



Cleaning process Liquid Bulk

Cleaning at home & on the road

In our world of silo and tank transport, we transport our customers' products without packaging. In fact, our tank is the product's packaging. Our tank, hoses and couplings come into direct contact with the product. This is precisely why it is important that these items are all immaculately clean when loading at our customers' premises.

Prior to the cleaning, your planner will:

- book the cleaning.
- schedule the cleaning station.
- report what previous load(s) have been carried in the tank.
- report any special cleaning requirements (specific cleaning requirements are often demanded and may vary from one customer to another).



Important points to consider in the cleaning process:

- Wear the required PPE's, depending on the work.
- Before loosening anything make sure there is no pressure on the tank.
- Beware of the risks when opening the load unit, such as the presence of gasses like carbonic acid, nitrogen.
- Note the presence of green or yellow seals.



- Check for residual product in the tank; report this to the cleaning station and the planner if necessary.
- Remove warning labels for nitrogen. These must have been removed after cleaning.
- Take extra caution with ADR/hazardous substances due to hazardous residual products such as gases, etc.
- Be aware of specific hazards in a cleaning:
 - (Aggressive) cleaning agents, hot water, steam, etc. are used for cleaning.
 - You can get in range of a lance pistol.
 - There is a high risk of slipping or falling caused by water and product residue on the floor.
- When signing in, you should be able to discuss the cleaning information on your Trimble on-board computer or app so you can verify the booking for cleaning.
- Ensure all bolts on the covers are loosened, all blind caps also from airlines and other couplings are loose, and that hoses are hanging out of the hose tube (do not remove the blind caps), so they can be cleaned.
- Remove all used couplings and other fittings out of the boxes and tubes.
- In cases where it is remaining in the cleaning hall during the cleaning is prohibited, or if the cleaning has been completed before you arrive to pick up the concerned trailer or container, you must check everything within your possibilities. For example, it is not possible to check everything if said container has already been sealed.

After cleaning:

- Always allow the moisture in the load unit to evaporate after cleaning to avoid condensation, especially in colder outdoor temperatures.

- Ensure you have checked everything before leaving the cleaning station's grounds.
 - **Complete a *thorough visual inspection*. Start at the top front of the tank or silo and work your way backward.**

Once you have signed the cleaning certificate, the cleaning station assumes you have accepted the cleaning and there is no opportunity to rescind this.

Proceed to check the following:

- The back and the spouts if these are found on the side.
- The air lines for residual water.
- The hoses and hose tubes.
- The separate couplings and other fittings.
- That the storage boxes are clean and dry.
- The seals if you have not sealed the load unit yourself.
- If the load unit's data has been correctly stated on the cleaning certificate.
- That all seal numbers are listed on the cleaning certificate, including those that have been issued in excess. All seals that were issued must be used for to the load unit.
- If the previous loads have been correctly stated on the cleaning certificate (as received from your planner). An incorrect description of the previous products can lead to a rejection of the tank at the loading address.
- Whether all actions have been stated on the cleaning certificate by means of the EFTCO codes on the back of the certificate.
 - ***If this code is not stated, the work has not been carried out and will usually lead to rejection by the loading address.***

1. Load unit data (tank/silo/container number)
2. Nature of the product (food/non-food/chemical)
3. Previous load
4. Cleaning procedures
5. Extra services
6. Previous loads
7. Seal numbers
8. Date, time, in/out
9. Signature (Cleaner/cleaning station)

Checks and inspections

- Check if the tank is depressurized before you start.
- make sure the air line is open.
- Open all dome lids: loosen the bolts, but leave the lids closed. These will be opened by cleaning staff (Chances are the tank may be too tall when you drive it inside).
- Ensure all blind caps, hoses and other couplings are separated or hanging out of the hose tubes, so that they can be cleaned.
- Offer the couplings and coupling chest for cleaning as well.
- The pump is opened by the cleaning staff in the cleaning station to prevent a spill. Make sure the pump is turning slowly throughout the cleaning as this is the only way to get the pump properly clean.
- Leave the bottom valve(s) and unloading valves closed, these are opened by the staff of the cleaning station to prevent spillage.
- Always clean and the air line.
- Make sure no water remains in the air line.

After cleaning

- Check the tank's cleanliness and if it is dry.
 - *In some cases, it is permitted for the tank to remain wet after cleaning. A couple of examples are:*



Orange concentrate



Juices



Glucose



Milk

- In some cases, it is desirable for a certain amount of rinse-water to remain in the tank after cleaning because this water must be analysed at the loading address.
 - *These instructions must always be provided by your planner.*
- Before putting back the blind caps and closing the lids, check if all the gaskets are in the proper place, dry, and clean:
 - *Make sure to check that there are no remnants/dirt under the gasket(s).*
 - *Leave 1 lid per chamber slightly open.*
 - *Close the manhole on 1 side, do not put the bolts down on the gaskets.*
 - *In cases where the tank must be closed and sealed, the method above cannot be used. In these cases, check that the vacuum valve is functioning to prevent a vacuum in the tank.*
 - *Seal the tank after cleaning.*
 - *Seal according to the Sealing procedure (See 'Procedure Sealing Tank').*

Checklist tank – check the following:

- Make sure the air line is open at the end of the cleaning.
- Bottom valves are closed until right before the cleaning until the end of the cleaning.
- The inside of the tank is properly clean.
- After cleaning, all vacuum valves, sample taps, blind caps, airline components that may come loose are closed.
- Drip trays are clean.
- gaskets/lids are properly clean and in the right place.
- the pump has been properly cleaned.
- The bottom valve(s) have been closed properly after cleaning.
- Couplings have been properly cleaned and stowed away.
- Hoses have been properly cleaned and maybe dry stowed away.
- If the hose tubes are sealed at both ends.
- All seal numbers have been stated on the cleaning certificate.