

- Remon

# Membrane filtrations



**REMON**  
passie voor water

Maximum Operating Pressure  
**300 PSI**

Operating Temperature Range  
**-10 °C – 49 °C**

  
**DANGER**  
HIGH PRESSURE

**WARNING**

*Not for use with compressed air.  
Serious injury to personnel and/or damage to equipment may result.  
READ THE INSTALLATION AND OPERATION MANUAL COMPLETELY BEFORE  
ATTEMPTING TO INSTALL OR OPEN, OPERATE OR SERVICE THIS EQUIPMENT*

EuroTec  
2760.3-1



**REMON**  
passion for water



**Remon creates high-quality water treatment systems tailored to your water needs. Based on our vision and experience, we have been providing water for plants, factories, humans, and animals for over 40 years.**

- **Over 20 years of experience with**

## **Membrane filtration systems**

“ Remon continuously thinks along ”

Henk Withaar - Carwash XL

Remon has been supplying various membrane filtration systems for the desalination of salt (ground) water or for the production of Demineralized water since the beginning of 2000. Born out of necessity and started as pilot projects, Remon has been building its own membrane filtration systems with capacities of up to 30 m<sup>3</sup> per hour for over 20 years. These systems find their way in industry, drinking water systems, glasshouses and agro and are often the prelude to ultrapure water via EDI for pharma applications and hydrogen production, for example.

- **How does**

## **Membrane filtration work**

**Highly effective for groundwater with iron and manganese.**

With membrane filtration, impurities are removed from the water through a membrane. The water is pressed through a membrane (film), leaving the impurities behind. It operates by using membranes with pores of varying sizes. Particles larger than the pores are blocked, while the purer liquid passes through. There are different types of membrane filtration, including microfiltration, ultrafiltration, nanofiltration, and reverse osmosis, each with different pore sizes and applications. Membrane filtration is used to produce purified water or liquids.



- **This is why you should have a**

## **Membrane filtration from Remon**

- ✓ Can be controlled online
- ✓ Own fabrication
- ✓ Low investment
- ✓ Low total cost of ownership (TCO)
- ✓ Possible from 1 to 30 M<sup>3</sup>/h
- ✓ 24/7 Service for continuous water
- ✓ Compatible with EDI for ultrapure water

**Remon has been a reliable partner in the field of water treatment for more than 40 years.**

**Visit our website [www.remon.com](http://www.remon.com)**



- **applicable for**

## Reverse Osmosis or Nanofiltration

The membrane filtration systems can be performed with membranes for reverse osmosis or with Nanofiltration, depending on the application and the water to be treated. In any case, all systems come standard with an online control, colour touch screen and PLC control which Remon has developed itself. This makes customization well possible and allows the system to be adapted to your needs if necessary. This NT (Network Technology) control allows you, as a user, to entirely monitor the machine's operation in a graphical representation, to control it, and to trace it. When connected to internet or a 4g modem, Remon can log in to the installation and read it out, and, if required, adjust and operate it remotely. What makes Remon's systems unique is that they can be used extremely well for the treatment of groundwater that contains iron and manganese. Where every other membrane filtration system will eventually have problems with scaling and iron oxides, Remon's systems have also been specially developed with this in mind, to keep the maintenance interval low, and the working pressures can remain low, resulting in low power consumption.

- **Ideal for combination with**

## Remon EDI

The Titan line of Remon is an ideal prelude to a system for the production of Ultrapure water. An EDI (Electro-De-Ionisation) system that can supply Ultrapure water must be supplied with already very high quality supply water. The TITAN line of Remon is extremely suitable for this.

The TITAN's smart NT control ensures integration with Remon's EDI systems. The exchange of data takes place via Modbus and the machine is accessible online. Not only to read out, but especially also to operate, check and even to fix any faults. The capacities of the two machines are also aligned to create a highly efficient installation producing water for laboratory applications, industry, and hydrogen production.



“ We have our own waterfactory ”

Patrick Bouten - Special Berries





## - The membrane filtration systems from Remon

Remon always recommends the best membrane filtration system for your situation.

### Titan© Mini

The Titan Mini is the smallest member of the TITAN family and is our smallest form of membrane filtration. The Mini is often used in small industries where a few cubic meters of demineralized water per day is desired. The MINI is only used on tap water and the clean water is used for supplementing boiler water, cutting oil, humidification etc.

Titan mini is widely applicable because the machine's structure is narrow and usually vertically oriented. As a result, the installation occupies little floor space and can be placed almost anywhere. Thanks to the 230 volt connection, it can be installed anywhere.



### Titan© Compact

The Titan Compact is the best sold model of the Remon membrane filtration systems. At the rear of the base frame, 6 different membrane configurations can be created, varying from 1 membrane for the production of approx. 1 m<sup>3</sup>/h, to 6 m<sup>3</sup> per hour with 6 membranes. This allows Remon to deliver installations in any size and capacity.

The Titan Compact can be connected to both tap water and raw (salt) groundwater. Equipped with energy-efficient pumps and a PLC HMI control with online control and a colour touch screen, this installation is very widely applicable. In addition, this system has already integrated the control for a multifilter, so that the Titan Compact produces 1st class (drinking) water on the spot. Also, Titan Compact often comes with a REMON EDI system for production of ultrapure water.



### Titan© Magnus

The Titan Magnus is the largest in the Titan range. This system is capable of delivering up to 30m<sup>3</sup> per hour and consists of 2 components; a basic frame with the control and pump on it and a separate pipe frame. With this application, the system can be built quickly, and it is modularly expandable, even at a later stage. The Titan Magnus typically finds its way in the industry and glasshouses. Thanks to the online control and the 10" colour display, this machine is made for the demanding customer who is permanently dependent on his/her (demineralized) water.



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# REMON

passion for water

## - Prevent watersource gases with the Multi filters from Remon

If you are interested in membrane filtration for the treatment of groundwater, it is advisable to also consider a multi-filter/deaerator. Since groundwater always contains unwanted gases such as methane, carbon dioxide, and hydrogen sulfide, for effective groundwater treatment, the water should always be aerated with fresh clean atmospheric air. This process eliminates all unwanted odors and gases from the groundwater after treatment with a membrane filtration system or an ion exchanger, ensuring that the water is also polished for any remaining traces, a process known as polishing. This is the essence of Remon's Multi-filters. Additionally, these Multi-filters can self-flush, earning them the nickname of self-cleaning stripper towers. Any sludge formation is thus easily removed from the stripper tower.

## - Always a reliable groundwater supply

If watersource gases are not effectively removed, bacterial colonies can grow within the downstream piping, leading to various consequences. The pipe can become clogged, bacteria can produce toxins resulting in diseases, and the freshness of the water is compromised. A multi-filter prevents this and is essential for a good and reliable private groundwater supply. Because the filters can be filled with sand or our special proprietary filter material based on marble granulate, the multi-filters can also be used to control whether or not to add lime to the water.

## - That's why you should buy a Multi filter from Remon

- ✓ self-cleaning stripping towers
- ✓ Post-treatment of source water
- ✓ Control via water treatment plant
- ✓ Add hardness as desired
- ✓ No slime in the downstream system
- ✓ No more smell from the water
- ✓ Water polishing
- ✓ 24/7 Service

With a multi-filter from Remon, you are assured of degassed groundwater.







- **the multi filters from Remon**

## R710

The R710 multifilter is ideal for smaller water purifiers up to approx. 4 m<sup>3</sup>/h. The model is available in a normal height of about 210 cm but can also be designed in a height of 260 cm. It is small enough to fit through a door and is designed to supplement smaller spring water treatment systems to perfectly purified water. The R710 multifilter may or may not have its own control and can be controlled by, for example, TITAN compact

## REM4000

This dynamic multifilter REM4000 is 'the system to use' when it comes to larger systems. Whether it's a large ion exchanger or a TITAN Magnus, the REM4000 multifilter is capable to treat and degas large amounts of water. The REM4000 can be placed in parallel and for that reason the dynamic control has been developed by Remon. In this way, multiple REM4000 multifilters can be combined and the amount of water to be purified is basically infinite. So, continuity is guaranteed, intermediate buffers for backwashing filters are no longer required, and water can be produced 24/7.



R710



Rem4000

- **Water is our Passion**

## That's why Remon should be your choice

Every situation is unique. Every water plant too. Because no place is the same, every situation requires its own solution. At Remon we understand that.

To be of great service to you, your contact with Remon starts with a conversation with our customer service. From here, you will be brought in contact with our experienced and specialized field representatives. They are able to select the right water installation with you, to ensure that the water meet your needs.

Once the sale is closed, the work preparation will begin and a custom water treatment will be prepared and assembled for you. Then the system is installed, commissioned and turn-key delivered for years of trouble-free purified water.

That is what we mean by *'passion for water'*

- **All in-house**

## The installations from Remon

Because we believe that only the best is good enough, we often manufacture our installations in-house. Only then can we achieve the exact quality that we aim to deliver. We build everything ourselves, have our own molds, create our own schematics, program the computers and online connections ourselves, and install and maintain everything ourselves. Only in this way can we consistently produce water of any desired quality, ensuring a constant standard.

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passion for water

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