

## INSTALLATION

### 1. Service conditions

The manlid is designed for aluminium tankers carrying powders such as plastics, cements, granular...

Check the material compatibility with the transporter product

The tank must be fitted with a safety device to limit operating pressure to 3 bar maximum.

### 2. Installation on the tank

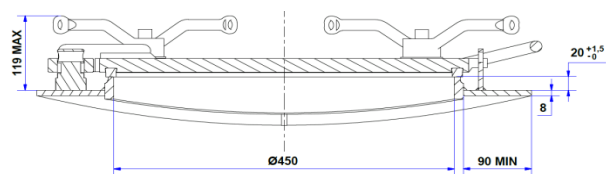
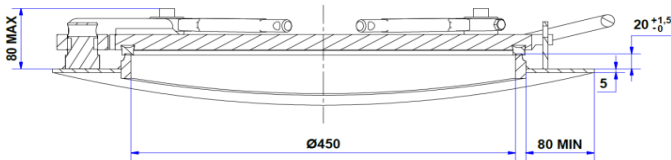
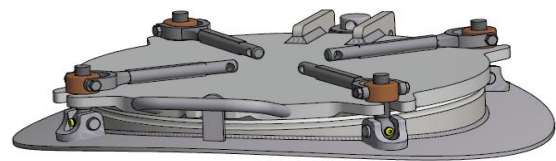
The neckring subassembly is welded on the tank by the customer.

The manlid material can be welded by TIG or MIG welding process, the customer is fully responsible of this final welding. **Max allowed flatness distortion 1mm**

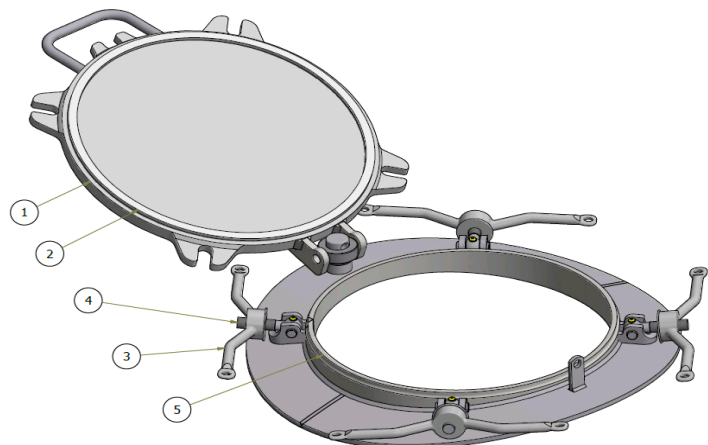
We suggest to use TIG process which needs less energy and limits the neckring seal face distortion after welding (welding material per ISO EN 18273).

Before welding the neckring on the tank, the cover and the 4 bolts must be removed. They should be reassembled after welding.

The 4 M6 x 8 screws should be secured with glue ('Loctite' or equivalent)



	Description	Part Number
1	Coverlid	13 15 11 10 00
2	Coverlid seal	13 15 01 00 04
3	Folding hand nut	13 15 01 50 00
3	Extended wing nut	13 15 11 35 00
4	Eye bolt	13 15 01 00 02
5	Neckring	13 15 12 10 00



### 3. Check before use

Check the neckring seal flatness (maximum defect value 1 mm)

When the flatness defect is over this value a seal with higher dimensions should be used to match with the flatness defect.

The seal tightness should be checked during tank pressure test, this test can be done with water or with air.

#### 4. Operating

##### Cover Opening

Unscrew the four nuts using the handle attached to every one , the torque given by the handle in horizontal position is enough to get the torque needed to unscrew.

If a residual pressure exists into the tank , the cover should slightly rotate around his articulation axis to evacuate the pressure before the 4 swing bolts have been rotated a stop exist on the cover near each swing bolt to secure the rotation before the pressure is evacuated.

Before rotate completely the 4 swing bolts, pull the cover to check there is no more pressure, then rotate finish the unscrewing and rotate the swing bolts .

The cover can be open in two ways : rotation around the horizontal axis , or rotation around the vertical axis , comfortable when the space is limited upper side .

##### Cover closing

Position the seal cover in front of the neckring sealing surface

Rotate the 4 swing bolts, pass over the cover stop to finish the tightening

A strength value of 20 daN on the handle is enough to get the seal tightness

##### Sealing

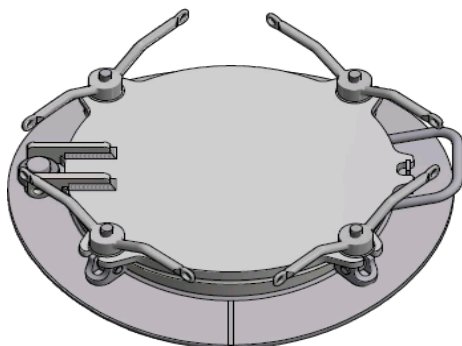
The cover vertical articulation spindle and the handles are drilled to allow installing a cable or a bar diameter 10 mm to secure the manlid against undesirable openings

##### Special precautions

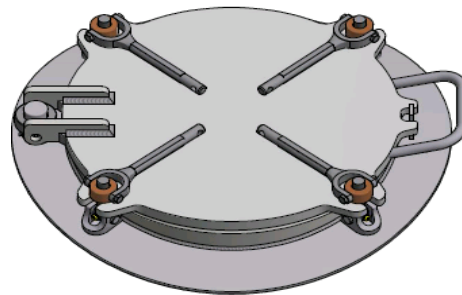
The neckring pressure test at 3 bar should be run by the customer after the neckring is welded on the tank.

(This test is not done during our final inspection.)

The cover should not be open when the tank is pressurized



Extended Wing Nuts



Folding Straight Handnut

