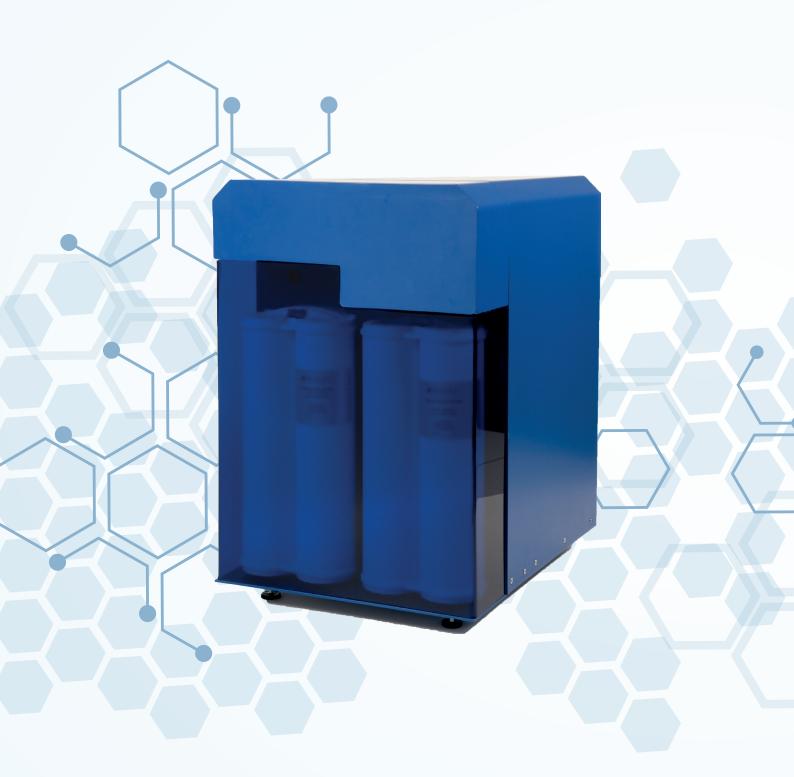
### RO CLASS + EDI







## LABORATORY OSMOSIS + EDI FOR WATER CLASS II OR III

Reverse osmosis is a cost-effective method for removing impurities from the feed water. The osmosis membranes we use are semi-permeable with their microporous membrane that retains almost all dissolved substances, including inorganic and organic substances, particles and microorganisms. In order to achieve Class II or III, either subsequent cleaning by means of a cleaning cartridge or a downstream electro-deionisation unit is necessary.

In combination with our downstream EDI you get the better water quality type III, at best 0.08 µs/cm.

#### WATER STANDARDS ACCORDING TO STANDARDS ASTM D1193-91

measurement	neasurement   conductivity		salinity	TOC		
Tap water	400-1500 μS/cm		ca. 300 ppm	bis 5000 μg/Ltr.		
ASTM Typ I ISO D1193-6	0,055 μS/cm	> 18	0,05 ppm	<50 μg/Ltr.		
ASTM Typ II	1 μS/cm	>1	0,12 ppm	<50 μg/Ltr.		
ASTM Typ III	0,25 μS/cm	> 4	8 ppm	<200 μg/Ltr.		
ASTM Typ IV	5,0 μS/cm	> 0,2	-	-		

### OUR PASSION IS THE BEST RECIPE FOR QUALITY







#### **INNOVATIVE PRODUCTS**

Berrytec water systems are equipped with functional technology to control your water quality.

We work with modern processing methods such as electrodeionization, osmosis with pulsation technology and proven polisher and subsequent cleaning cartridge.

Our systems are so flexible and diverse that you only buy what is necessary for your application.

The housings of our Berrytec series are built from magnesium-aluminum alloys, as well as our dispenser arm. This allows us to guarantee optimum service life and durability.

#### **CONCEPTIONAL**

Not your laboratory needs to adapt to your water system, but we adapt your system to your standards.

In other words, we offer many solutions as individual components. As well as compact solutions as a cabinet system or as solutions in a fixed or mobile base cabinet.

With our dispenser-arm solutions you are flexible when you have to fill your vessels.

Different water qualities from one system are possible, that is efficient and saves costs.

Your requirements in the laboratory are changing: no problem, we can retrofit our Berrytec series on many models.

#### **ADVICE AND SERVICE**

With the right choice of your water system we will not leave you in the dark. We analyze the best system for your application for free.

We take the following parameters into account:

- feed water quality
- Your laboratory application
- · water demand
- Financial framework
- Variants

Request the free test kit from us or one of our distributors. Fill in the questionnaire and send back the enclosed sample tube with your feed water.

Maintenance, such as changing subsequent cleaning cartridges, UV lamps and filters, is customer-friendly and can be done by the user. This saves costs.

Ask us, we help you to choose the right system.

Pre-Softening To increase the service life of your osmosis modules
Membrane degassing For the reduction of carbon dioxide in the water, for example to reduce the conductance of the produced permeate
Reverse Osmosis The cost-effective method of producing laboratory water. Up to 98% deposition
Electrodeonization Recleaning stage after osmosis to produce water of less than 1 $\mu$ S / cm
Ultrapure water The royal class of water quality
UV radiation Against standstill contamination
Ultrafiltration Removal of pyrogens and DNA
Ion exchanger Removal of inorganic ions

Activated carbon can be used to remove dissolved organic substances and chlorine

#### MODEL OVERVIEW OF ALL SYSTEMS

Adsorption

							_				
Series	Production volume per hour	Adsorption and Deioni- zation	Osmosis	EDI	Ultrapure water	UV	UF	Post- cleaning			
Available options											
mini-RO	up to 24 ltr.		•								
mini-UP+	up to 20 ltr.										
RO	up to 60 ltr.										
EDI	up to 20 ltr.										
UP	up to 20 ltr.	•			•	•	•				
Kombi Klasse	from 5-20 ltr.	•	•	•	•	•	•	•			
Sutower	up to 36 ltr.	•	•	•	•	•	•	•			
Kompakt²	from 24 ltr. up to 500 ltr.	•	•	•		•	•	•			

<sup>&</sup>lt;sup>2</sup> cabinet / cabinet model, also available as roll container



# Berrytee



### **RO CLASS OSMOSIS**

Everything starts with a good pre-cleaning, in order to get pure water classes II, and/or III. Or as a preliminary stage for one of our many ultrapure water systems, with the exception of our BerryPURE® mini Direkt, which can be connected directly to the feed water. In addition, osmosis is the best way to keep the TOC

value low. With our laboratory osmoses we offer you a solution for every need up to 40 litres \* per hour as a standalone system. Reverse osmosis is a cost-effective method for removing up to 99% of impurities from feed water. The modules we use are equipped with their microporous membrane and retain almost all dissolved substances, including inorganic and organic substances, particles and microorganisms. The use of osmosis water is manifold, we are happy to assist you.

\* (For larger systems up to 500Ltr./hour we offer our compact class to you.)



#### MINI RO

In our range of laboratory products, we offer you 3 different model groups.

Our mini-RO is best suited for 6-24 litres/hour and adapts to your space conditions. Housing made of white plastic in a very compact design.

- Dimensions only T300 x W 180 x H 410mm
- External placement of control for monitoring all values, data and limit settings
- 2 external prefilter cartridges 2 x 10" 1 $\mu$ m and activated carbon with 5 $\mu$ m
- with rinsing program and discharge control for the permeate
- Concentrate to permeate ratio 35 : 65 (except mini RO+)
- TOC values <30ppb</li>
- integrated module flushing, permeate of 5-13µS/cm are available (depending on the quality of the feed water)
- Removal of silicates <99.9%</li>

With the downstream berrypure & XL residual desalination cartridge, we achieve pure water qualities of up to  $0.08\mu s/cm$ . The mini-series can be installed at different places in your laboratory, one corner is always free , - under table - wall - "ceiling", only the external control unit should be in your field of vision So we can also integrate our control unit into your laboratory media supply.

We also offer tank modules in various sizes and shapes from 30-XXXLiter. We manufacture individually tailored to your needs, so that also the assembly behind laboratory tables with only 10-12cm depth is possible. Of course we also have standard sizes with 30/60 and 100 litres in our assortment. Here, too, there are plenty of additional options such as automatic UV sanitation, recirculation, tank ventilation with  $\rm CO^2$  adsorber, ring line solutions and much more. Our specialists will be happy to assist you individually.

In addition, we have a Mini-RO Plus in our offer, which offers a integrated tank with 30 litres volume and a feed pump, as a simple entry-level solution for smaller quantities and customers who nevertheless do not want to do without a smart osmosis solution.



FOR SMALL 350 T X 180 W X 460 H, THE STRONG MINI CAN DELIVER 24 L / HOUR - AND FINDS A PLACE IN ANY LABORATORY. SUITABLE TANKS AND ACCESSORIES ACCORDING TO YOUR SPACE REQUIREMENTS.

#### RO AND EDI CLASS

For all those who have a little more space and expect even more comfort and performance from our systems, we offer our RO-, or/and EDI-class systems.

Compact construction in our high-quality aluminium housing, individually paintable in many RAL colours (for a small supplement).

Our RO and EDI class manage a performance spectrum of 12-40 litres per hour and are still compact in size in its construction, as table, under-table or wall model.

Also here we have different assemblies, like basic system, tank, control and feed pump. The difference is that here the possibility of an electrodeionization unit can be offered as a post-cleaning stage, which is not possible with the mini-RO for space reasons. This saves you consumables for purification.

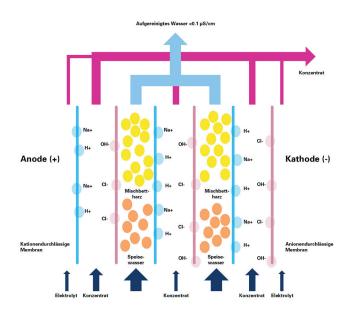
- EDI cell with which we can achieve water qualities of up to 0.08µS/cm (EDI class)
- 2 external prefilter cartridges 2 x 10" 1µm and activated carbon with 5µm
- · with rinsing program and discharge control for the permeate
- Ratio concentrate to permeate 35:65
- TOC values <30ppb</li>
- Removal of silicates <99.9%
- Optional control integrated in housing or external, e.g. Media column in your laboratory
- Control: Touch Panel (Option)
- Network module (option)
- · 10/00
- Integrated pre-cleaning cartridge for the EDI cell
- Capacity from 12 to 40 litres/hour, for daily quantities of up to 600 litres.
- Sanitation module (option)
- Powerful external feed pump with 66 litres/minute
- Connection of one or more Easy Dispenser arms with volume dosing function 0.01-99 litres for user withdrawal in the laboratory.

The dimensions of the RO class are T440  $\times$  B380  $\times$  H520mm, the housing of the EDI class is 100mm deeper. Here, too, you are flexible with the tank modules. We offer tank modules in various sizes and shapes from 30-XXX Liter. We manufacture individually tailored to your needs, that also the assembly behind laboratory tables with only 10-12cm depth is possible. Of course we also have standard sizes with 30/60 and 100 litres in our assortment. There are many additional options for this, such as automatic UV sanitation, recirculation, tank ventilation with  $CO^2$  adsorber, ring line solutions and much more.

Also here we help you with pleasure with the correct choice of your system and offer you a complete service of the first installation up to the value-adding annual maintenance.

### **RO CLASS WITH EDI**











TANK SIZES AND SHAPES ACCORDING TO YOUR WISHES AVAILABLE



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