

WHITEWATER

quality in purity

Water treatment in dialysis technology

Fig.: Twin pass dialysis water treatment, supports full thermal disinfection

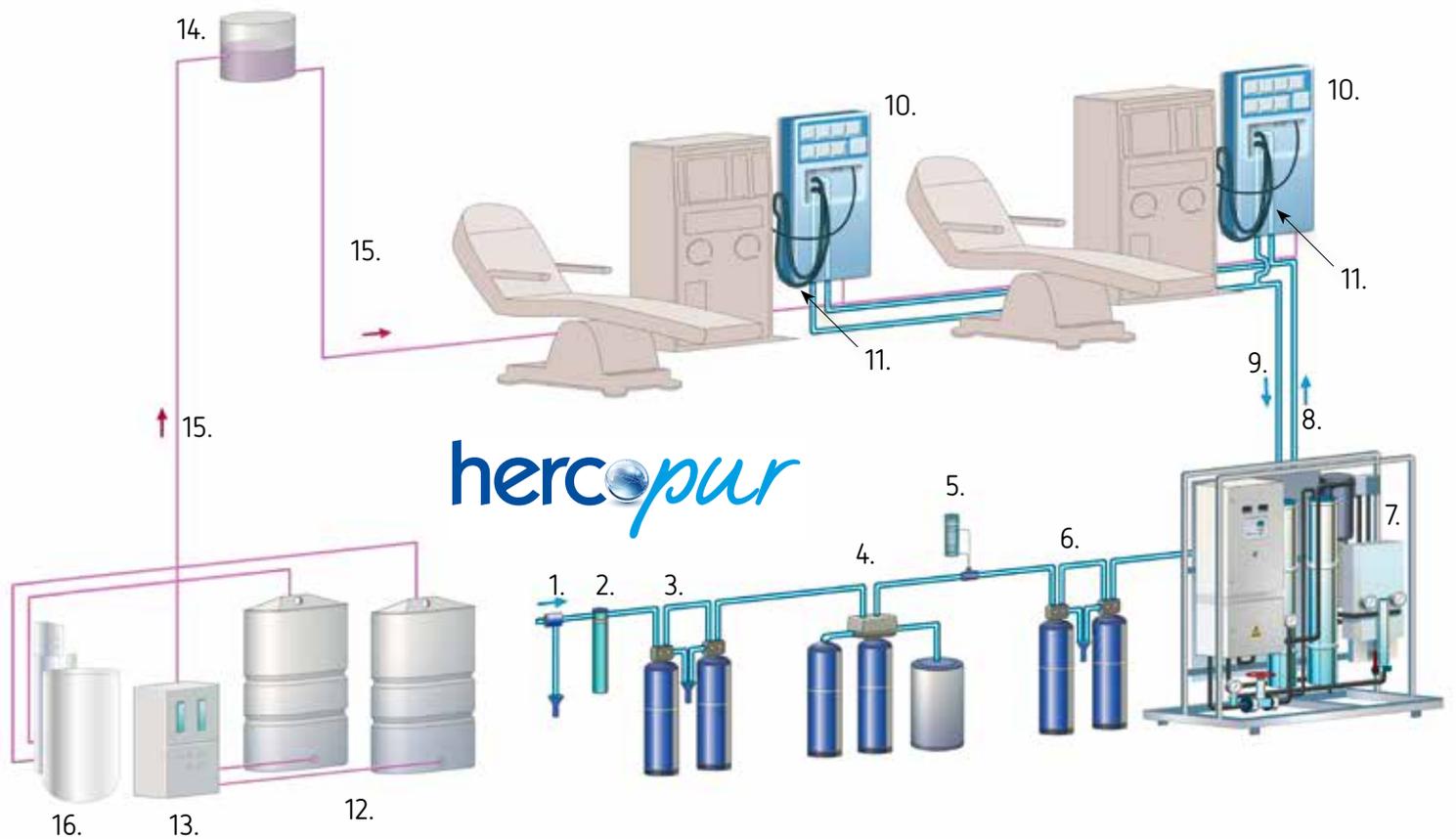


in partnership with Herco
hercopur



Dialysis water treatment – it's a matter of trust

At a glance – the complete water treatment system for artificial kidney dialysis



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| 1. backflow preventer | 9. return side distribution ringmain without dead legs |
| 2. pre-filter | 10. bed head media panel |
| 3. iron removal filter (option) | 11. double-hose connection system,
flow and return without dead zones |
| 4. duplex water softening unit | 12. concentrate holding tank |
| 5. hardness monitoring unit limitron | 13. central concentrate distribution |
| 6. activated carbon filter (option) | 14. high-level concentrate distribution reservoir |
| 7. hercopur reverse osmosis unit | 15. concentrate supply pipe |
| 8. supply side distribution ringmain
without dead legs | 16. concentrate mixing system |



Complete solutions for maximum safety and economy

Dialysate is comprised of up to 99% of purified water, generated by hercopur reverse osmosis of perfect quality. Specialised, energy-efficient, low-pressure modules ensure maximum hygienic safety.

Permeate that has not been used is recycled in order to reduce operating costs.

Twin pass for maximum safety

Our twin-pass reverse osmosis systems guarantee maximum safety and premium-quality purified water thanks to the use of two water treatment systems arranged in series. Excellent operational reliability is also ensured as both systems can be run separately without interruptions during operation.

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50 % less water costs thanks to demand rated controller and water recycling



- Constructed to operate with constant circulation with continuous-flow membrane modules and continuous-flow sampling valves at the beginning and end of the ring main loop
- Disinfection unit monitored using computer technology
- User-friendly microprocessor control with complete graphical display
- Sequential arrangement of thin-film spiral membrane modules with tangential flow and vortex action to prevent deposits on the membrane surface
- Improves the quality of the purified water and extends the service life of the membranes
- Additional periodic rinse programmes (water flush, permeate rinsing) to clean the membrane surface
- Fully-automatic, fully-programmable rinsing of the system when dialysis is not being carried out
- Three-way reduction of water consumption thanks to demand-based control, recirculation of concentrate and the adjustment of concentrate for maximum utilisation
- Robust, long-lasting stainless steel tubing
- Redundant configuration for all devices used to measure the quality of purified water
- Optional: remote monitoring and remote control of the system

Because water must flow: sub loop for each dialysis machine

Even dialysis units that are disconnected or are not in operation are not without risk. This is because with conventional systems, at least some water remains in the feed line. This can result in biofilm formation in the inlet hose, which can in turn trigger acute or chronic reactions in your patients.

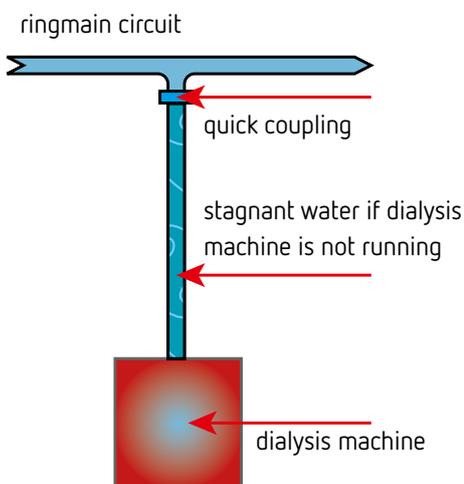
With the hercopur double-hose connection system, you can prevent the health of your dialysis patients suffering as a result of endotoxins.

Even when the dialysis unit is not in operation or is disconnected, the inlet hose remains attached to the water system and subject to continuous circulation.

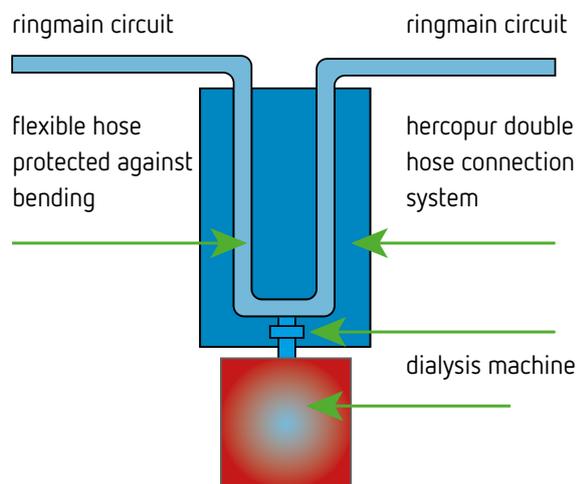


The hercopur double-hose connection system prevents biofilm formation and protects your patients.

Conventional system

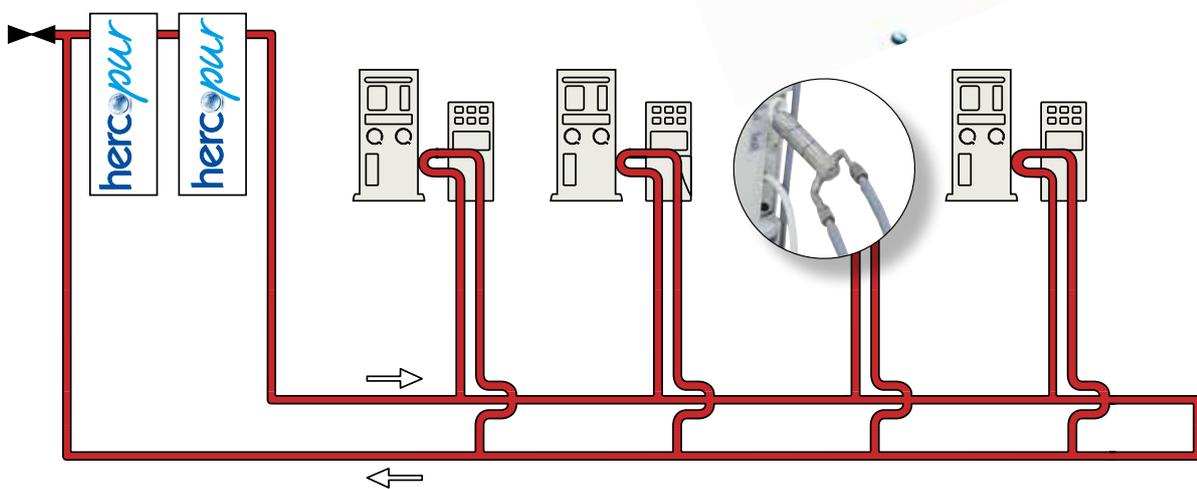


Progress of hercopur



Guaranteed bacteriafree by complete thermal disinfection including the reverse osmosis units

No chemical disinfection required, improved safety for staff and patients.



Only regular thermal disinfection can guarantee that quality standards are observed in the long-term. However, if reverse osmosis units and inlet hoses of the dialysis machine cannot be disinfected at the same time – as is the case with a number of systems on the market – there is a risk that bacteria could grow in the reverse osmosis unit or in the inlet hose of the dialysis machine, and spread again in the system.

hercopur systems are therefore ideal for those who do not want to leave anything to chance. They offer complete thermal disinfection of the reverse osmosis unit including the feed tank, membrane modules, ring main loop and sub loop for each dialysis machine that operates with continuous circulation.

For this reason, the permeate is heated to 85-95°C and circulated throughout the system – from the feed tank, through the membrane, the ring main loop, and the machine inlet hoses that are designed for continuous circulation, and return again to the feed tank.

With fully programmable control, the process is completely automatic with programmable disinfection intervals as well as continuous heat disinfection when dialysis is not being carried out. The integrated rapid-cooling programme also allows thermal cleaning to be interrupted at any time if emergency dialysis is required.

- Complete thermal disinfection that includes the entire reverse osmosis unit
- Fully-programmable disinfection intervals when dialysis is not being carried out
- Rapid-cooling program for emergency dialysis

Modern dialysis supply panels



Your patients should feel comfortable – and the elegant design of the hercopur dialysis supply panels will make sure that they do. Our customised rail systems and fitted furniture are a simple way to make patient rooms a lot friendlier.

Our quick coupling connections are mounted with a 30° downwards slope. As a result, fluid always flows outwards to the collector.



Optionally available from hercopur:

- Radio/TV connection
- Telephone connection
- Internet access
- Twin column for supplying two dialysis stations

Central concentrate supply system

By combining the hercopur concentrate mixing system with the hercopur concentrate gravity system you can ease the burden on the environment, your staff and your wallet. All that is left to do is to purchase concentrate powder from your preferred supplier. In this way, you will only need to transport 15% of the original quantity as you will be able to produce inexpensive dialysis concentrate yourself using the permeate from existing reverse osmosis units.

The dialysis stations are supplied automatically using the hercopur gravity system. Thanks to the static head, the concentrate flows automatically to each dialysis machine at constant pressure.



Experience gives us the edge: hercopur reverse osmosis units

Whitewater, in partnership with Herco have concentrated on membrane technology since the end of the 1970's, manufacturing reverse osmosis systems for various applications.

You can rely on our expertise and the quality of our systems without any doubt. Herculpur reverse osmosis systems combine a lower water consumption, low operating costs with maximum safety.



*Economic systems -
continuous development -
certified safety!*



Service – throughout Ireland



Dialysis is a matter of trust and requires service that you can rely on – round the clock and of course at weekends and on public holidays.

Our team of qualified technicians is your guarantee of outstanding support for your dialysis centre. We would be delighted to provide you with further information on our attractive maintenance contract system for exceptional safety and a long service life for your system.

Thanks to our strong service network, we are always available to help. You can contact us 24/7 via our

*Around the clock -
guaranteed!*

→ **Service Hotline**
+353 (0)1 294 0300

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