

# Cleaning process Dry Bulk

# Cleaning at home and 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 essential PPEs depending on the activities.
- Before loosening anything make sure there is no pressure on the tank.
- When opening the loading unit, remember the risks. Such as the presence of gases (nitrogen, etc.). Be aware of the presence of yellow seals.



- Check before driving for rest load. Report its presence to the cleaning station and planner.
- Remove nitrogen warning stickers. After cleaning these should be off.
- Take extra care with ADR/hazardous substances due to the presence of hazardous residual products such as gasses.
- 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 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 bolds from the man lids are loosened, all blind caps, vent valves, blind cap of the vacuum valve 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. 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 by opening the air-release valve
- Ensure you have checked everything before leaving the cleaning station's grounds and dry our air-lines with the compressor.
  - Complete a **thorough visual inspection**. Start at the top front of the tank or silo and work your way backwards.

# 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 valves for residual water
- When a silo trailer is concerned: the air manifold block and on-way valves.
- 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 affixed to the load unit.
- If the previous loads have been correctly stated on the cleaning certificate, in accordance with those that you 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.



- 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
- Previous loads
- 7. Seal numbers
- 8. Date, time, in/out
- Signature (Cleaner/cleaning station)

#### **Checks and inspections**

- Check if the tank is depressurized before you start and make sure the airrelease valve is open.
  - Especially the hoses, unloading elbow, and the one-way valve should be checked especially, as product is often still found in the one-way valve, as well as the vacuum valve.
- Manually clean and inspect unloading bottom, metal livebottom or ring, unloading elbow, product valve and oneway valves on the bottom and the unloading elbow.



 Ensure that no water remains in the air lines or the hoses.



 Clean the couplings and coupling chest as well as the couplings and coupling chest of the truck.



- Always inspect the silo/silo container's cleanliness and if it is dry after cleaning.
- Before putting back the blind caps and closing the lids, check if all the gaskets are in the proper place, dry, and clean.

- If the silo must be sealed, this must be done with the T.I.R. cable that should be crossed over and passed through all covers, caps, air vents and release valves. (Please refer to the procedure sealing the silo.)
- When in doubt, always seal or get in touch with planning.
- Always leave the vent open after cleaning so that the silo cannot create a vacuum during the cooling process. Use the insect filter to prevent insects from getting into the silo.

### Checklist after cleaning – check the following:

- Is the silo properly clean on the inside? Pay attention to the underside of lids and manholes in particular.
- · Gaskets and lids are clean and on the right sheet.
- · Lids are tight.
- The vent is open.
- Insect filter is clean and installed.



 Couplings and unloading elbow are stored in clean state. Also check the functioning and cleanliness of the one-way valve on the unloading elbow.



- Hoses cleaned and dry, blind caps installed.
- Hose tubes are cleaned.



