



## MannTek

### Quality, Health, Safety and Environment Policy

Our objectives are simple – no accidents, no occupational illness or work related accidents, no negative environmental impact and optimizing and continuously improving customer satisfaction wherever we operate.

Mariestad, February 22 2019



Markus Bäckström

#### What does this mean?

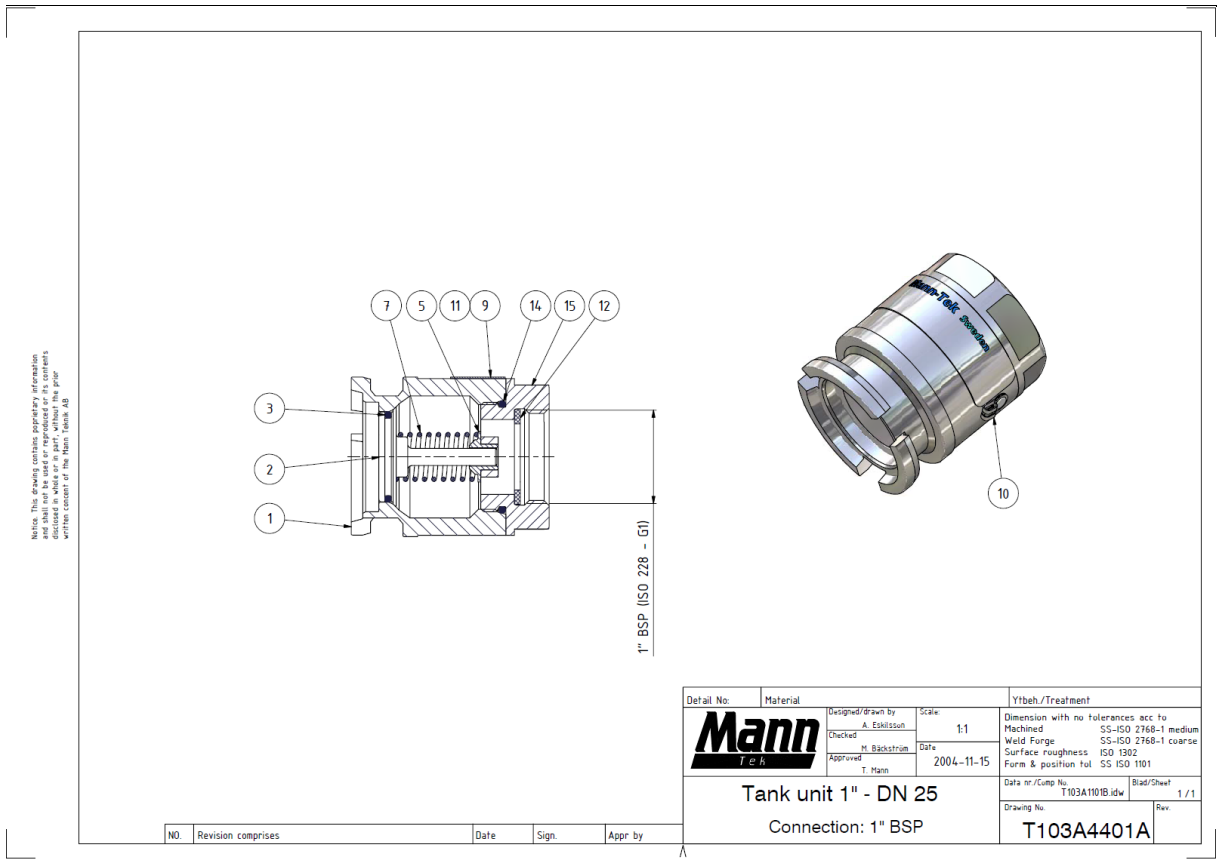
In our daily work to develop, sell, deliver and maintain our products this means to act as soon as we recognize a risk for:

- Delivery of products with insufficient technical quality
- Giving incorrect information
- Not complying with laws and regulations concerning our operation
- Causing negative environmental impact
- Causing occupational illness or accidents
- Not being able to keep promises on delivery terms (product and information)

To act, here means to point out the risk and to make sure we take a balanced decision to prevent what is undesired.

(This policy includes all that is traditionally covered in separate policies for quality, health, safety and environment)

## TANK UNIT 1" MATERIAL: AL, BR, SS



**PARTS NEEDED FOR SERVICE:** Spare part kit and O-ring kit (see page 4)  
Tool: Hexagon wrench No. 2

**PERFORM A SERVICE:** If leaking  
According to regular service (p. 4)  
Change of media



**PLEASE NOTE!**

Make sure that you are using the right type of O-rings and seals for the media you are using. We are using a standard silicone based grease for standard media, for special media please contact us.

## MAINTENANCE AND SERVICE INSTRUCTION



Always depressurise the system and rinse off the parts before beginning any maintenance work. Use protective goggles. Do not handle O-ring seals if the material appears charred, gummy or sticky.



Use tweezers and wear neoprene or PVC gloves. Do not touch adjacent parts with unprotected hands. Rinse off the parts once again before starting the “daily inspection”

## DAILY INSPECTION

1. Inspect the coupling surface for cleanliness and corrosion.
2. Inspect the O-ring in the tank unit connection for serviceability and correct seating in the groove.
3. Inspect the tank unit spring poppet for free movement.
4. Inspect the tank unit for faultlessness and external signs of damage.

## REGULAR SERVICE

Regular service interval is very much depending on local regulations and application conditions. It is recommended practice to make the service every 12 months.

The service procedure shall be as follows:

1. Replace the tank unit O-ring (and washer for BSP connections).
2. Replace worn or damaged components.

Check the state of the connection surface and verify that it is clean before proceeding with the connection.

Couple the serviced tank unit to a usable hose unit as appropriate and check for the correct operation of the valve actuating and bayonet locking mechanism. Couple and uncouple the unit(s) several times.

## USE ONLY ORIGINAL MANNTEK SPARE PARTS FOR MAINTENANCE.

Spare part kit (S-T1-xx)  
O-ring kit (O-T1-yy)

xx and yy means the material key according to the product catalogue. You will find it also as the 6<sup>th</sup> to 9<sup>th</sup> sign in the serial number (eg. T103AxxyyB).



Remove the flat sealing.  
NPT-thread and flange does not have a flat sealing.



Remove the threaded part and take out the spring. The threaded part has been locked with Loctite® so to easy up the dismounting heat the coupling.



Remove the piston.



Change the O-ring (pos.3) on the piston to a new greased O-ring.



Have an equal pressure around the O-ring and make sure to press down the O-ring in the groove.

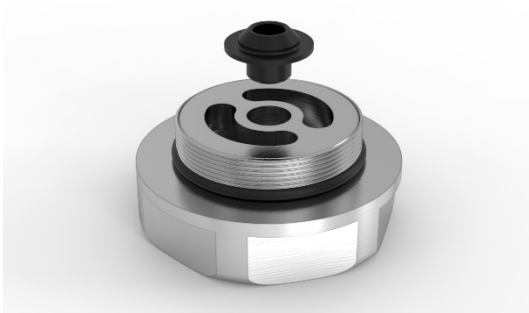
Place the piston in the connection part.



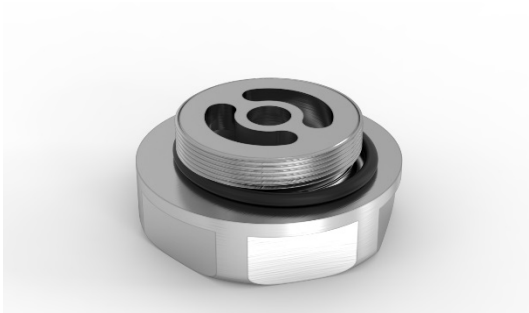
Place the spring over the piston in the connection part.



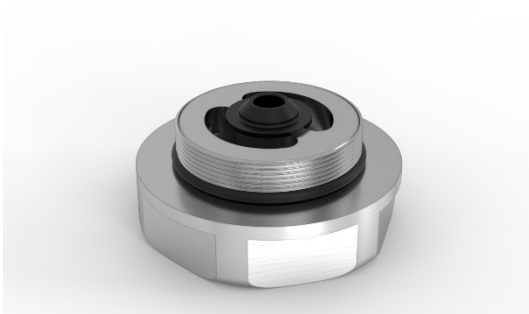
If needed, change the PTFE bushing to a new one, on the threaded part.



Change the O-ring (pos.14) on the threaded part to a new one. Use a greased O-ring.

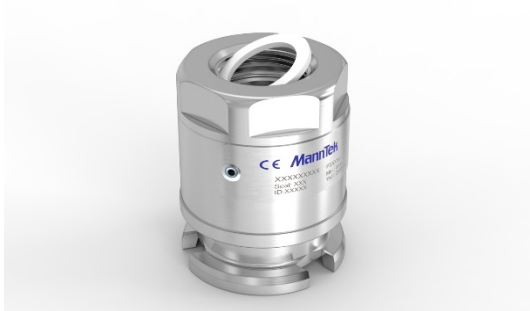


Put some Loctite243® on the threads.





Assemble the connection part with threaded part. Make sure to tighten the threaded part on the connection part.



Assemble a new flat sealing. Finally, make a visual inspection that everything is in its right place. Do also a test connection/ disconnection with a hose unit that not is mounted and not has any fluid inside. If the coupling works all right you are ready to use it again.

Loctite® is registered trademark of Henkel.

## TEST PROCEDURE

After each service a pressure and tightness test of each coupling is mandatory.

If only the O-Ring kit is replaced a seat tightness test is enough.

The following test parameters are in accordance with EN12266 and EN14432:

| Test procedure                                  | Test pressure          | Acceptance criteria   |
|---|------------------------|---|
| Seat tightness test<br>(Air)                    | 6 bar +/- 1 bar        | No visually detectable leakage for the duration of the test |
|   | Max 0,3 bar            |   |
| Shell tightness test<br>(Water) (if applicable) | 1,5 x working pressure |   |

Table 1 – Test pressure

| Nominal size    | Minimum test duration |
|-----------------|-----------------------|
| Up to DN 50     | 15 s                  |
| DN 65 to DN 150 | 60 s                  |

Table 2 – Minimum test duration

### TEST PROCEDURE:

- Plug the tank unit with the appropriate end connection and fill it with the test media (e.g. air or water).
- Apply the test pressure specified in Table 1.
- Maintain the test pressure for the test duration specified in Table 2.
- Determine the leakage rate.
- Couple the serviced tank unit to a usable hose unit and test for leakage.

If a pressure test should be achieved for the coupling mounted in an assembly follow the respective test instructions for the equipment but do not exceed 1,5 x Working Pressure of the coupling.

### STORAGE

Store coupling in a dry, dust free, dark place, in ambient temperature.