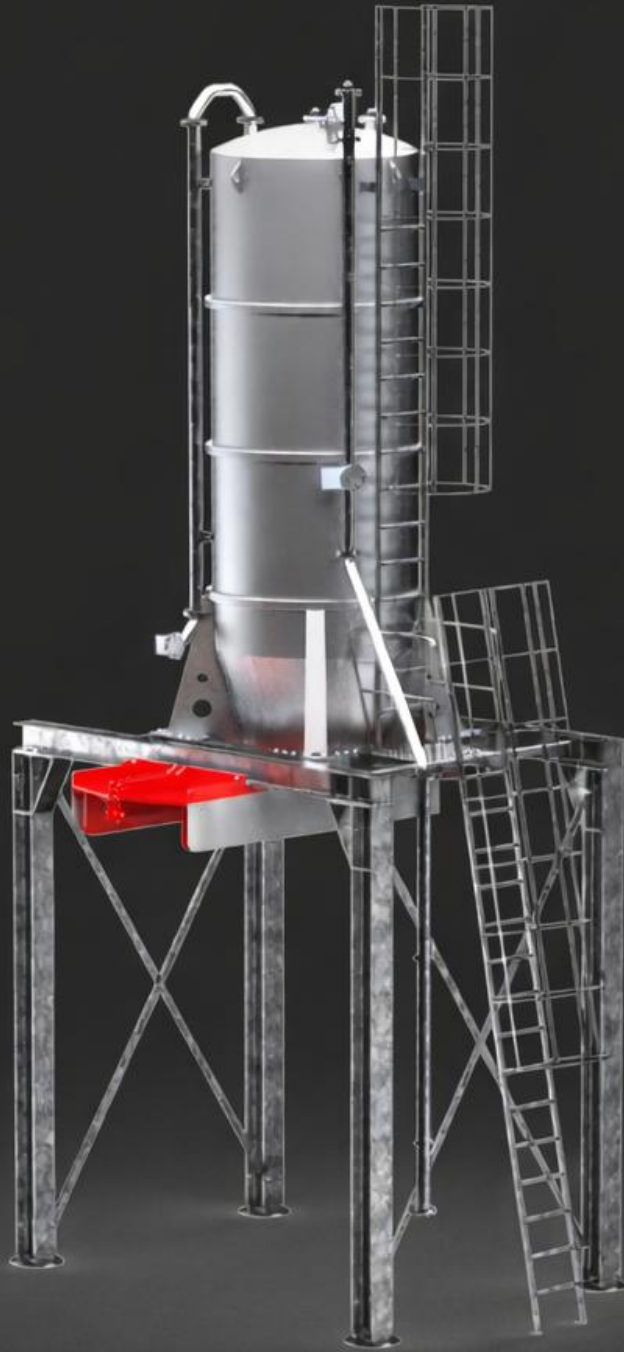


PEECON



USER MANUAL

2025

Peecon Silo Tank

The primary purpose of this document is to ensure safe and efficient interaction between human and machine. Retain this document for future reference.

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Peeters Group B.V. reserves the right to modify components at any time, without prior or immediate notice to the customer.

The contents of this user manual may also be subject to change without prior notice. For information regarding configuration, maintenance activities, or repairs not covered by this user manual, please contact the technical support department of your supplier.

This user manual has been compiled with the utmost care; however, Peeters Group B.V. accepts no liability for any errors contained herein or for the consequences thereof.

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1. Introduction

1.1. Foreword

Congratulations on the purchase of your new Peecon Silo Tank. With this machine, you are assured of quality and durability.

The Peecon Silo Tank has been developed on the basis of an extensive research and testing program. One of the primary objectives was to design machines that fully comply, in terms of operation, performance, safety, maintenance, and service life, with the applicable European Directives and international standards for silo tanks.

Before putting the machine into operation, carefully read this manual and ensure that you fully understand all the information provided. This will contribute to safe operation, optimal performance, and a long service life of the machine. Always keep this manual with the machine so that it can be consulted easily.

The most recent version of this manual can be obtained from your dealer. A digital version is also available at <https://peecon.com/downloads>.

If you have any questions or encounter issues that are not addressed in this manual, please contact your dealer or Peeters Landbouwmachines B.V.

No warranty can be granted for damage resulting from incorrect operation or improper use. If you are in doubt about any operating, maintenance, or repair procedure, always consult a qualified specialist.

The manufacturer reserves the right to make changes to the machine without prior notice. Illustrations, dimensions, and weights shown in this manual may also be subject to change and are therefore not binding.

Authorized personnel are persons who:

- Have acquired an adequate level of knowledge through education and/or training (internal training specifically for the Peecon Silo Tank) and possess the necessary skills to operate the machine.

Technically qualified personnel are persons who:

- Are authorized and have acquired a sufficient level of technical knowledge (at least an MBO-level diploma or equivalent) through education and/or training, and who are familiar with the machine's technology and aware of the potential hazards and risks.
- Are authorized to set up, operate, clean, and carry out maintenance on the machine (for example, a service technician of Peeters Landbouwmachines B.V.).

1.2. Warranty and liability

To avoid any misunderstandings, we kindly request that you read this manual in its entirety. Great care has been taken to ensure the safety and functionality of your machine. Below you will find the key information regarding warranty and liability.

Each machine is carefully inspected at the factory to exclude material and manufacturing defects. Should any defects nevertheless occur, Peeters Landbouwmachines B.V. will supply defective parts free of charge for a period of 12 months or 750 operating hours after delivery (whichever occurs first), excluding wear parts.

The warranty shall become void in the following cases:

- If you deviate from the operating and maintenance instructions in this manual without the manufacturer's written consent.
- If maintenance is not carried out in accordance with the prescribed maintenance schedule. These maintenance activities must be properly documented.
- If non-original parts are used during maintenance or repairs. Original parts are listed in the parts catalogue, available for download at <https://peecon.com/downloads>.
- If the user declaration below has not been fully completed, signed, scanned, and submitted by the customer.
- If modifications are made to the machine without the prior approval of Peeters Landbouwmachines B.V.
- If the machine is resold.

The warranty is limited to the supply of replacement parts and does not cover:

- Loss of income due to machine downtime.
- Transportation costs to and from a workshop.
- Costs for special tools.
- Labour costs for service technicians.

To make a warranty claim, please contact your dealer. The costs of parts may initially be charged and will be reimbursed after inspection by an authorized dealer or Peeters Landbouwmachines B.V.

User declaration

Please record the following information about your machine. This will assist in reporting issues and ordering spare parts.

1. Model: Silo _____ 2. Date of delivery: _____

3. Machine serial number: _____

By signing below, the user confirms that this manual has been read in full and fully understood:

Name: _____

Signature: _____

1.3. EG Declaration of Conformity



PEETERS GROUP
The Dutch innovators
Munnikenheiweg 47 | 4879 NE Etten-Leur | NL



Technical documentation available on site aforementioned manufacturer.

EG DECLARATION OF CONFORMITY

PEECON

The undersigned hereby declares that the machine:

Brand: Peecon
Model: Peecon Silo
Year of manufacture:
Serial no: 610
Category: Silo tanks (storage of slurry and slaughter waste)

Complies with the following European Directives:

- EN-ISO 12100:2010
- EN ISO 4413



Place: Etten-Leur
Date:

D.P.M. Peeters
Managing director

1.4. Safety instructions

or careless operation may lead to accidents. Therefore, carefully read all instructions and strictly observe the safety regulations. Also consult the manuals of other components, such as the connected pump. Anyone who operates the machine must be familiar with these instructions.

Various symbols are used in this manual:

Symbol	Meaning
	WARNING – HAZARD OR DAMAGE Warnings and additional information.
	TIPS AND ADVICE Suggestions and recommendations to make your work easier.

1.5. Type designation

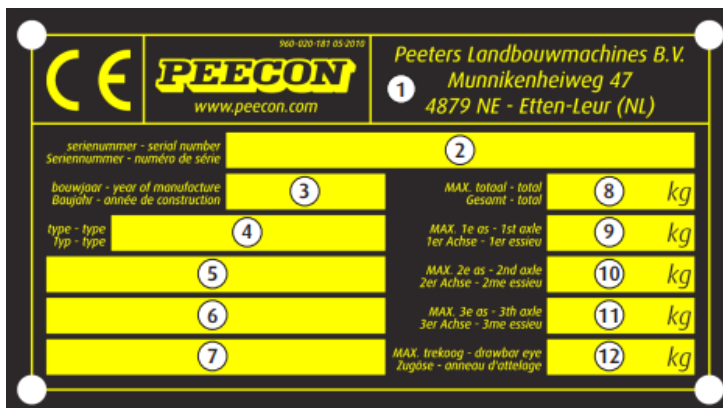
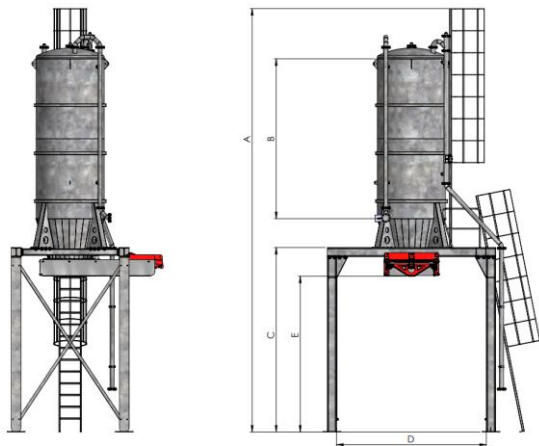


Figure 1 – Type plate

1	Manufacturer's contact details	7	Reserved for additional information
2	Serial number (identification number)	8	Maximum permissible gross weight of the machine
3	Year of manufacture	9	Maximum axle load on the 1st axle (if applicable)
4	Machine version/configuration	10	Maximum axle load on the 2nd axle (if applicable)
5	Reserved for additional information (e.g. type approval number)	11	Maximum axle load on the 3rd axle (if applicable)
6	Reserved for additional information	12	Legally permissible maximum load on the drawbar eye (if applicable)

2. Technical specifications



Peecon Silo	ST 3000	ST 7000	ST 10000
Capacity	3m ³	7m ³	10000m ³
Length A	10600mm	8168mm	6418mm
Length B	750mm	2400mm	4000mm
Length C	4618mm	4618mm	4618mm
Length D	3740mm	3740mm	3740mm
Length E	3915mm	3915mm	3915mm

3. Use of the machine

This machine is intended exclusively for the following applications:

- Storage of slurry, slaughter waste, or other liquids approved by the manufacturer.
- Loading and unloading of slurry, slaughter waste, or other liquids approved by the manufacturer.

When using the machine, you must always comply with the instructions provided in this manual. This applies to both the operating instructions and the manufacturer's safety instructions.

Making structural modifications or extensions without the manufacturer's prior approval is not permitted. Such modifications may result in unsafe situations and could cause serious injury or fatal accidents.

The machine may only be operated when no persons or animals are present within the hazard zone.

4. Important safety precautions



CAUTION! Carefully read this manual before operating the machine. Consult the manual in the event of any questions or problems. Check that the factory settings have not been altered and that no parts have become loose during transport. Ensure that all warning labels are present and correctly affixed in their designated locations.

4.1. General

The owner and/or operator is always responsible for any damage and/or accidents resulting from improper use or failure to comply with the safety instructions.

The Peecon Silo may only be used for the storage, loading, unloading, and dosing of slurry, slaughter waste, or other liquids approved by the manufacturer. Use for any other purpose is not permitted.

Before each use, check the following points:

- Carefully inspect the machine for visible damage and loose components.
- Check that all connections and couplings are securely fastened.
- Ensure that the slide gate is fully closed.
- Verify that no persons are present within the machine's operating area.
- Never exceed the maximum permissible volume and/or load as stated on the type plate.
- Check the anchor bolts.
- Study and observe the safety instructions.



CAUTION! We draw your attention to a number of situations in which extra caution is required in order to ensure your own safety and that of others in the surrounding area.

The following situations require extra caution:

- Carrying out work or test runs with this silo must not take place in an enclosed space due to the presence of hazardous gases.
- Always check the area around the machine and the tractor or truck before driving off or activating the machine.
- Pay extra attention to people, animals, and especially children in the vicinity.
- Ensure good visibility while working.
- It is prohibited to ride on or remain on the machine during transport or operation.
- Never position yourself between the tractor or truck and the machine.
- Never stand underneath the slide gate.

In addition to the instructions in this manual, always observe the generally applicable safety and accident-prevention regulations. Familiarize yourself with all systems, controls, and their functions before operating the machine.

- Check the machine for safety before each use.
- Always wear close-fitting clothing and avoid loose garments.
- The machine may only be operated by one person.
- Secure, lock, and switch off the machine after completing your work and when leaving it unattended.
- Connect the machine to your pump in accordance with the instructions and always check that all locking mechanisms are properly secured.
- Exercise particular caution when loading and unloading the machine due to the hazardous substances present.
- Repair any damage to paintwork, galvanized parts, or wear immediately before resuming operation. If the machine is still under warranty, first contact your dealer or the manufacturer.
- Regularly check hydraulic hoses and lines for damage. Replace damaged hoses immediately with hoses of the specified quality (SAE 100 R2A in accordance with DIN 20022/2).
- Never attempt to seal leaks in a pressurized hydraulic system with your hands. Hydraulic oil can penetrate the skin and cause blood poisoning.
- Always check the direction of rotation of your pump before switching it on.



CAUTION! Pay special attention to these points when installing the machine for the first time. This will help prevent hydraulic functions from not working or operating incorrectly.

- Switch off the hydraulic power unit when it is not required to prevent unnecessary deterioration of the hydraulic oil.
- Check weekly that the slide gate seals properly.

4.2. Hazard zone

During operation, no persons may be present within the hazard zone.

- Maintain a minimum distance of **10 metres** around the machine.



CAUTION! *It is strictly prohibited to access or stand on the platform while the machine is in operation.*

The noise level during operation of the silo depends on the pump connected by the user.

- If the noise level exceeds 80 dB(A), hearing protection must be available.
- **If the noise level exceeds 85 dB(A), wearing hearing protection is mandatory.**
- Always consult the pump manual for the exact noise levels and any additional safety instructions.

4.3. Operation of the machine

- Wear close-fitting clothing. Loose clothing increases the risk of entanglement.
- Familiarize yourself with all components and operating functions before starting work.
- Never exceed the maximum permissible gross weight and volume.
- Only operate the machine when all connections are properly connected and/or sealed.
- Do not allow any persons to remain in the vicinity of the machine during operation.

4.5. Safety symbols

Safety and warning stickers are affixed to your silo. These indicate areas where risks are present, despite the machine's safe design.

Always read the manual before putting the machine into operation. Regularly check that all stickers are present and clearly legible. If they are damaged or unreadable, do not continue operation and have the stickers replaced by your dealer.



CAUTION! *To ensure that every (new) user can work safely, the stickers must always be clean and clearly legible. If damaged, they must be replaced at all times.*

Stickers are available from your dealer.

4.5.1. Explanation of safety symbols



Read and comply with the manual and all safety instructions before putting the machine into operation.



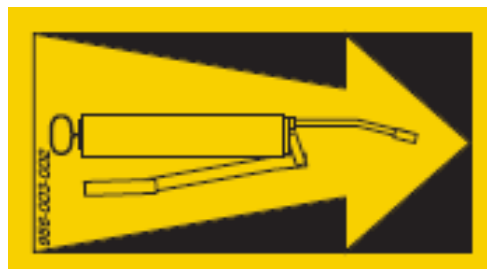
These hoses may cause personal injury and environmental damage. Only carry out work on the hydraulic system when it is completely depressurized.



It is prohibited to climb onto or access the platform. Do not allow persons to load the machine manually from the platform (risk of falling in).



During operation or transport, it is prohibited to stand on or underneath the machine. During loading, no one may be positioned behind the mixer wagon.



One or more lubrication points are located here. Lubricate these points in accordance with the maintenance schedule.



Check the lubrication points every 10 operating hours to prevent wear and avoid high repair costs. Use the specified type of grease. If in doubt, contact your dealer.



This is a lifting point. Use only these points to lift the machine.



Not a lifting point. Do not attach cables, chains, or other lifting equipment here. This may cause damage to the machine.



Wear hearing protection during liquid suction operations.



It is prohibited to enter the tank or inhale vapours due to the risk of suffocation or poisoning.

4.7. Extreme conditions

This section describes extreme operating conditions. If you are confronted with such conditions, please be aware that the system may malfunction.

The recommended operating and ambient temperature range is between **-30 °C and +40 °C**. Operation at lower temperatures:

- Accelerates wear of hydraulic seals.
- Increases the risk of damaged hydraulic hoses and brittle fractures in the steel structure.
- **Important measure:** At low temperatures, load the machine only with lighter loads than normally permitted.

Before starting work at low temperatures:

- Allow the oil to circulate through the system for several minutes.
- Perform all operations slowly and repeatedly so that the seals become flexible before being subjected to full pressure.

When working under extremely hot conditions:

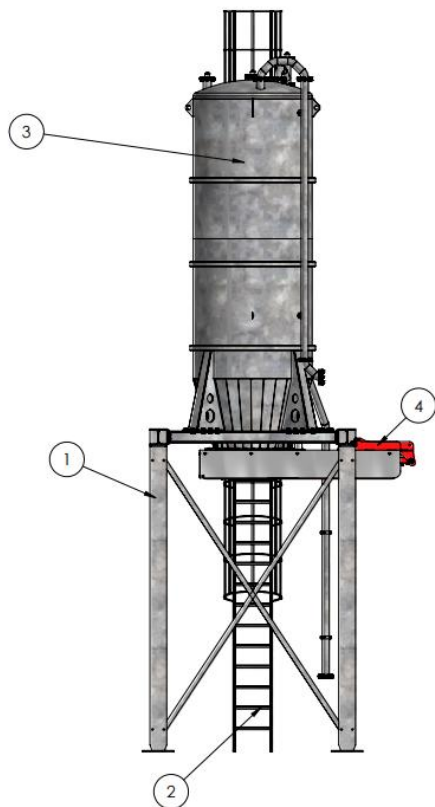
- Be aware that the hydraulic oil can become very hot.
- If the oil temperature rises above **+80 °C**, the oil may vaporize and the seals may be damaged.

5. Operation of the machine

The silo has been developed for the safe storage and buffering of liquids in combination with your pump. During filling, the liquid is supplied by your pump and flows into the silo.

For emptying the silo, a slide gate is installed at the bottom. This slide gate may only be opened when an appropriate collection facility is in place, such as a tanker truck or a collection container. In this way, the contents can be discharged in a controlled and safe manner. **Never use a pump to empty the silo.**

Through this combination of storage and controlled discharge, the silo provides a robust and user-friendly solution for a wide range of applications. Its construction ensures durability, safety, and ease of use in daily operation.



- | | | |
|---|--------------|-------|
| 1 | Portal frame | _____ |
| 2 | Ladder | _____ |
| 3 | Tank | _____ |
| 4 | Slide gate | _____ |

6. Initial commissioning

6.1. Portal frame



Depending on the configuration of your machine, the height of the portal frame and the size of the tank may vary.

The portal frame is constructed as follows:

The load-bearing structure of the silo consists of four columns made of **HEA 240 profiles**, mounted on anchoring plates to ensure a stable connection to the foundation. At the top, the columns are interconnected by heavy **HEA 240 beams**, forming a rigid frame structure. Within this framework, secondary beams made of **HEA 180 profiles** are installed to support and distribute the load of the silo.

For horizontal stability, the structure is equipped with cross-shaped wind bracing between the columns. These braces provide the required stiffness against wind loads and other lateral forces, ensuring that the structure safely and deformation-free transfers both vertical and horizontal loads to the foundation.

In the assembly manual, steps 1–3 show how this structure must be assembled. These steps are briefly described below:

Step 1:

Mount the two illustrated beams to the welded frame using **M24 bolt-and-nut connections (24x)**. Tighten these connections to a torque of **275 Nm**.

Step 2:

Lift the assembled frame to a height that allows the columns to be mounted underneath. Install the four illustrated columns using **M24 bolt-and-nut connections (32x)**. Tighten these connections to a torque of **275 Nm**.

Step 3:

Mount the four illustrated wind braces to the designated brackets. Do not fully tension the braces until the portal frame has been anchored. Subsequently, secure the portal frame using **24 anchor bolts** at the designated locations. The anchor bolts must be installed in at least **200 mm of reinforced concrete**.

6.2. Silo

The silo itself is intended for buffering slurry, slaughter waste, and other liquids approved by the manufacturer.

Step 4:

After securing the portal frame as described above, mount the silo onto the portal frame using the designated hole pattern. This connection consists of **32 bolt-and-nut connections**. Tighten these to a torque of **275 Nm**.



CAUTION! Ensure that the silo connections are positioned exactly as shown in the drawing.

6.3. Slide gate

The slide gate allows for the rapid discharge of liquids from the silo.

Step 5:

Once the silo has been mounted according to Step 4, the slide gate can be installed. Before starting, it is essential that the slide gate is in the open position; this ensures access to the hole pattern used to secure the silo.

Lift the slide gate and press it against the mounting surface of the silo, with the illustrated gasket positioned in between. Then secure the slide gate using **M16 carriage bolt and nut connections (36x)** and tighten them to **200 Nm**.

At the end of the slide gate, the gate must be additionally secured to the portal frame using the illustrated angle section. For this, use **M16 bolt-and-nut connections (6x)**.

6.4. Loose components

There are several loose components that must be installed subsequently:

Step 6:

Mount the platform between the designated flange plates using **M12 bolt-and-nut connections (12x)**.

Next, install the connections by fastening the flange connection on top of the silo using **M16 bolt-and-nut connections (8x)**.

Then connect the tabs on the side of the silo to the tabs on the pipes using **M12 bolt-and-nut connections (4x)**.

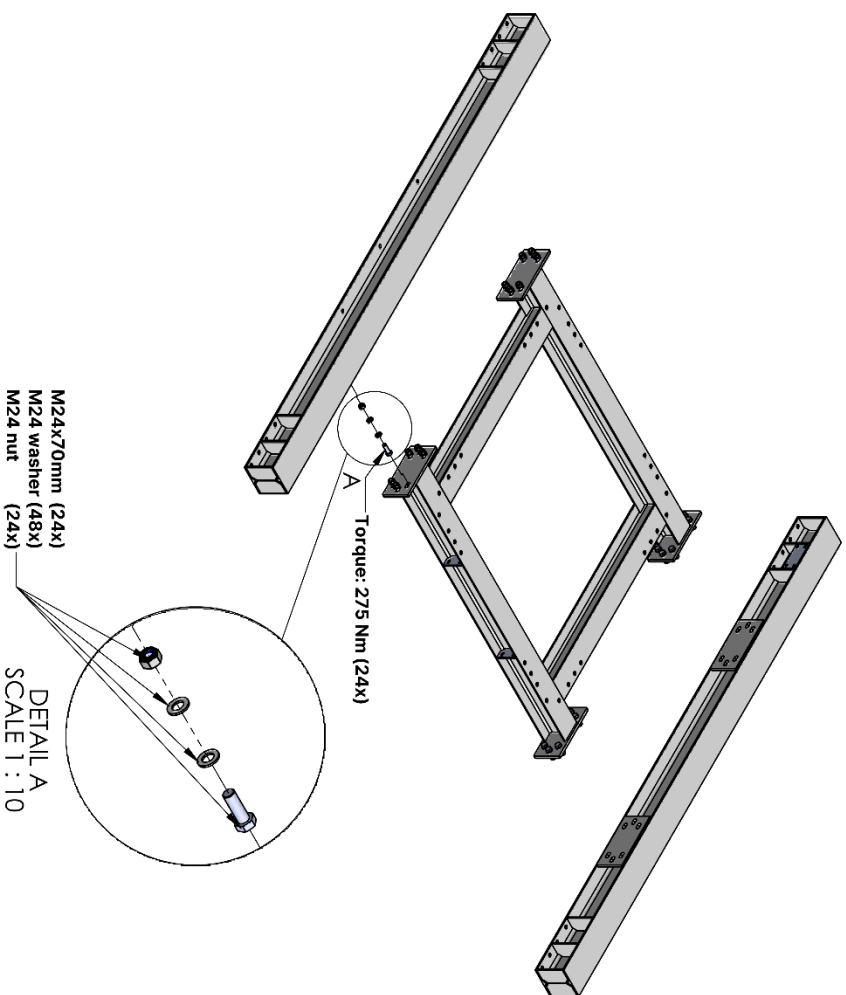
Step 7:

Finally, install the cage ladders. These are mounted using the illustrated tabs at both the top and bottom.

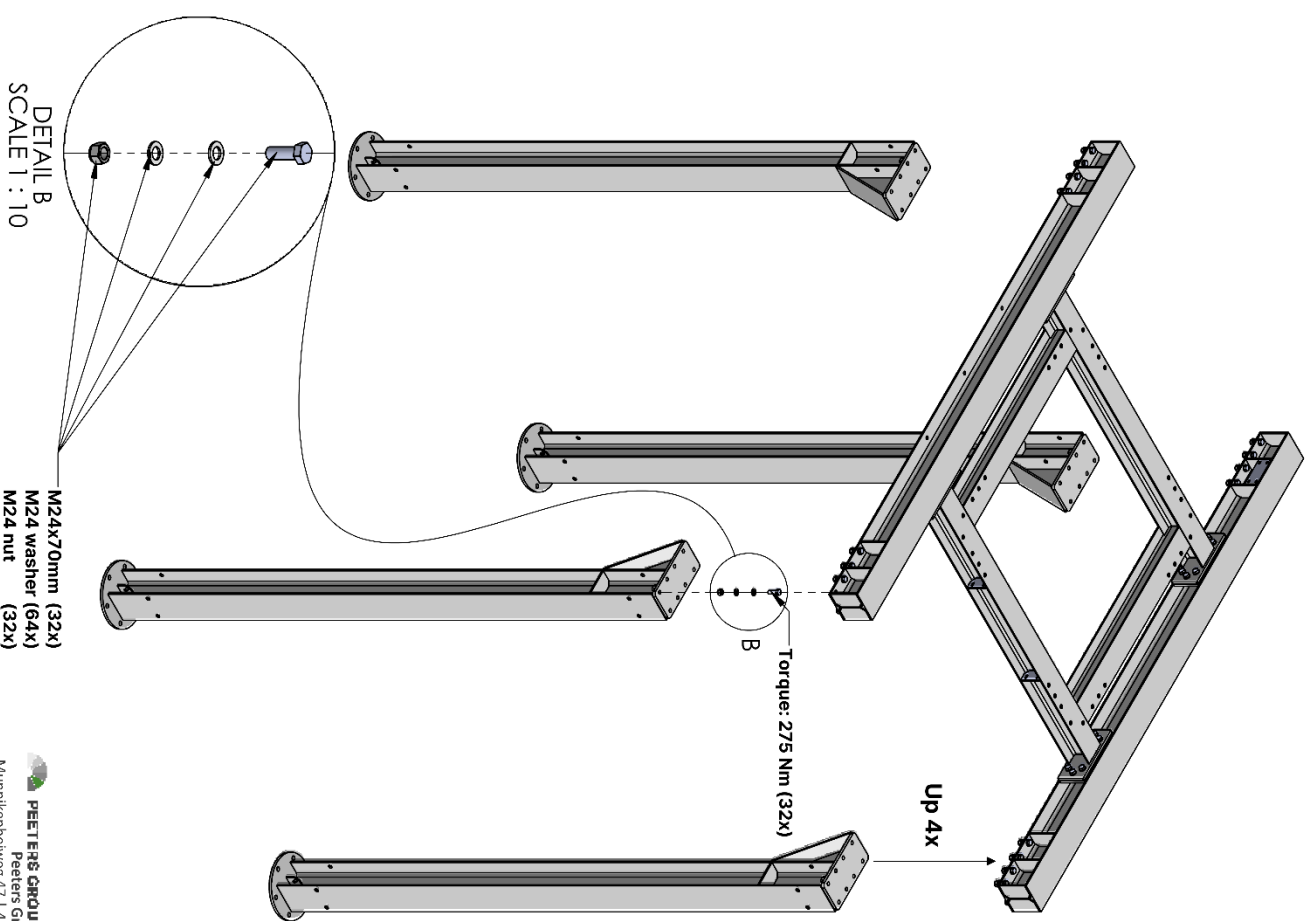


CAUTION! Ensure that the bottom of the cage ladder is also anchored using **M12 bolts**.

STEP 1

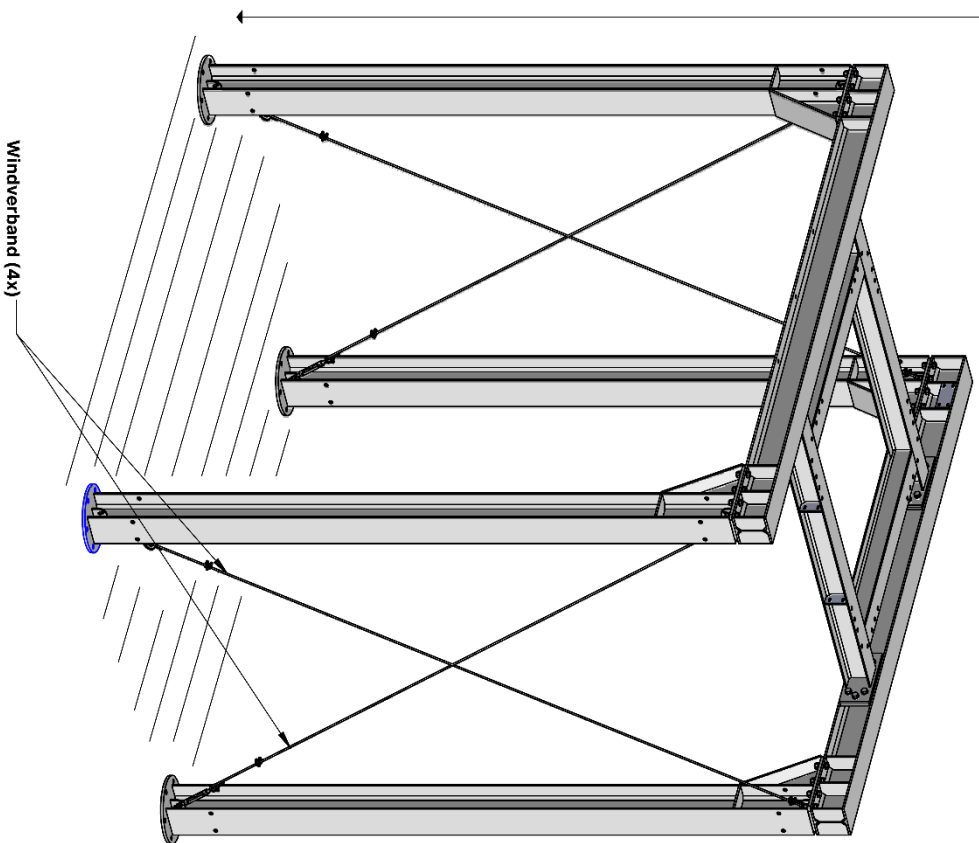


STEP 2

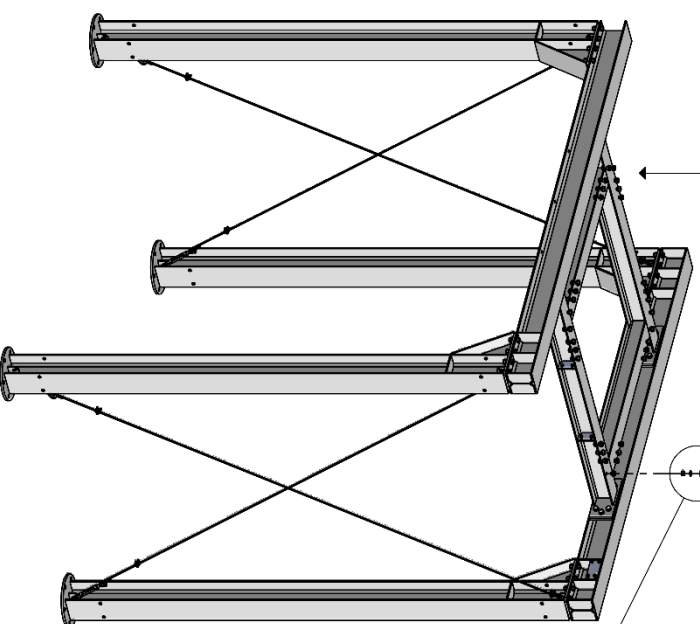
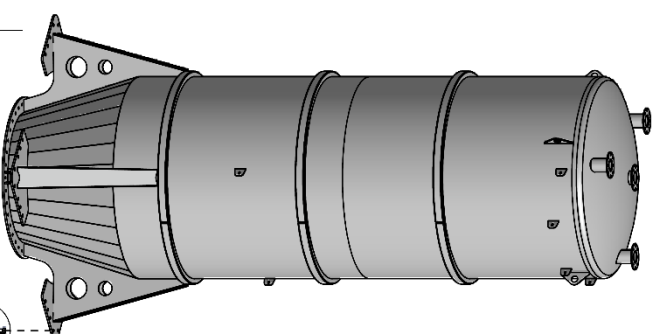


STEP 3

Anchor bolts must be embedded in 200 mm reinforced concrete.

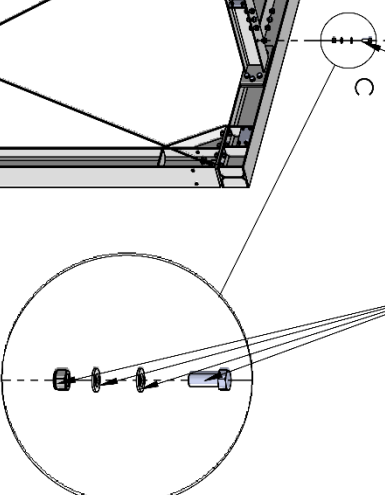


STEP 4



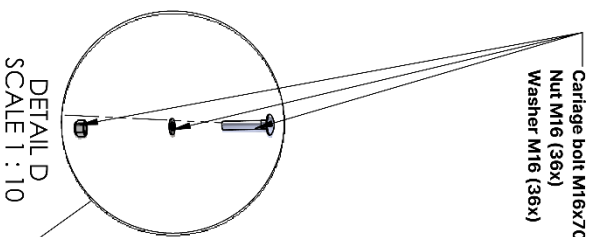
M24x70mm (32x)
M24 washer (64x)
M24 nut (32x)

Torque: 275 Nm (32x)

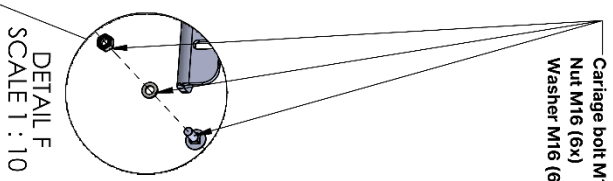


DETAIL C
SCALE 1 : 10

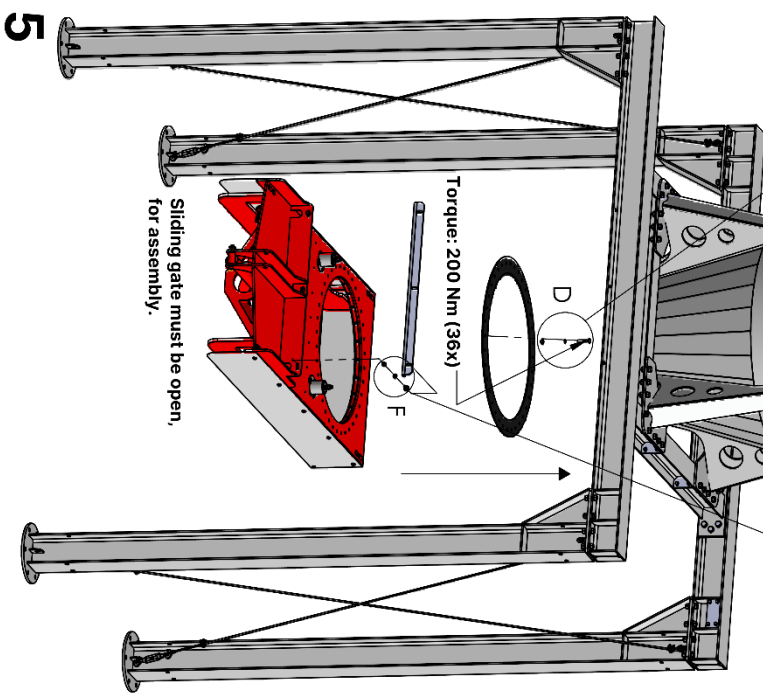
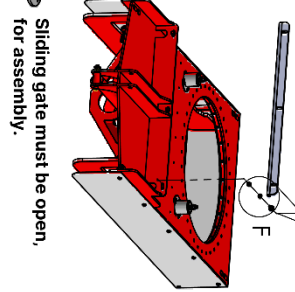
Carriage bolt M16x70 (36x)
Nut M16 (36x)
Washer M16 (36x)



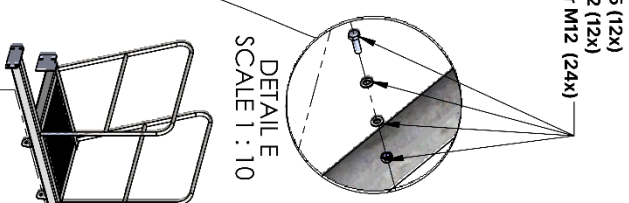
Carriage bolt M16x50 (6x)
Nut M16 (6x)
Washer M16 (6x)



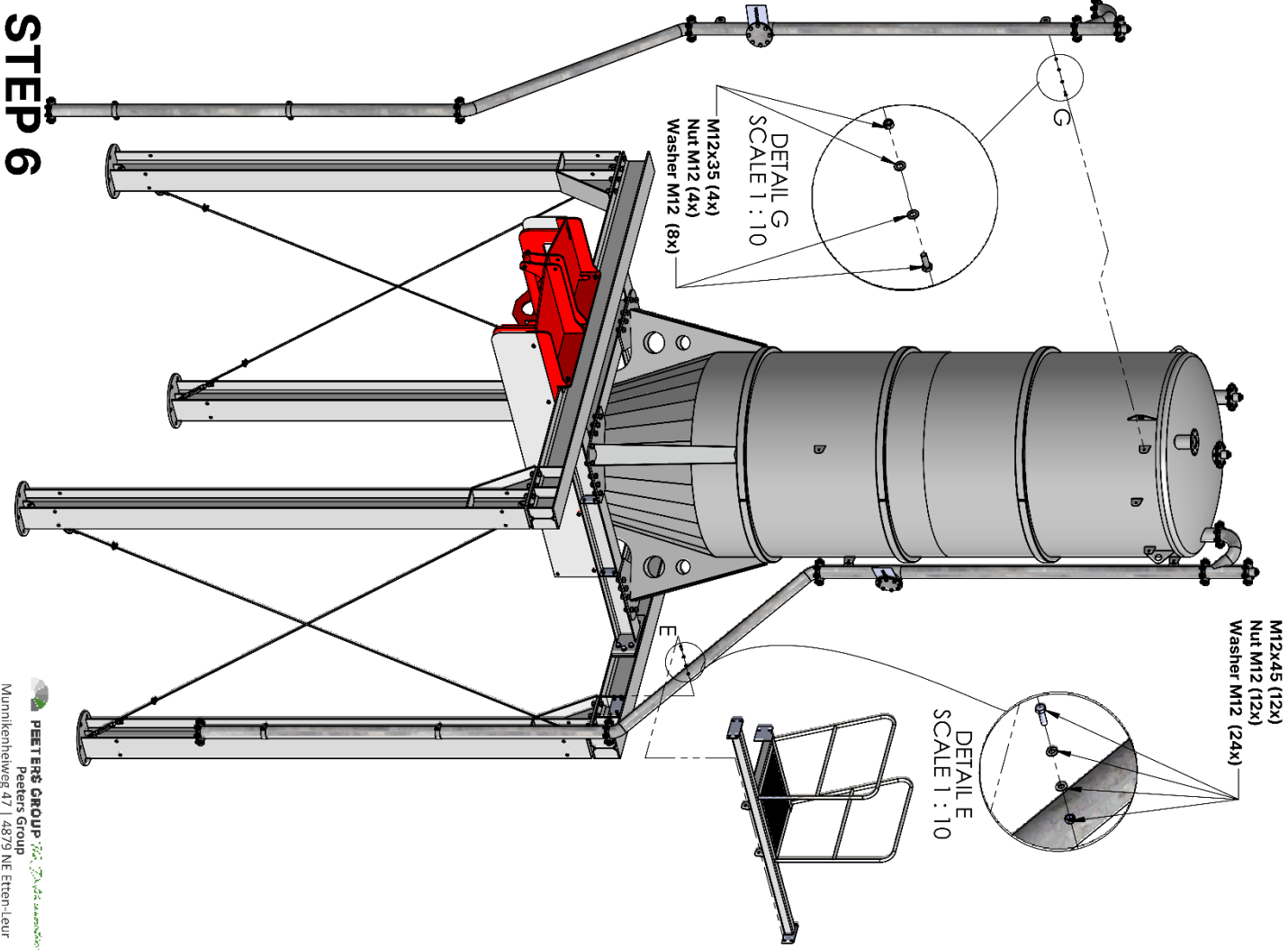
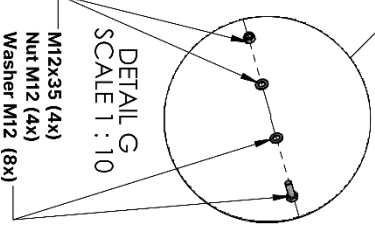
Torque: 200 Nm (36x)



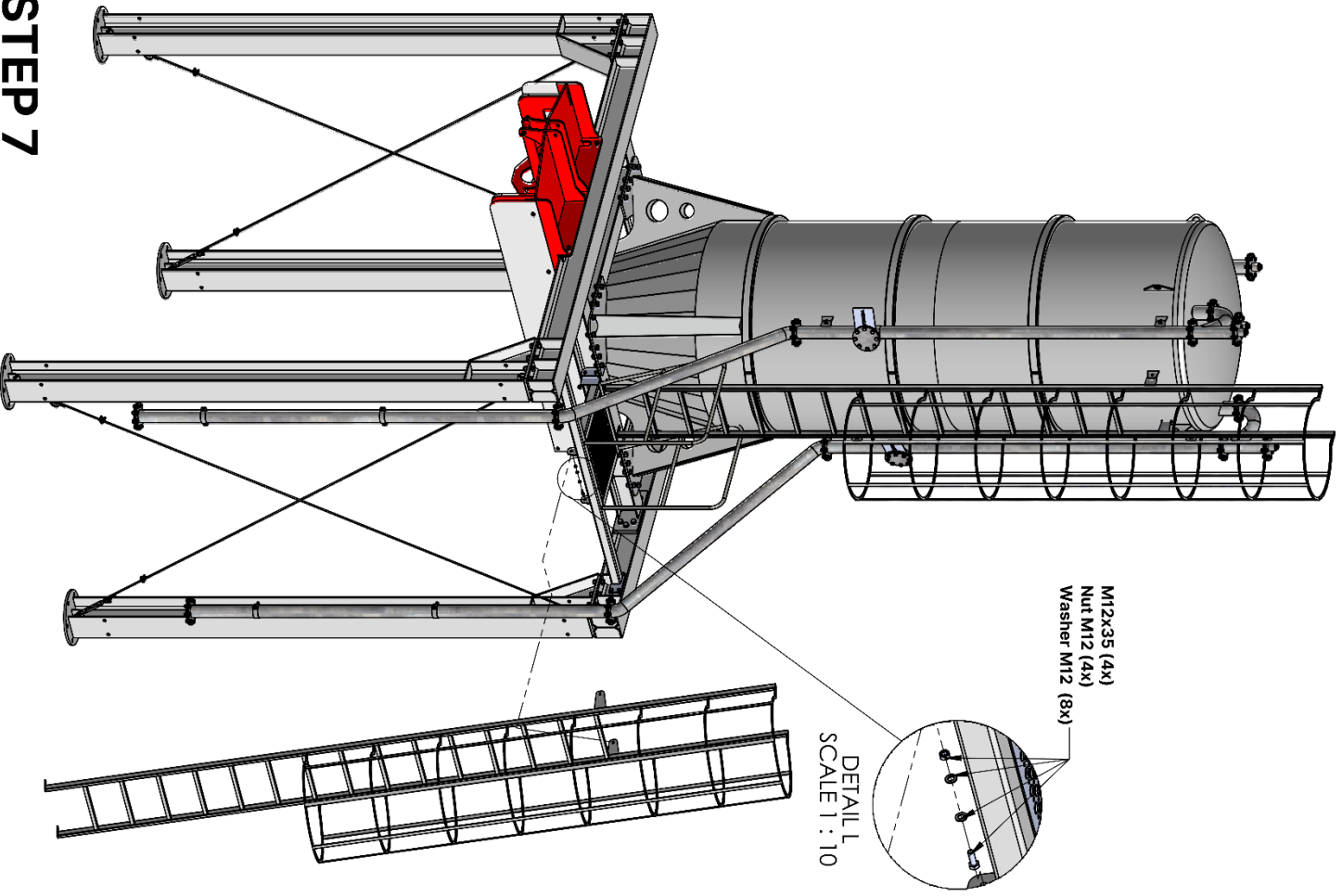
M12x45 (12x)
Nut M12 (12x)
Washer M12 (24x)



M12x35 (4x)
Nut M12 (4x)
Washer M12 (8x)



STEP 7



6.5. Operation

As standard, the hydraulic functions of the machine are operated via the control valve of the supplied hydraulic power unit.

6.6. Filling

1. Check if the slide gate is fully closed.
2. Connect the vacuum hose to your moisture trap and check the operating position of your pump.
3. Fill the silo using your available pump. The pressure is variable between 0 and 0.5 bar. Thin slurry requires lower pressure than thick slurry. At all times ensure that the pressure never exceeds 0.5 bar.
4. Check the valves and settings of your pump and slowly disconnect the filling hose. Some liquid may flow out of the hose.

6.7. Opening the slide gate

1. Check if no one is positioned between the slide gate and your collection system.
2. Open the slide gate in a controlled manner using the hydraulic power unit.



CAUTION! When handling solid material, the contents may discharge unexpectedly.

6.8. Closing the slide gate

1. Ensure that there are no obstacles between the rubber seal and the slide gate.
2. Close the slide gate using the hydraulic power unit and check that the gate has fully reached its end stop.

7. Machine maintenance and personal protective equipment (PPE)



Timely and correctly performed maintenance is essential for proper operation and a long service life of the machine. During maintenance, always use the prescribed personal protective equipment (PPE).

Before carrying out any maintenance, cleaning, or repair work, ensure that at least the following safety measures and PPE requirements are met:

- The hydraulic system is completely depressurized.
- The slide gate is closed.
- A safe working environment has been created.
- You are wearing appropriate personal protective equipment: work gloves, safety glasses, and safety footwear.

All work may only be carried out by qualified personnel who have read and fully understood all operating and safety instructions.



7.1. Maintenance intervals

	Before each use	Weekly	Monthly	First 10 hours	Every 8 hours	Every 25 hours	Every 50 hours	Every 100 hours	Every 250 hours	Every 1000 hours	Annually
○ = inspect / lubricate / top up ● = replace											
1: Inspection for damage or excessive wear	○										
2: Lubrication of hinges and sliding points		○									
3: Inspection of hydraulic hoses and lines		○									
4: Retightening of bolts and nuts				○				○			
5: Hydraulic power unit oil			○	●			○			●	●
6: Slide gate sealing ring	○								○		
7: Cleaning of the slide gate		○									
8: Cleaning hydraulic components to remove contamination							○				
9: Inspection of pressure relief valves	○										

7.2. Fluid specifications

	Type	Quantity	Article number
Hydraulic power unit oil	Textran TDH Premium	± 20 litres	959-181-014

7.3. Hydraulic hoses

	CAUTION! <i>Never search for a hydraulic leak by hand. Oil under high pressure can penetrate the skin and cause blood poisoning. If this is suspected, consult a medical professional immediately.</i>
	CAUTION! <i>Always check before starting work that the hydraulic system is completely depressurized. Removing a component that is still under pressure can cause serious injury.</i>

Hydraulic hoses and lines must be inspected at least once a year by a qualified specialist for damage and wear. If damage or wear is detected, the affected component must be replaced or repaired immediately before the machine is put back into operation.

New hoses must meet the minimum specified quality: **SAE 100 R2A in accordance with DIN 20022/2.**

Always avoid contact with pressurized leaking fluids. When performing work on the hydraulic system, the system must be fully depressurized.



7.4. Fasteners

After the first **10 operating hours**, all bolted connections and wheel nuts must be checked and retightened to the specified torque.

8. Malfunctions

For more information on malfunctions, please consult the table below or visit <https://peecon.com/troubleshooting/>.

Malfunction	Cause	Action / Solution
No hydraulic function available	Oil supply is blocked	Check the hydraulic line
	Oil reservoir is empty	Refill the reservoir Contact your dealer
Insufficient material quality	Line blocked	Check the lines
	Moisture trap blocked	Check the moisture trap
	Manure too thick	Dilute or mix the manure
Leakage at slide gate	Gasket or sealing ring leaking	Check the gasket or ring for drying or hairline cracks
	Slide gate adjusted too low	Use the adjusting nuts to raise the slide gate so that it presses more firmly against the sealing ring Contact your dealer

9. System diagrams

9.1. Hydraulic diagram

