

# ✓ Check List

## Multi-Function-Filter MF<sub>2</sub>

### Water runs out from the cover of the MF<sub>2</sub>:

- The MF<sub>2</sub> has too high pressure (water is pumped too high; the MF<sub>2</sub> is operated in downstream mode).*  
**Action:** change the operation mode of the filter: e. g. upstream operation  
**Action:** grease the seal with vaseline or silicone grease.  
**Action:** increase the contact pressure of the cover by using thumbscrews to additionally fasten the cover.
- The seal in the lid is defective or missing*  
**Action:** insert a new seal and lubricate it with silicone grease or vaseline.
- The additional connection in the cover is not correctly sealed.*  
**Action:** Please seal additional fittings with teflon tape or similar; carefully tighten the blind plug with a wrench.

### The MF<sub>2</sub> is blocked in upstream mode (from bottom to top):

- The bottom sieve in the base plate of the MF<sub>2</sub> is clogged by coarse dirt particles.*  
**Action:** pump only clear water into the filter (use a pre-filter)
- Action:** install a drain valve in the additional connection of the base plate; then you can open the valve from time to time and drain off the dirt.
- Action:** remove the bottom sieve for coarse filter materials

### The MF<sub>2</sub> has air in the main pipe during downstream operation (from top to bottom):

- There are very small air bubbles in the inlet water, which accumulate in the main pipe.*  
**Measure:** pump bubble-free water into the MF<sub>2</sub> (check inlet pump)
- The reactor is not vented*  
**Action:** Install a vent valve in the cover (supplementary connection) and connect a hose. Draw the air out of the MF<sub>2</sub> and close the valve.

### The filter material does not whirl in the MF<sub>2</sub> main tube during fluidized bed or circulating operation:

- The bottom sieve in the base plate of the MF<sub>2</sub> is clogged by coarse dirt particles*  
**Action:** pump only clear water into the filter (use a pre-filter)  
**Action:** install a drain valve in the additional connection of the base plate; then you can open the valve from time to time and drain off the dirt.  
**Action:** use the lower sieve only for very fine filter materials (e. g. quartz sand)
- Too little water is pumped through the filter.*  
**Action:** increase the pump capacity that pumps into the filter.

- *The filter material cannot be pumped through the water flow into the central tube.*  
**Action:** pull the central tube a little bit upwards: 5-10 mm distance to the lower inlet opening is ideal.

### **The filter material hangs on the upper filter:**

- *Too much water is pumped into the MF<sub>2</sub>*  
**Action:** throttle the supply through an adjustment valve or with a weaker feed pump.
- *The filter material is lighter than seawater*  
**Action:** change the procedure to reverse circulation (reverse vertical flow) or reverse fluidized bed

### **AquaCare +Globuli get caught in MF<sub>2</sub> and are no longer swirled around:**

- *Too little water is pumped into the MF<sub>2</sub>*  
**Action:** increase the flow rate to MF<sub>2</sub>
- **Action:** use the magnet set to release the blockage of the globules from the outside (without having to open the filter).