

Operating Instructions for a Storage Tank Loaded through a Top Outlet and Discharged through a Bottom Outlet

a) Loading a Tank through the Top Outlet

1. Loosen nuts and lift off top lid screws. Lift off the top lid. If vacuum builds up in the tank, vent the tank by loosening the flange at the top of the storage tank. If this is not possible, slightly open centre and end valves to vent the storage tank.
2. Fill the storage tank and simultaneously exhaust gases.
3. After filling up close the filler plug.
4. Check the tightness of the centre valve, shut off the side valve and replace blanking cap (flange).

b) Discharging a Storage Tank

1. Remove the blanking cap (flange) and connect a discharge conduit.
2. Vent the storage tank by loosening nuts, lifting off screws and removing top lid. If vacuum builds up in the tank and the lid clings to it and cannot be opened, lift it using a lever, loosen the air-inlet valve, or loosen the overpressure vent flange at the top of the tank.
3. Open the centre valve using the wheel at the top of the tank counter-clockwise or toggling the lever at the side of the tank in the direction of the arrow pointing to "Open".
4. Open the end valve, vacuum is filled through the discharge conduit. Then, open the top lid and doing so have the tank vented.
5. After discharging, close the centre and end valves, and close the top lid and mount the blanking caps of the discharge conduit.

Operating Instructions for a Storage Tank with Degassing Piping

a) Loading a Tank through the Top Outlet

1. Open the top lid by turning the handle of bayonet lock or by loosening nuts. If vacuum builds up in the tank and the lid is clinged by pressure, the tank needs venting which can be done by loosening the air-inlet valve on the cover.
2. Fill the storage tank and simultaneously exhaust gases.
3. After filling up close the filler plug and tighten the air-inlet valve.

b) Discharging Without Having Degassing Connected

1. Remove the blanking cap and screw on a discharge conduit.
2. Dismount the flange of the degassing piping.
3. Open the centre valve using the side lever. After the air-inlet valve's pointer moves from "Closed" to "Open" position, discharging of the tank can commence.
4. If "Open" position is not signalled, air-inlet valve failed and it is necessary to vent the tank by opening the top lid.
5. Slowly open end discharge valve.
6. After discharging, close the centre and end valves, shut off degassing piping, mount the blanking cap of the discharge conduit and recovery piping flange.

c) Discharging With Degassing

1. Remove the blanking cap of discharge conduit and the flange of discharge conduit.
2. Connect discharge conduit and recovery degassing piping.
3. Open centre valve and degassing valve will be opened along with it.
4. Slowly open the side valve of the discharge conduit.
5. After discharging, close the centre valve to close degassing valve along with it.
6. Close end side valve, disconnect discharge and degassing piping.
7. Mount the blanking cap and degassing piping flange.

Discharging Instructions for a Storage Tank with Top Outlet Overpressure Vent

1. Allow the blind flange air duct (not red) and line-up the tension in the tank.
2. Remove the blind flange pressure pipe (red flag.) and connect discharge pipe to the flange.
3. Connect air-inlet pipe to flange. There must be a safety valve of adequate cross section on the air-inlet.
4. Bring compressed air into the storage tank and so generating air pressure on liquid surface deliver the liquid through pressure pipe.
5. Check for the tightness of piping connection during discharging.
6. When discharge is complete, close the inlet of compressed air into the tank.
7. Demount discharge pipe and air-inlet pipe. Mount blanking flanges including the original sealing and screws.

In Šaľa on 6.2.2014

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