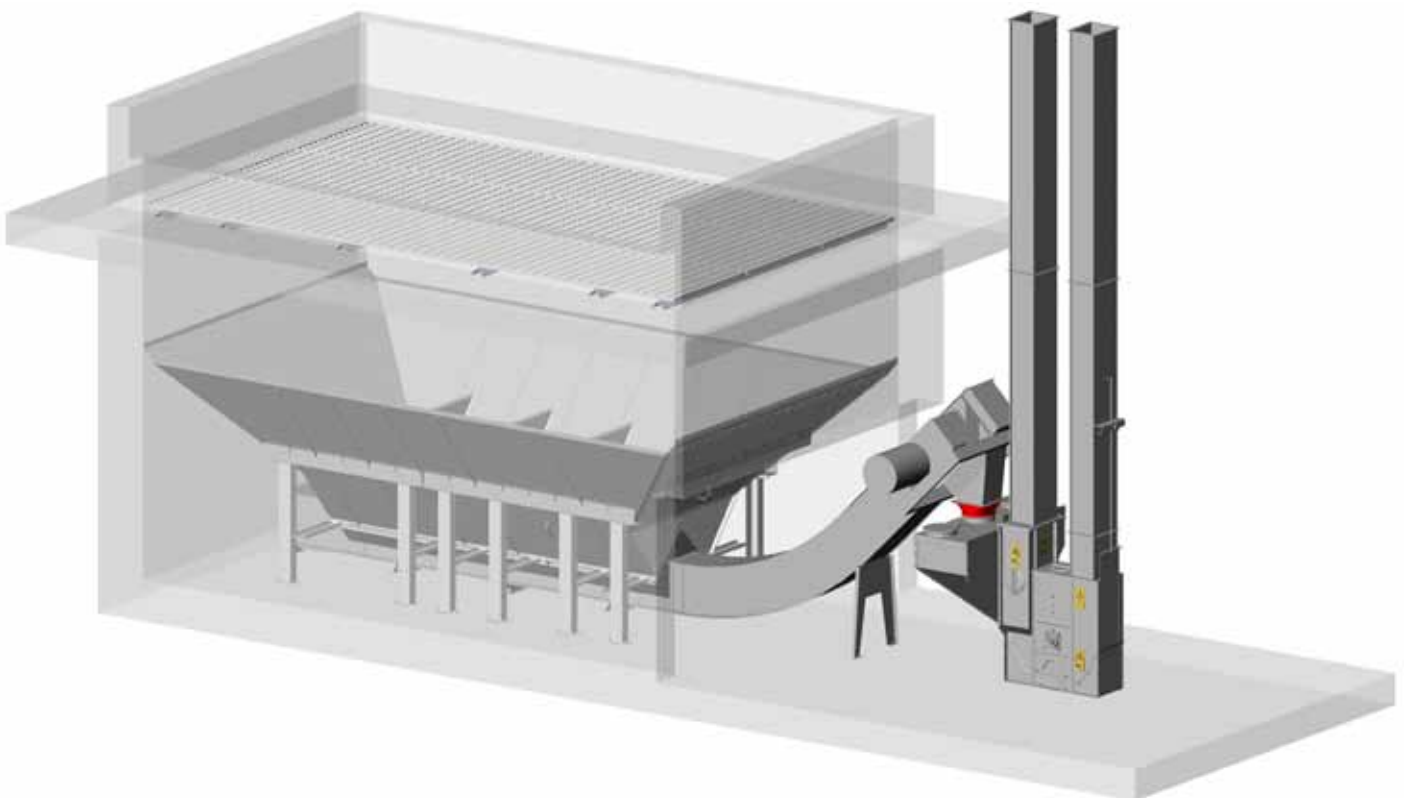


# Installation and Operating Instructions

Intake pit with  
Skandia conveyors

408115 (en) 09-2021



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**Read the Installation and Instruction Manual carefully before installing the hopper and putting it into operation.**

## **Safety**

Follow the local instructions for occupational safety.

When assembling, take into account that the plates are large and heavy. Two fitters and a decent lift are minimum requirements. The assembly can be carried out using ordinary tools.

## **Intake pit with Skandia conveyor**

The intake pit is designed for the conveyors Skandia KTG, KTIG 20-40, KTIG 30-40 and KTIG 40-40. The concrete foundation serves as a support structure for the intake pit. The support beams or overpass beams for the grate shall be attached to the foundation. The width of the intake pit is always 3 metres, and its length is 3, 4, 5, 6, 8 or 10 metres.

The model of the conveyor, the adapter parts (if any) and the set height of the legs must be observed during assembly.

One way to assemble the intake pit and attach it in its place is presented in these instructions.

**NOTE!** The sheet metal parts must be stored in a dry area, protected against rain, to prevent water from getting between the plates, which would induce build-up of white rust.



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## Hopper pit (foundation)

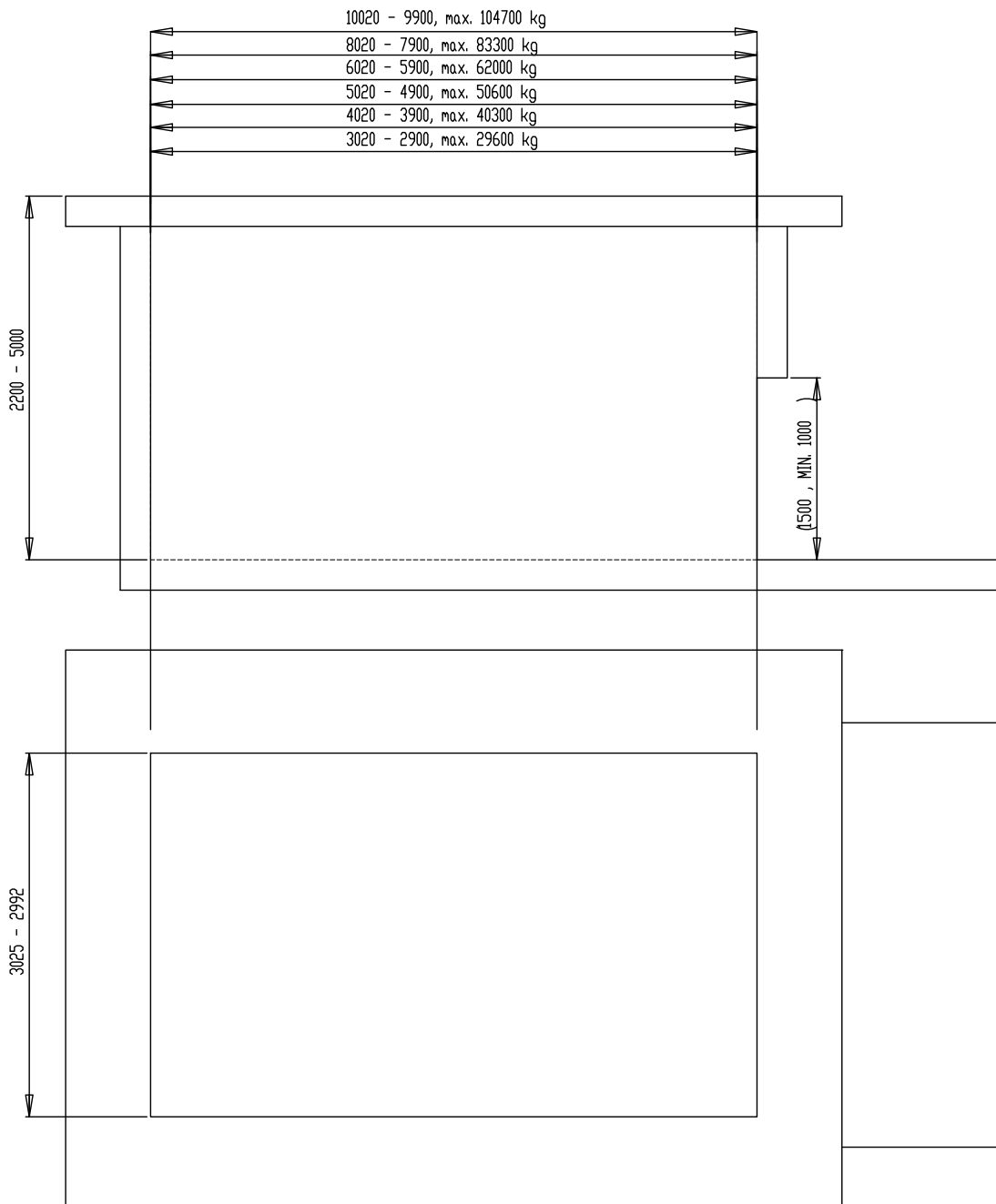
The intake pit with conveyor is designed to be installed in a concreted hopper pit. When planning the pit, it is advisable to design openings that provide access to underside of the hopper.

The dimensions of the hopper are to some extent adjustable, enabling the hopper to be fitted even into a pit, that differs slightly from the nominal size.

Attach the upper edge of the hopper either using expander bolts or by welding to the bond plates, set in the concrete. Attach the legs to the bottom using expansion bolts or by welding to the bond plates.

The hopper's legs do not have to stand on a level surface – as necessary, their length can be adjusted by means of pieces of sheet metal, for example.

Fig. 1: Basic dimensioning of the intake pit

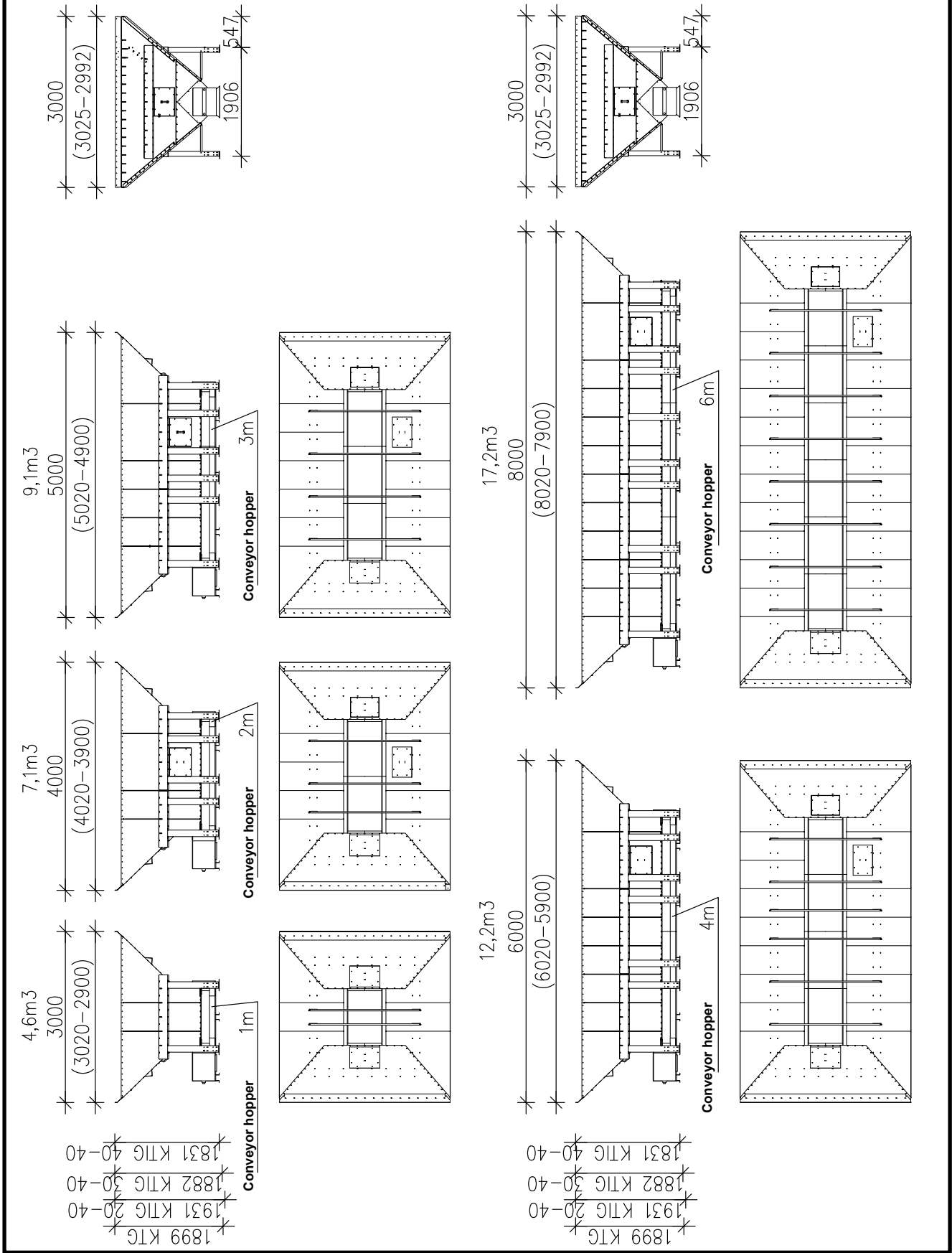


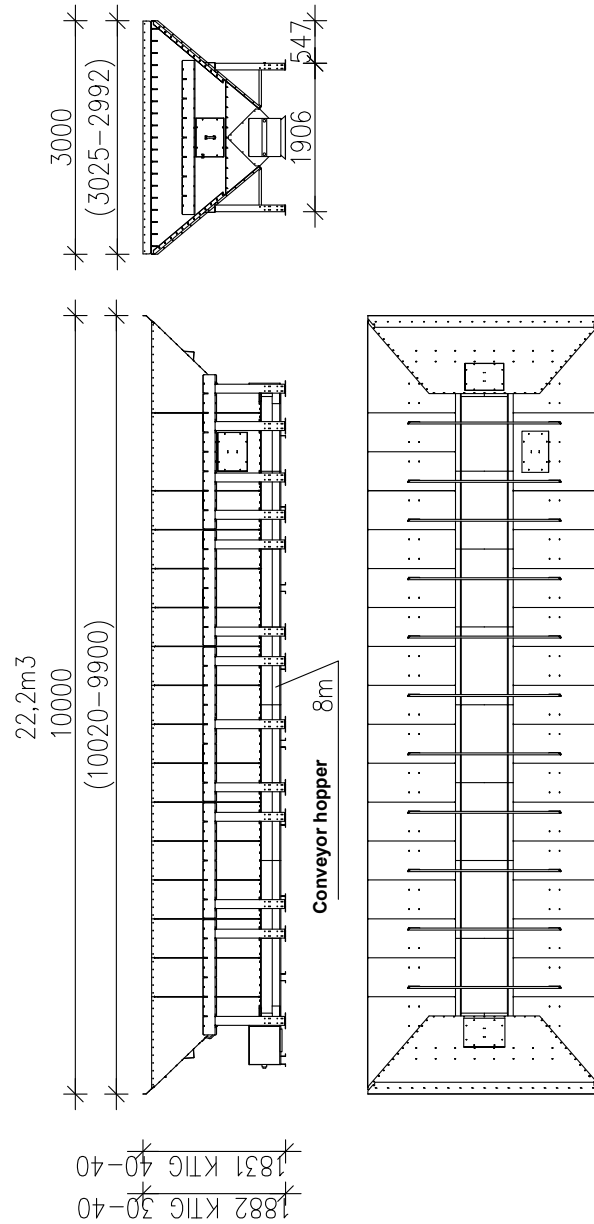
The load subjected to the foundation by the grain:

INTAKE HOPPER, WIDTH x LENGTH	3x3	3x4	3x5	3x6	3x8	3x10
The volume of a cone (m <sup>3</sup> )	4,6	7,1	9,1	12,2	17,2	22,2
Foundation height (m)	5	5	5	5	5	5
Total volume (m <sup>3</sup> )	32,9	44,8	56,2	68,7	92,6	112,2
Load (kg), grain weight 900 kg/m <sup>3</sup>	29574	40302	50580	61848	83304	104760



Fig. 2: Dimensions of different conveyor models, and the lengths of the in-feed funnels







## Spare parts

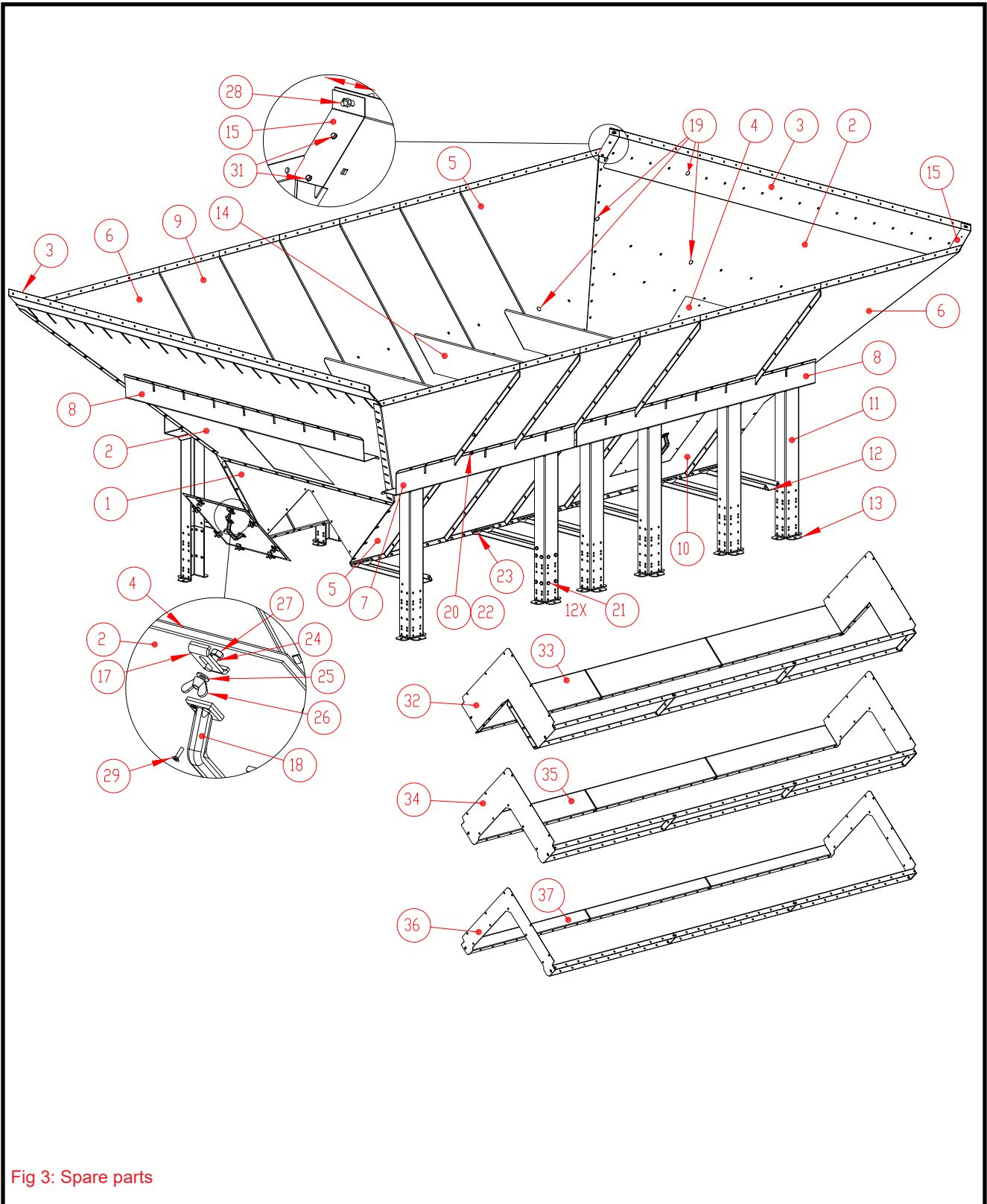


Fig 3: Spare parts





Part	Item	Denomination	Pcs 3X3	Pcs 3X4	Pcs 3X5	Pcs 3X6	Pcs 3X8	Pcs 3X10	Weight
1	A75667	DRY PIT SKANDIA END BOTTOMM16	2	2	2	2	2	2	8,8
2	A75668	DRY PIT SKANDIA END DIAGONAL M16	2	2	2	2	2	2	70,6
3	A75669	DRY PIT SKANDIA END TOP M16	2	2	2	2	2	2	17,5
4	A75670	DRY PIT SKANDIA MANH REAR M16	2	3	3	3	3	3	4,4
5	A75671	DRY PIT SKANDIA SIDE END LEFT M16	2	2	2	2	2	2	27,5
6	A75672	DRY PIT SKANDIA SIDE END RIGHT M16	2	2	2	2	2	2	27,5
7	A75673	DRY PIT SKANDIA BEAM L=1500 M16	2	4	2	6	6	6	10,0
8	A75674	DRY PIT SKANDIA BEAM L=2000 M16	2	2	4	2	4	6	13,4
9	A75675	DRY PIT SKANDIA SIDE PLATE 500 M16	2	4	8	12	20	28	23,3
10	A75676	DRY PIT SKANDIA SIDE PLATE 1000 M16	-	1	1	1	1	1	44,5
11	A75677	DRY PIT SKANDIA LEG M16	4	10	12	14	20	26	5,8
12	A75678	DRY PIT SKANDIA LEG SUPPORT M16	4	10	12	14	20	26	2,0
13	A75679	DRY PIT SKANDIA ADJUSTMENT LEG M16	4	10	12	14	20	26	2,0
14	A75680	DRY PIT SKANDIA TENSION SUPPORT M16	2	3	4	6	8	11	10,5
15	A75681	DRY PIT SKANDIA CORNER COVER M16	4	4	4	4	4	4	0,2
16	800271	SEAL MASTIC GREY 310 ML	1	2	2	2	2	3	0,2
17	400280	TOP SECTION COVER HOLDER	16	24	24	24	24	24	0,1
18	119034	HANDLE PLASTIC LIGHTGREY PISLA 805 10100550	2	3	3	3	3	3	0,1
19	107908	SCREW LOCK ZN M10X20 DIN603 8.8	192	214	214	236	280	324	
20	111550	WASHER M 10 DIN125 ZN	192	214	214	236	280	324	
21	102195	BOLT HEX ZN 8.8 10X16 AM DIN933	192	314	314	436	680	924	
22	110560	NUT M10 ZN 8 DIN934	384	528	528	672	960	1248	
23	101810	BOLT HEX ZN 8.8 8X16 AM DIN933	75	115	115	155	235	315	
24	104264	SCREW COACH SCREW 8X30AM 10.9Z ISO7380	25	25	25	25	25	25	
25	111540	WASHER M 8 DIN125 ZN	25	25	25	25	25	25	
26	111020	NUT WING M8 ZN DIN315	25	25	25	25	25	25	
27	110540	NUT M8 ZN 8 DIN934	105	140	140	175	245	315	
28	131024	EXPANDER BOLT KA 8X 75	110	140	140	170	230	290	
29	103611	SUNK SCREW CROSS GROOVE 5X16 AM ZN	13	13	13	13	13	13	
30	110520	NUT M5 ZN 8 DIN934	13	13	13	13	13	13	
31	107523	DRILL SCREW 6HEX 5,5X19 ZN DIN7504-K	10	10	10	10	10	10	
		<b>FITTINGS KTG</b>							
32	A75682	DRY PIT SKANDIA FIT END PART KTG M16	2	2	2	2	2	-	3,5
33	A75683	DRY PIT SKANDIA FIT SIDE PART 1000 KTG M16	2	4	6	8	12	-	4,1
		<b>FITTINGS KTIG 20-40</b>							
34	A76807	DRY PIT SKANDIA FIT END PART KTIG 20-40 M16	2	2	2	2	2	-	2,6
35	A76808	DRY PIT SKANDIA FIT SIDE PART 1000 KTIG 20-40 M16	2	4	6	8	12	-	3,3
		<b>FITTINGS KTIG 30-40</b>							
36	A75685	DRY PIT SKANDIA FIT END PART KTIG 30-40 M16	2	2	2	2	2	2	1,6
37	A75686	DRY PIT SKANDIA FIT SIDE PART 1000 KTIG 30-40 M16	2	4	6	8	12	16	2,1



## Installation

The assembly drawings present the assembly of the 3x4 model. In the 3x4 model the support beam must be cut, whereas in the other models it is of standard measure. The places for the support beams, L=1500 and L= 2000, and positioning of the legs and the draw bars.

The assembly shall be carried out without using any sealing compounds. The sealing of the corners, bevelling of the upper edge, etc., shall be carried out last.

The ball-heads of the bolts shall be placed in the grain space.

The manhole hatches shall be assembled as shown in the spare parts drawing.

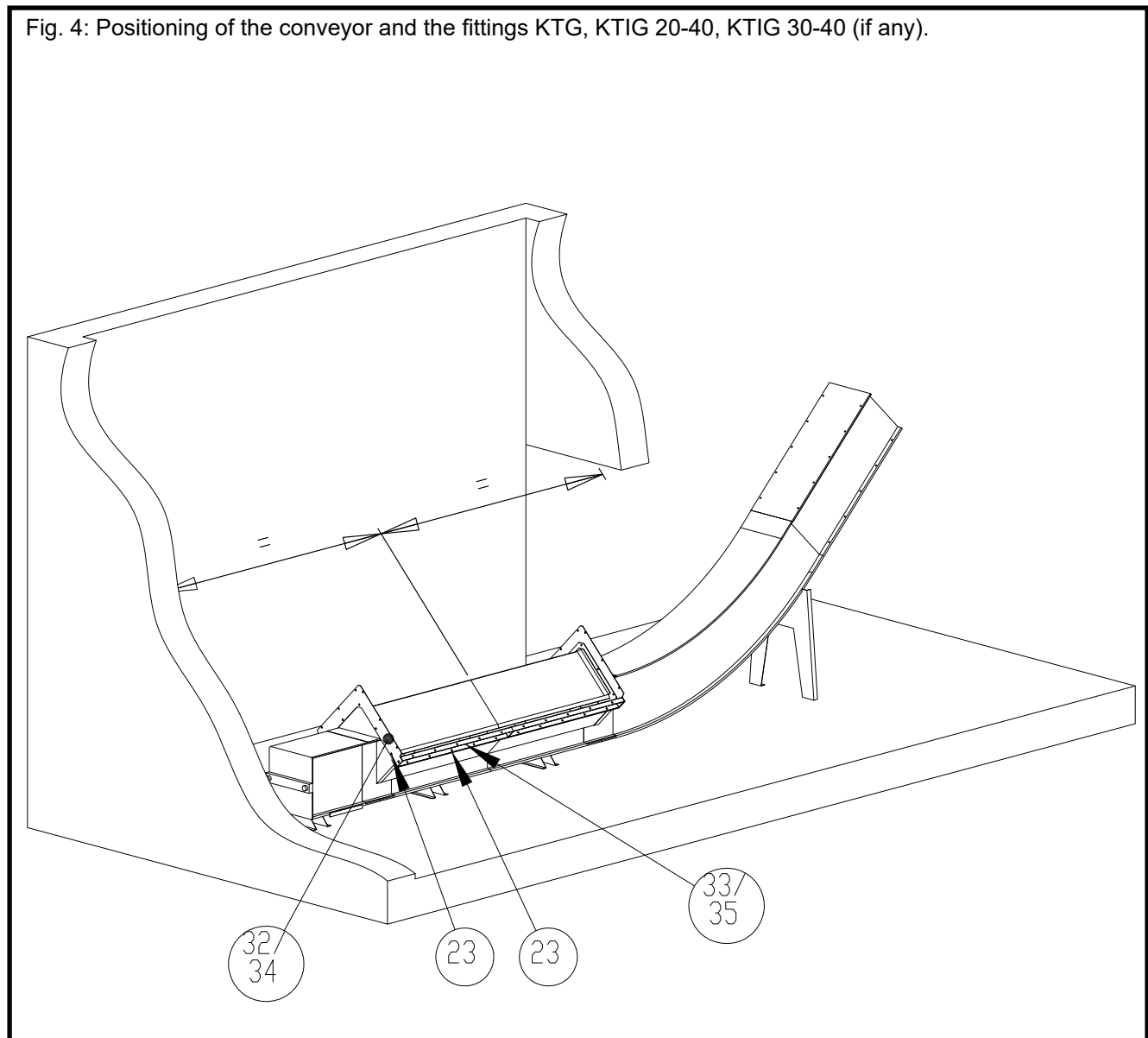


Fig. 5: Attach the end plate (1) to the conveyor by M8x16 bolts. The beam (8) (L=2000) and the top plate (3) shall be attached to the diagonal end plate by M10x20 square neck bolts (19) using washers on each bolt. Leave the joints with long holes loose (adjustment reserve). The plate will remain leaning against the foundation wall.

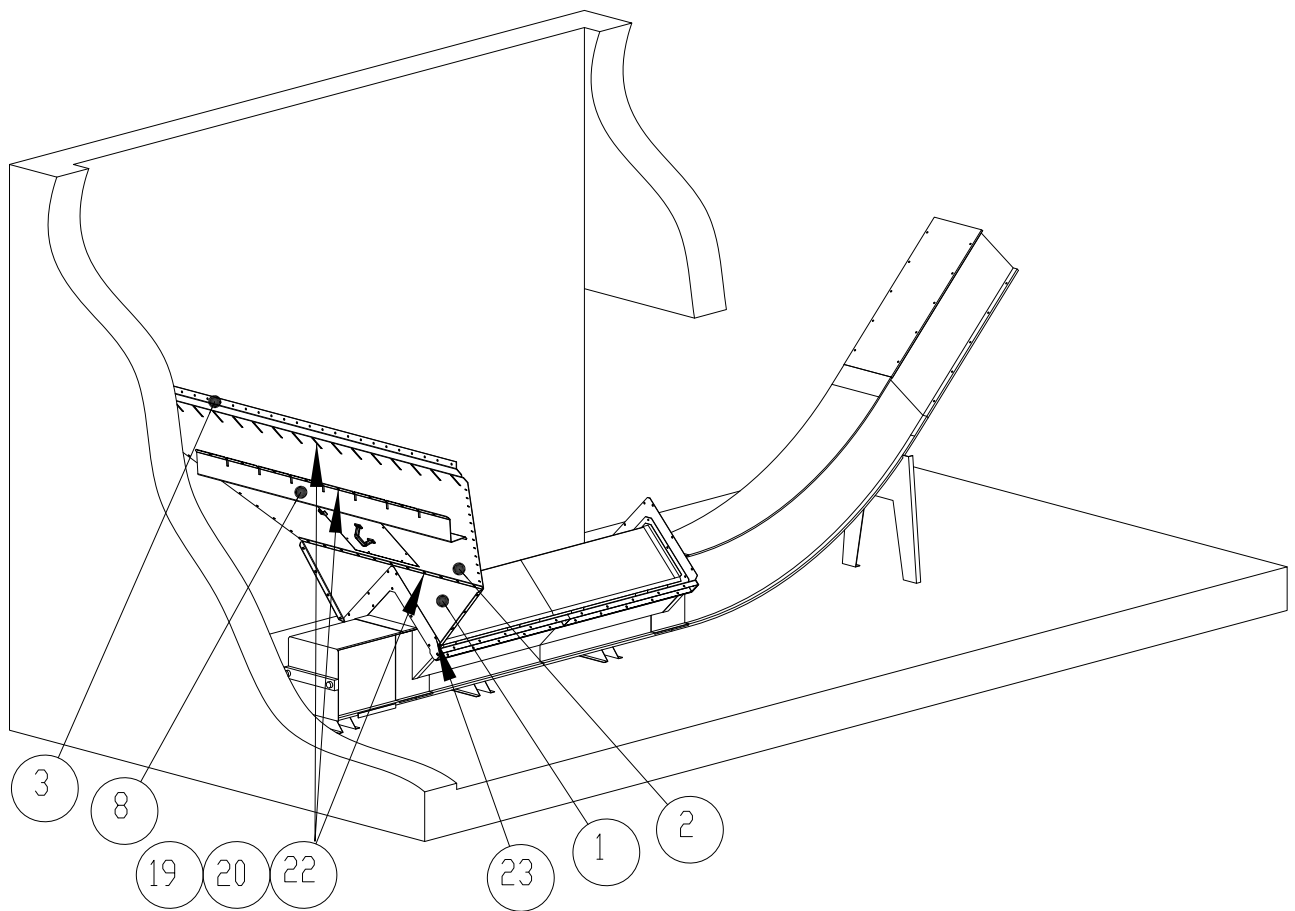


Fig. 6: The end-plates (5) and (6) of the side shall be placed on opposite sides. At this stage, insert just a bolt in the joint at the lower edge, and install the support for the leg later. Leave the joints with long holes loose (adjustment reserve).

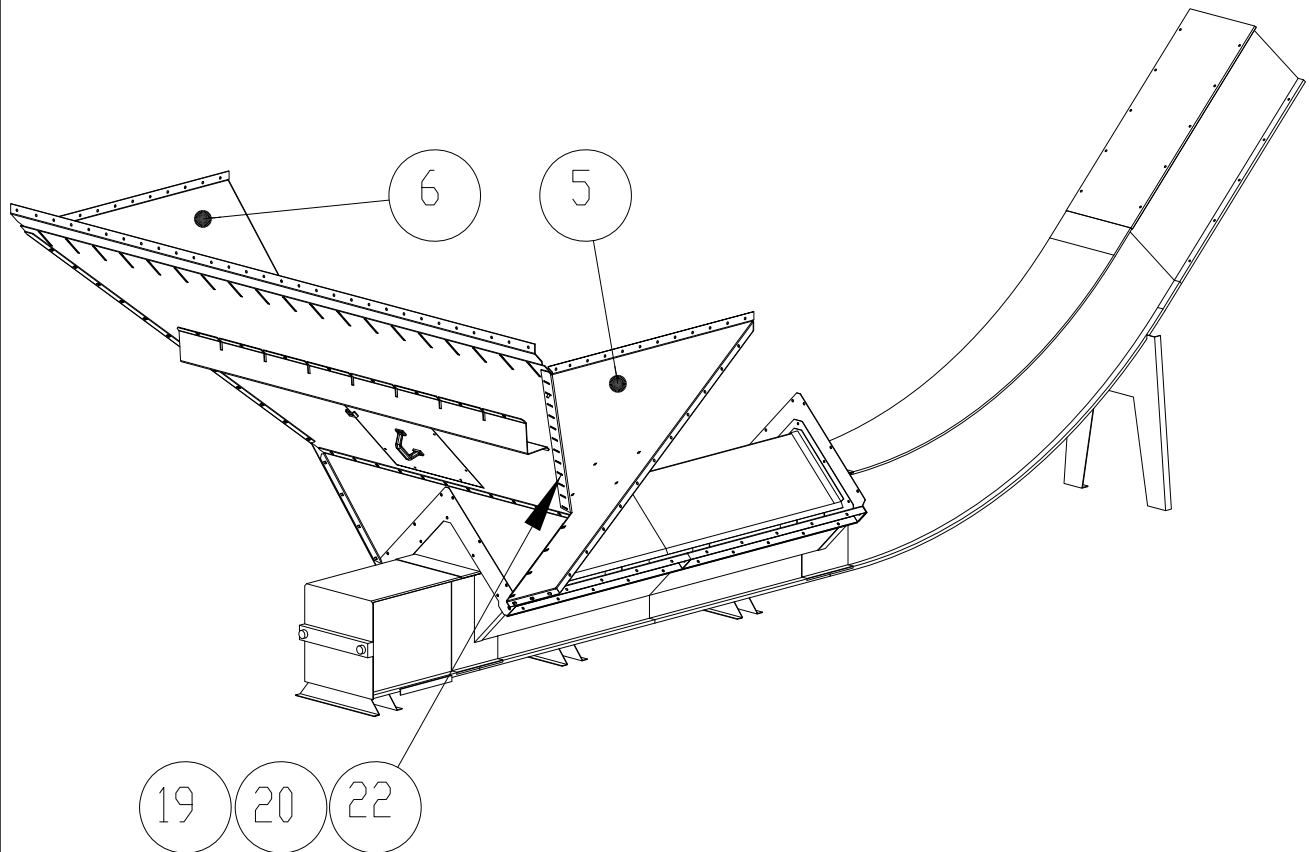


Fig. 7: Install the side-plates in place and tighten the vertical joints of the side-plates. At this stage, insert just a bolt in the joint at the lower edge, and install the support for the leg later.

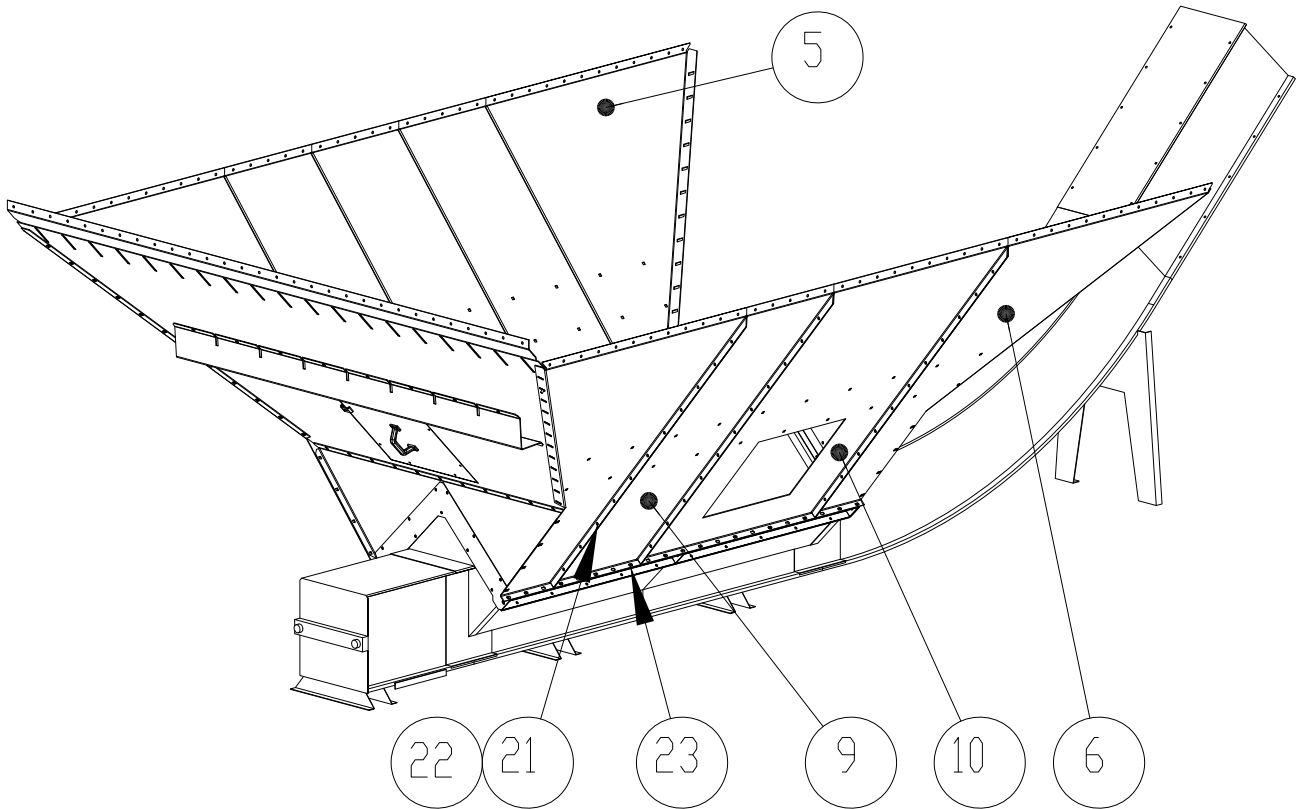


Fig. 8: Fix the legs to the support beams of the sides, the drawing is only indicative. See the positions of the legs for intake pits of different lengths in the drawing 2. Bolts M10x16 (21).

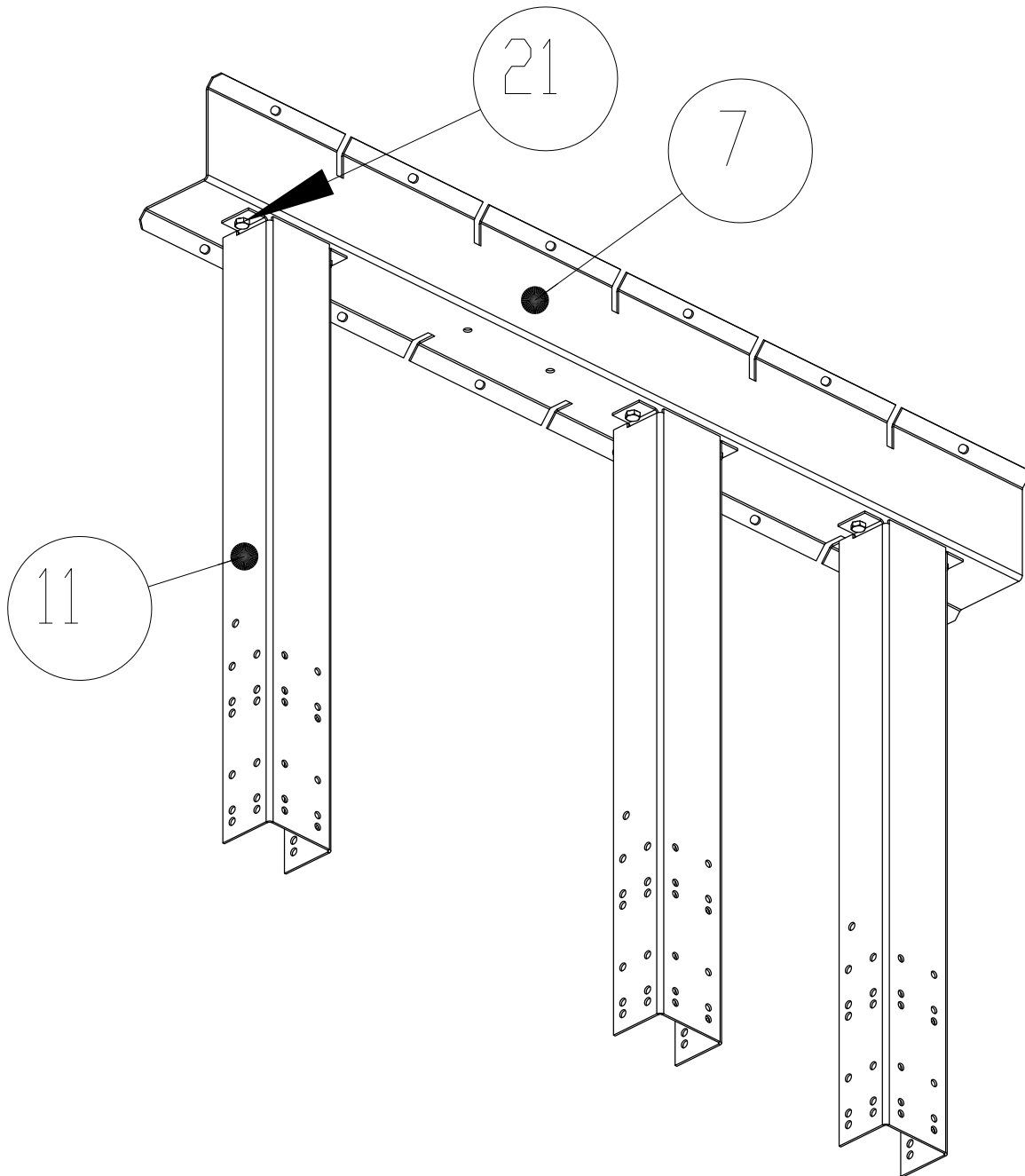


Fig. 9: Install the end-plate in place, and install the support beam. Leave the joints with long holes loose (adjustment reserve). Install the beams with legs and the draw bars in place, and tighten the bolts. In the 3x4 intake pit, cut the beam.

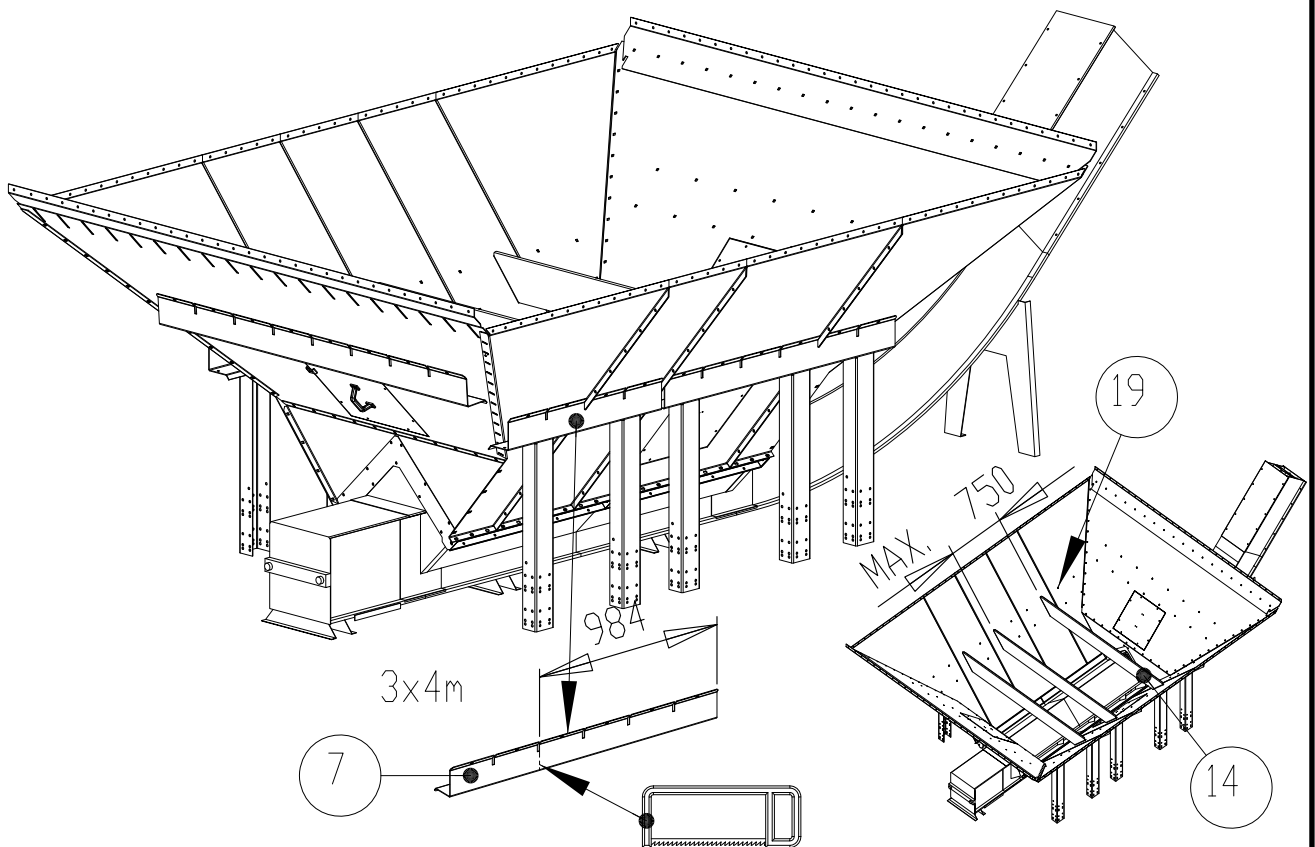
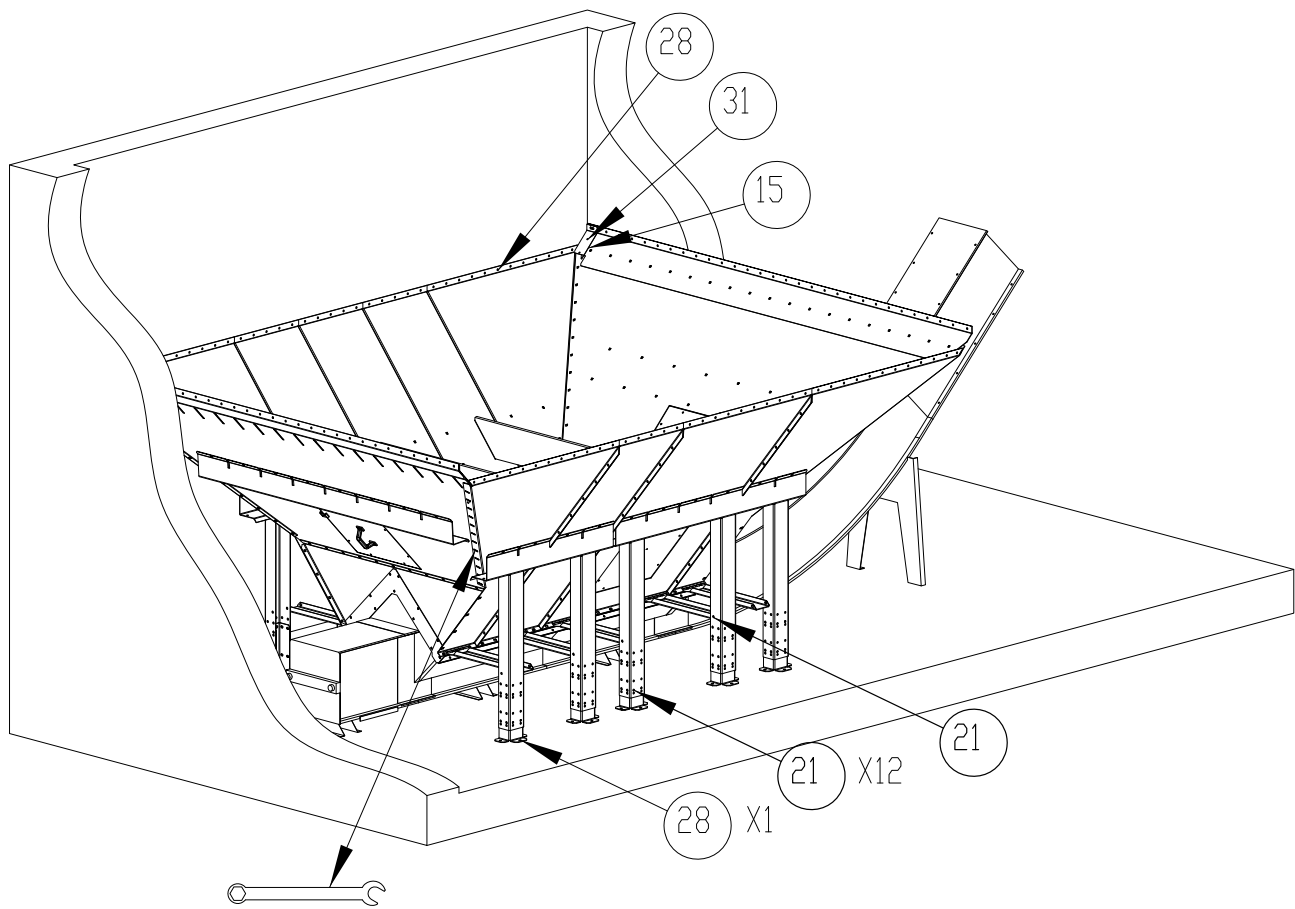




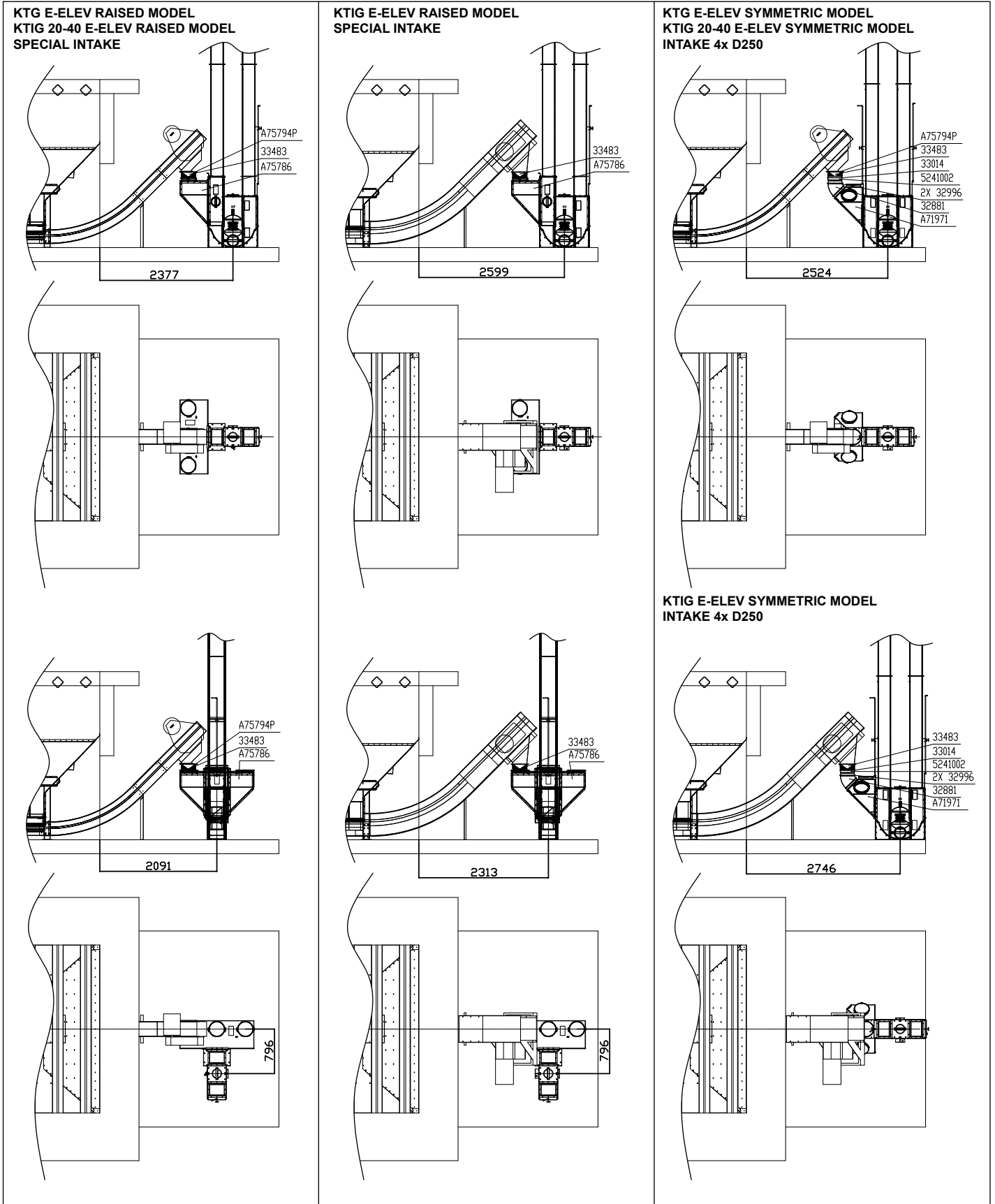
Fig. 10: Install the supports (12) on the legs and attach the inner end of the supports to the lower edge of the intake pit by 2 pcs. of M8x16 bolts. Depending on the model, install the adjustment leg at the prescribed height; bolts M10x16 (21), 12 pcs./leg. The legs of the intake pit must rest on a level surface; if necessary, adjust by using pieces of sheet metal.





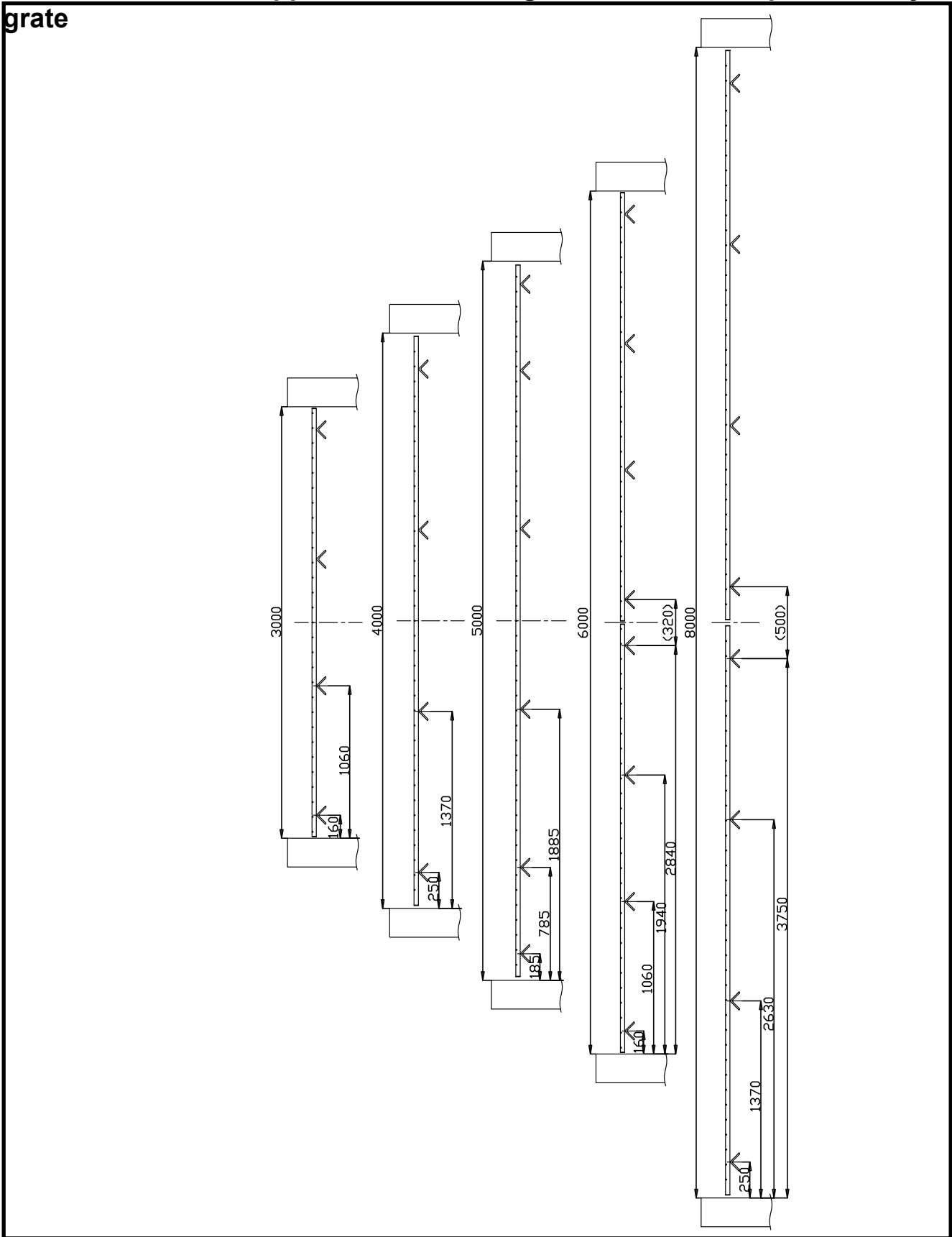


## Installing the elevator, feeding from the front





# Distribution of the support beams of the grate on the intake pit, walkway grate





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## EU Declaration of Conformity

**ANTTI-TEOLLISUUS OY**  
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declares that

### **INTAKE PIT WITH SKANDIA CONVEYOR**

conform with the provisions of the following directives:

- **Machine Directive 2006/42/EU**

**Kuusjoki 04.01.2016**

**Kalle Isotalo**  
**Managing Director**

