

# MOUNTING INSTRUCTION



## LIQUID FEEDING TANK WATER TANKS (4200, 6000 L)



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**DANISH DESIGN | GERMAN QUALITY | GLOBAL EXPERIENCE**

## MOUNTING INSTRUCTION FOR WATER TANK FOR LIQUID FEEDING

This mounting instruction contains information about how to assemble and install the water tanks used for liquid feeding. Accessories for the tanks (e.g. acid evaporator, bacteria preventing UV-light and rotating high pressure cleaner) are described in separate instructions.

Mounting instructions for mixing tanks and residual tanks are also found separately.

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**WATER TANKS**

The water tanks for liquid feed comes in two sizes with a capacity of 4200 and 6000 L.



Water tank 4200 L.



Water tank 6000 L.

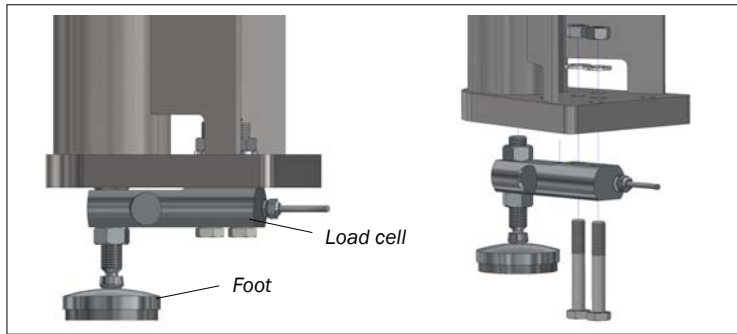
## OVERVIEW OF THE WATER TANK

1. Ventilation
2. Hatch
3. Level tilting device
4. Fiberglass container, top part
5. Fiberglass container, rings (number of rings depends on the size of the tank (1-2 stk.))
6. Bottom part of the tank (for the fiberglass container)
7. Feet
8. Inspection cap
9. Outlet connection and ball valve

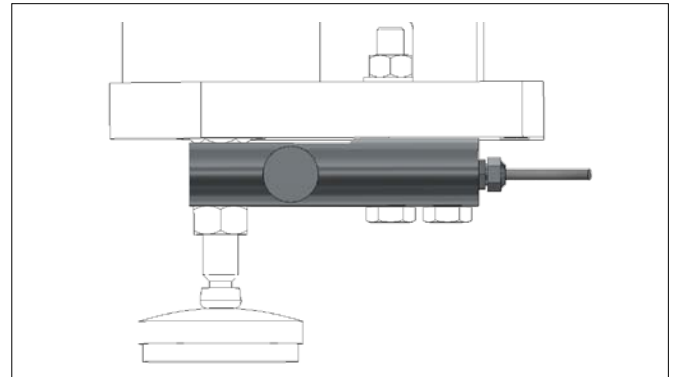


### MOUNTING OF LOAD CELLS

The load cells is mounted under the feet of the bottom part of the tank. Data from the load cells is registered by a load cell amplifier mounted on the wall near the tank.



Mounting of load cells



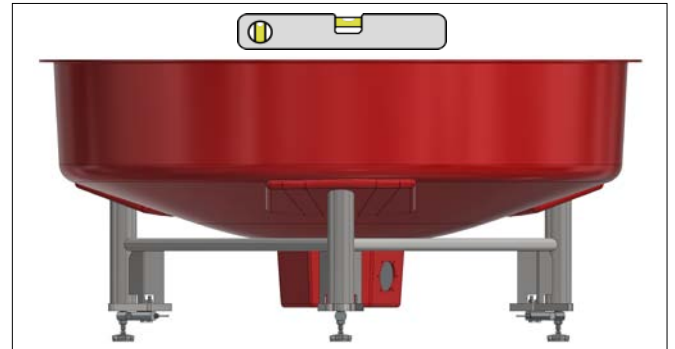
Be sure to place the load cell correctly. The completely flat side must face down

LOAD CELL KIT			
	Item no.	Description	PCS.
	0139-505	LOAD CELL KIT VF4	
1	0139-443	LOAD CELL 5510F 2000 KG	1
2	0139-444	MACHINE SHOE TYPE HJ-7C DSI	1
3	32900015	MACHINE SCREW M12X80 FZB QUAL. 10.9 DIN 931	2
4	33900028	NUT M12 A4-80 DIN 934	2
5	35600080	FLAT WASHER Ø12X13/24/2,5 A2 DIN 125 A	2

### POSITIONING OF THE TANK

The bottom part of the tank is placed on the floor. The floor should be approximately level.

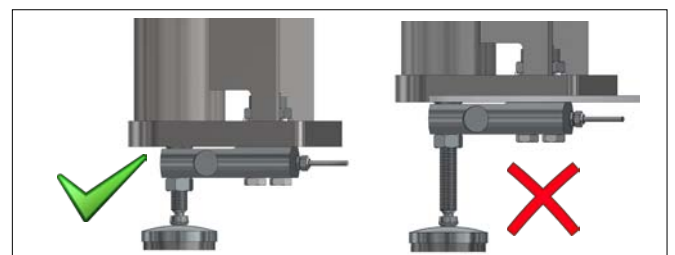
Be sure to notice how the bottom part is placed in relation to the pump and outlet.



Bottom part of tank with feet

### LEVELING THE TANK

Adjust the height so that the feet are leveled horizontally. Do not raise the height of the feet more than necessary (because of the stability).



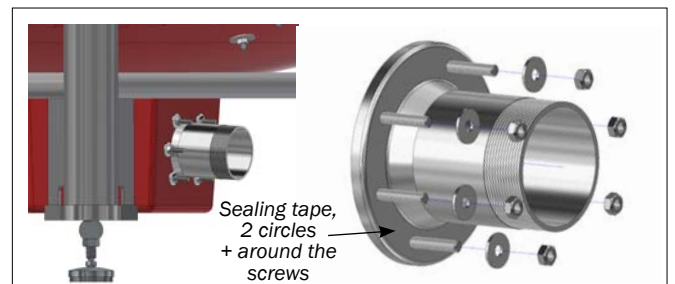
Adjusting the feet

### MOUNTING OF OUTLET CONNECTION

The outlet connection is placed in the bottom of the tank (see the overview illustration).

Apply two whole circles of sealants around the neck of the outlet connection and around the welded screws.

The outlet connection (with applied sealants) is mounted from the inside of the tank in one of the two pre-made holes (see ill.)

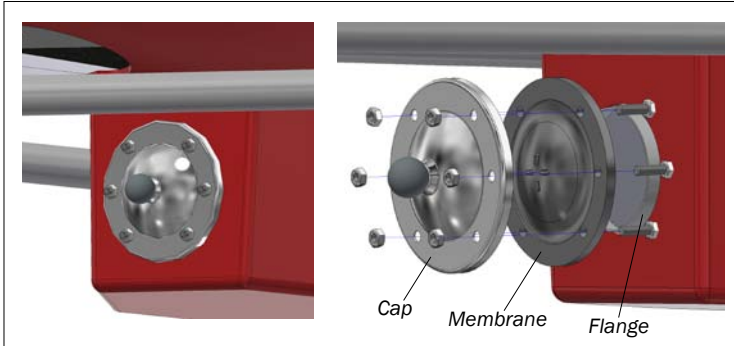


Mounting of outlet

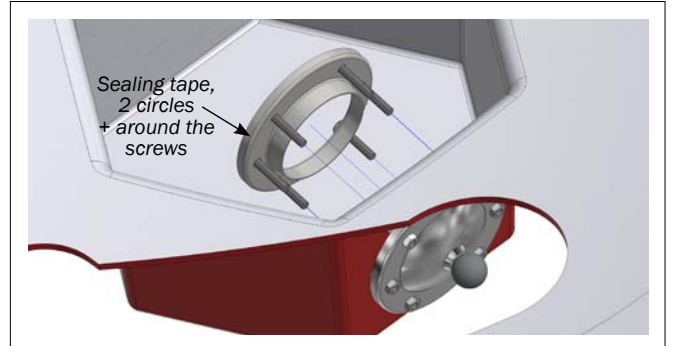
## MOUNTING OF INSPECTION CAP

The inspection cap is placed in the bottom of the tank opposite the outlet connection (see overview illustration).

Apply two whole circles of sealants around the neck of the inspection cap and around the welded screws. The flange (with applied sealants) is mounted from the inside of the tank in the other of the two pre-made holes (see ill.).



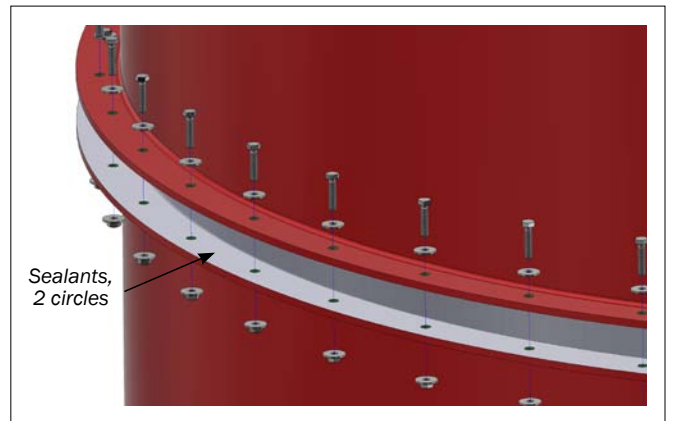
Inspection cap



Inspection cap, sealing tape on the inside

## ASSEMBLING THE FIBERGLASS PARTS

Apply two whole circles of sealants around the flange. Assemble the parts flange to flange. Position the upper part so that the hatch is placed so that it is easy to access it. The tank parts are fastened as shown.



Assembling the fiberglass parts

## MOUNTING OF THE HATCH

The hatch is pre-assembled and mounted on the tank.



Hatch

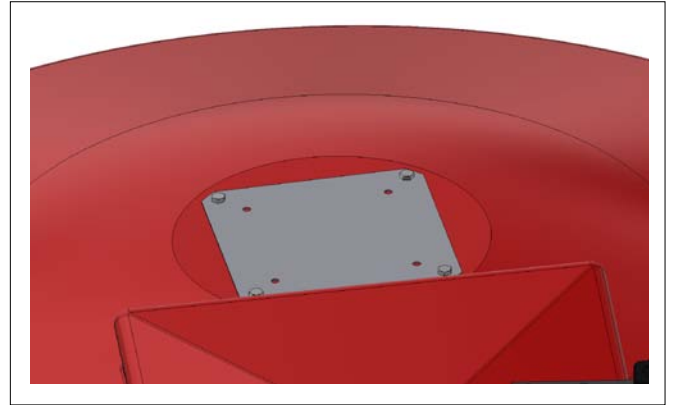
### MOUNTING OF THE TOP FLANGE

The top flange is placed centered over the hole at the top of the tank.

Use the flange as a template for drilling 4 holes. Place the screws in the holes from the top, and apply sealing tape around the screws on the inside. Fasten the flange with washers and nuts.

Apply sealants all the way around the joint along the edge of the hole and the flange.

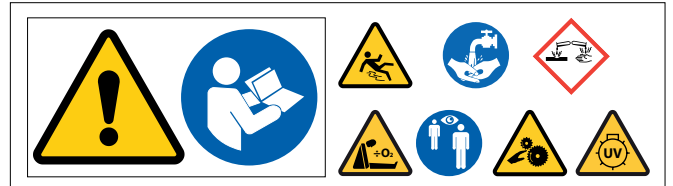
(It is advised to do apply the sealants last, due to the discomfort of the smell.)



Top flange

### PLACING THE WARNING SIGNS

A warning sign is applied to the tank in two places, as shown. Use the clear cover labels (45x45 mm) to cover the icons not relevant to the specific tank; e.g. *acid*, *UV light* and *moving parts*. For example: If a UV light cleaner is not installed in the tank, the icon for *UV light* is covered,



Warning sign

	<b>READ THE MOUNTING INSTRUCTION!</b> Read this manual thoroughly before mounting, use and service.
	<b>CORROSIVE SUBSTANCES!</b> The tank can contain acidic substances that can cause corrosive damage to skin and material.
	<b>SLIPPERY!</b> Risk of wet and slippery areas in and around the tank.
	<b>MOVING PARTS!</b> Risk of crushing due to moving machinery in the tank.
	<b>LACK OF OXYGEN!</b> There is no oxygen in the tank. Before entering the tank, be sure to vent the tank thoroughly.
	<b>UV-LIGHT!</b> The tank can contain UV light that can cause eye damage.
	<b>SUPERVISION REQUIRED!</b> A supervising person is required outside of the tank, when someone is working in the tank.
	<b>WASH YOUR HANDS!</b> Clean yourself and used tools thoroughly after working around the tank. Disposable tools (e.g. gloves) are discarded.

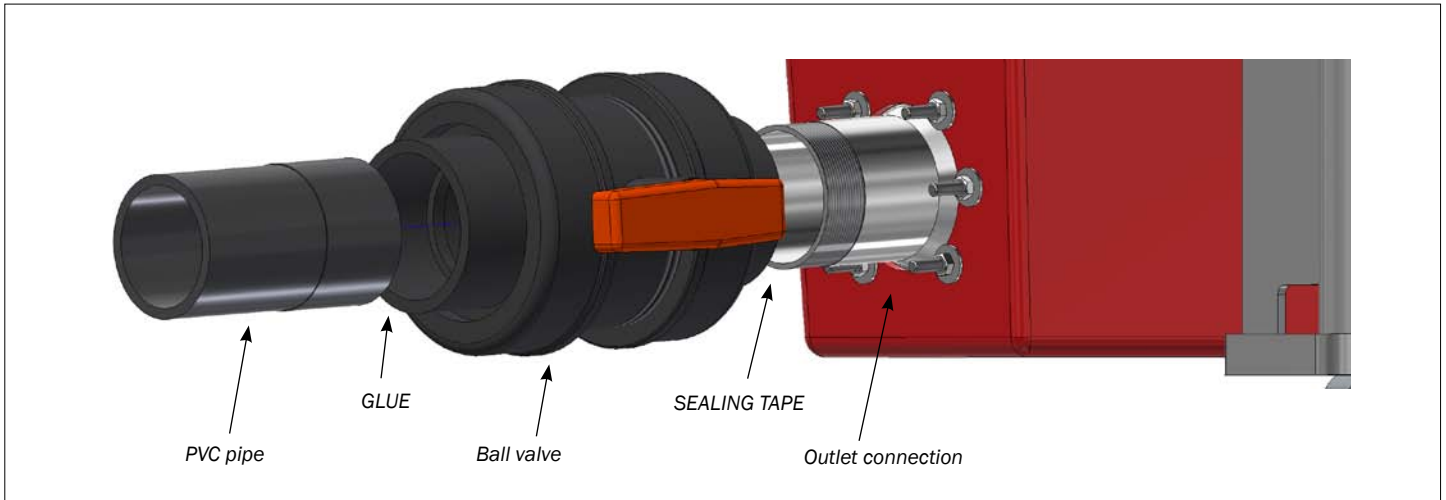


Where to place the warning signs



## PIPE FOR CONNECTING THE PUMP

A ball valve, a PVC pipe and a piece of flexible hose are mounted on the outlet connection. The feed pump is then connected to the flexible hose. The piping from the outlet to the pump should be as short as possible.



Pipe for connecting the pump

## PIPE FOR INTAKE OF WATER

Water can be let in through the top, the side or the bottom of the tank (see ill.).

### Intake of water through the top of the tank:

Mount an intake pipe as shown on the illustration. Remember to carefully seal the passage with a flexible sealant around the hole.

### Intake of water through the side of the tank:

Mount an intake pipe as shown on the illustration. Insert a tank flange. Remember to carefully seal the passage around the hole with sealing tape.

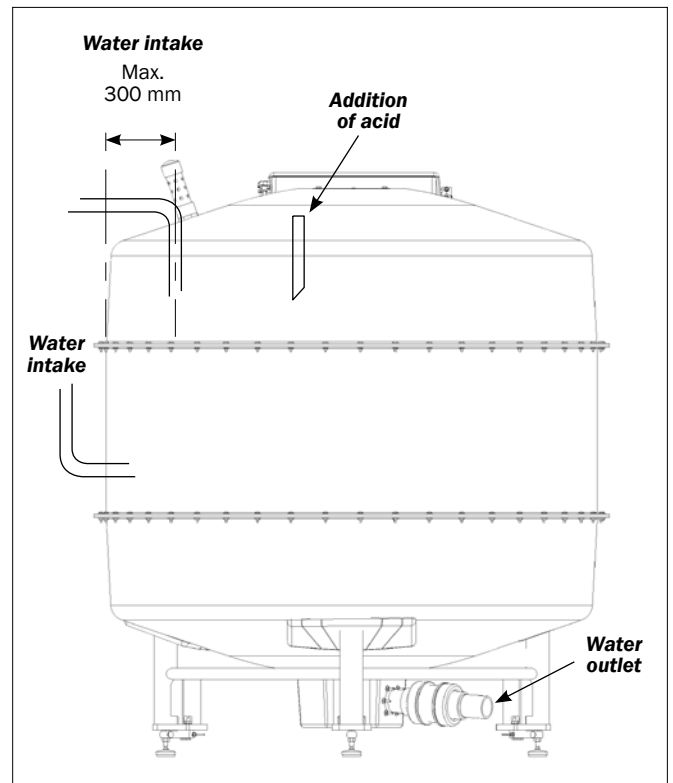
### Intake of water through the bottom of the tank:

Water can also be let in via the pipe for the feed pump in the bottom of the tank (see ill.).

### Intake of acid

Inlet of acid is to be placed separately in the top, opposite the hatch, and as near the wall of the tank as possible (see ill.).

All pipes for intake are ordered separately.



Intake and outlet of water

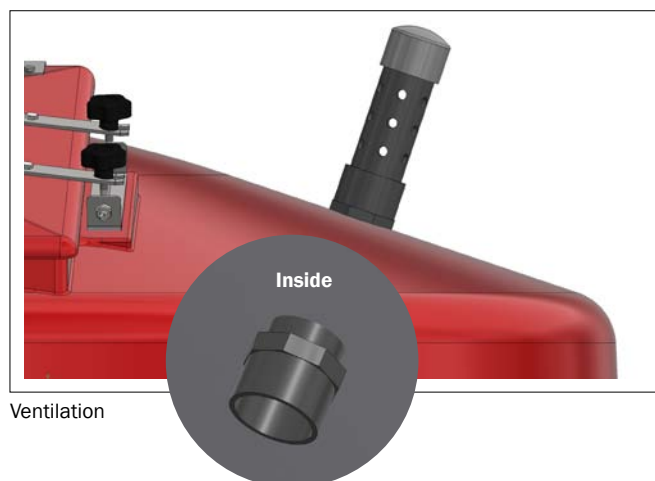
## OUTLET OF WATER

The water is pumped out of the tank through the pipe for the pump in the bottom of the tank (see ill.).



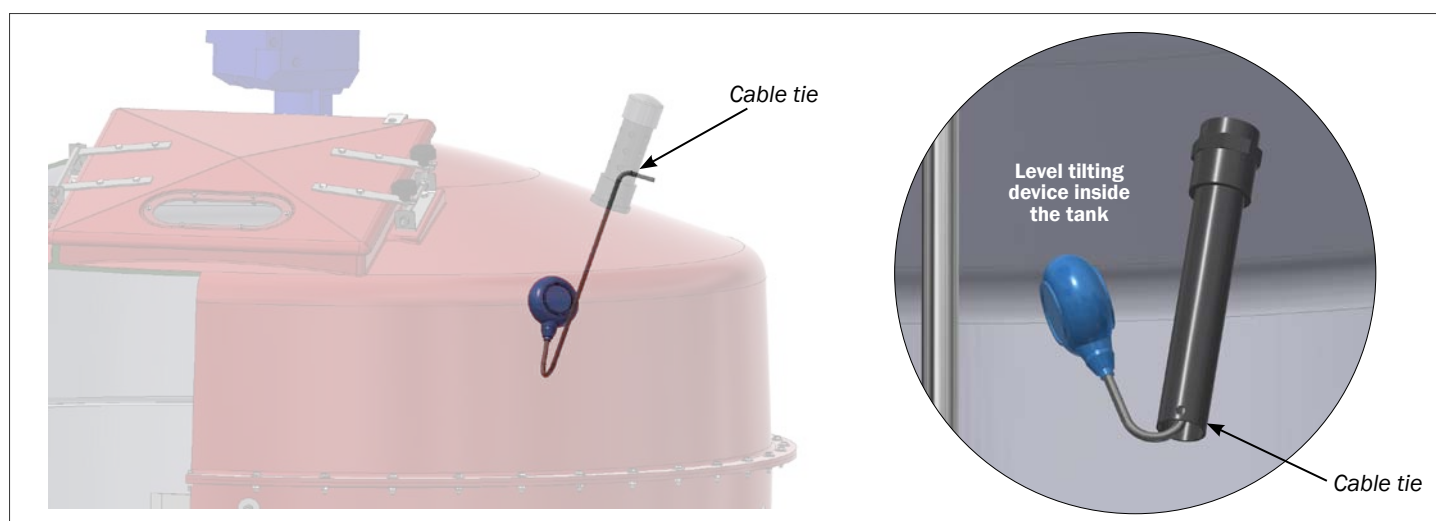
### PIPE FOR VENTILATION OF THE TANK

The ventilation pipe is placed in the top of the tank. Remember to seal the passage with a flexible sealant around the hole.



### MOUNTING OF LEVEL TILTING DEVICE

The level tilting device is mounted in the ventilation pipe. Fixate the device with cable ties (as shown).



### INTERNAL WASHING OF THE TANK, MANUALLY

If you wish to wash the tank thoroughly on the inside, you can use a high pressure cleaner. Please note the following safety precautions:

- Before opening the tank, the tank must be ventilated thoroughly. This is best done by removing the inspection cap in the bottom of the tank and rinse the tank thoroughly with water.
- All work in the tank must always be supervised by a person outside of the tank.

### DISASSEMBLY - SAFETY PRECAUTIONS

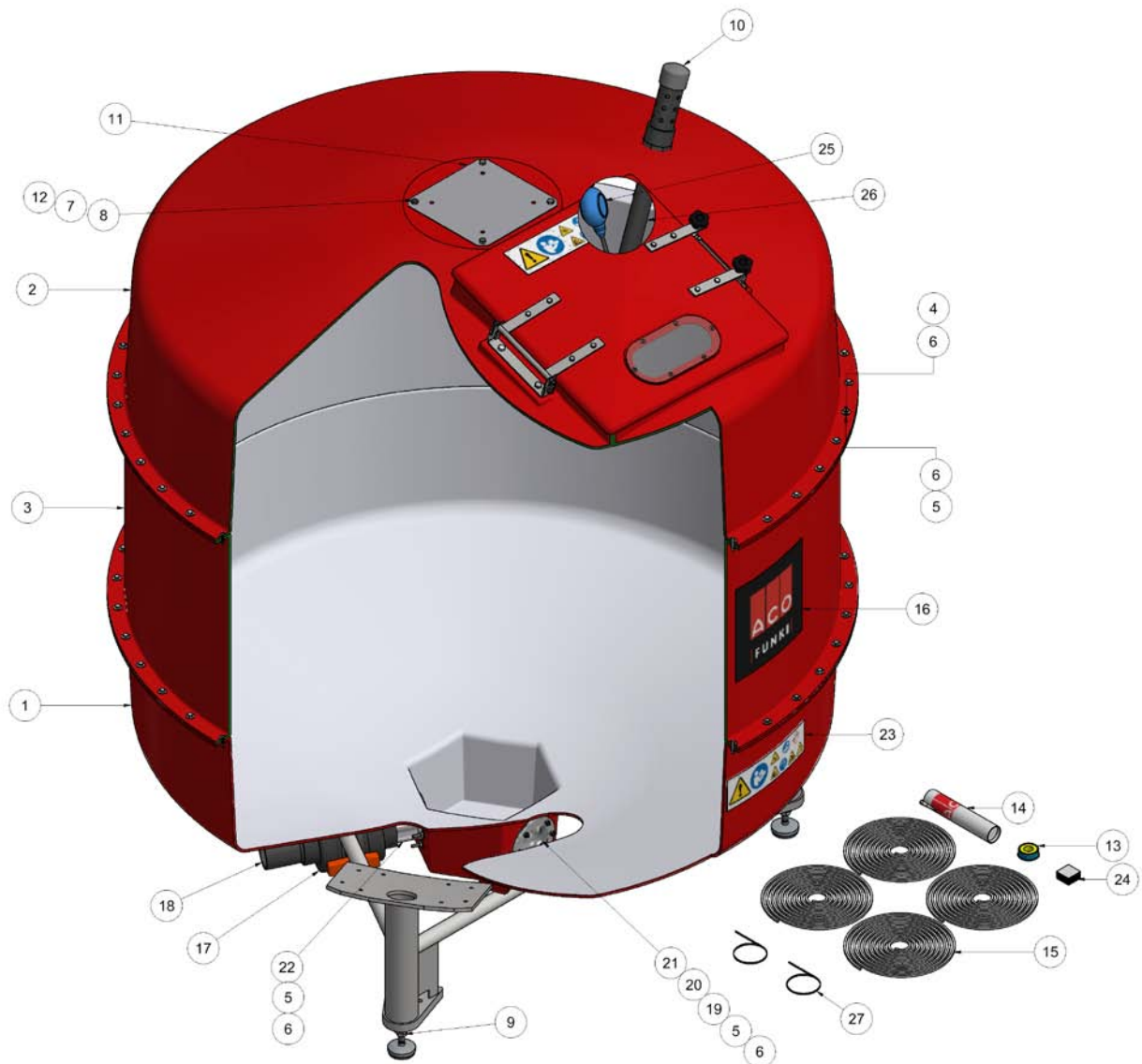
When disassembling parts of the tank, please note the following safety precautions:

- All work in the tank must always be supervised by a person outside of the tank.
- Before opening the tank, the tank must be ventilated thoroughly. This is best done by removing the inspection cap in the bottom of the tank and rinse the tank thoroughly with water.
- When the safety precautions have been followed, one or more parts can be demounted. See this instruction for information on how the tank parts have been assembled.

## BILL OF MATERIALS - WATER TANK 4200 L

BILL OF MATERIALS - WATER TANK 4200 L			
	Item no.	Description	Pcs.
	0340-209	WATER TANK 4200 LITER	
1	0140-110	Bottom part for tank VF	1
2	0140-120	Top part for tank VF	1
3	0140-115	Middle part for tank VF	1
4	30308035	Set screw A2 M8 X 35 DIN 933	90
5	33508013	Nut M8 A2 DIN 934	108
6	35600058	Nut washer Ø8x8,4/24/2 A2 DIN 9021	192
7	0139-547	Disc Ø45/10,5X2 stainless	4
8	30310030	Set screw A2 M10 X 30 DIN 933	4
9	0139-505	Load cell kit VF4	3
10	0300-216	Ventilation for Liquid feeding tank	1
11	0139-492	Tank flange B5 for fibreglass water tank	1
12	33900029	Lock nut A2 M10 DIN 985	4
13	29100001	Thread tape 1 roll= 10M	1

	Item no.	Description	Pcs.
14	74520	Flexible water sealer 300ML	1
15	29900003	Joint band 6m, sold in rolls of 8m	32
16	0140-040	ACO Funki logo label 30x30cm for LF tank	1
17	0140-064	PVC Ball valve 3"/ Ø90	1
18	0140-063	PVC pipe Ø90 for 3" valve	1
19	0139-495	Inspection flange VF4	1
20	0138-451	Membrane DN40	1
21	0139-496	Inspection cover VF4	1
22	0140-140	Outlet pipe for liquid feeding tank VF7	1
23	0140-035	Safety label VF7	2
24	0140-036	Cover label VF7	6
25	71200012	Level tilting device/Filling	1
26	0300-262	Tube for level tilting device/Filling	1
27	76200023	Cable tie 290x4,5 mm	2



BILL OF MATERIALS - WATER TANK 6000 L			
	Item no.	Description	Pcs.
	0340-210	WATER TANK 6000 LITER	
1	0140-110	Bottom part for tank VF	1
2	0140-120	Top part for tank VF	1
3	0140-115	Middle part for tank VF	2
4	30308035	Set screw A2 M8 X 35 DIN 933	135
5	33508013	Nut M8 A2 DIN 934	153
6	35600058	Nut washer Ø8x8,4/24/2 A2 DIN 9021	282
7	0139-547	Disc Ø45/10,5X2 stainless	8
8	30310030	Set screw A2 M10 X 30 DIN 933	8
9	0139-505	Load cell kit VF4	3
10	0300-216	Ventilation for Liquid feeding tank	1
11	0139-492	Tank flange B5 for fibreglass water tank	1
12	33900029	Lock nut A2 M10 DIN 985	8
13	0140-040	ACO Funki logo label 30x30cm for LF tank	1

	Item no.	Description	Pcs.
14	29100001	Thread tape 1 roll= 10M	1
15	74520	Flexible water sealer 300ML	1
16	29900003	Joint band 6m, sold in rolls of 8m	48
17	0140-064	PVC Ball valve 3"/ Ø90	1
18	0140-063	PVC pipe Ø90 for 3" valve	1
19	0139-495	Inspection flange VF4	1
20	0138-451	Membrane DN40	1
21	0139-496	Inspection cover VF4	1
22	0140-140	Outlet pipe for liquid feeding tank VF7	1
23	0140-036	Cover label VF7	6
24	0140-035	Safety label VF7	2
25	71200012	Level tilting device/Filling	1
26	0300-262	Tube for level tilting device/Filling	1
27	76200023	Cable tie 290x4,5 mm	2



