RO/DI, REVERSE OSMOSIS SYSTEM [CROS]

PHARMACEUTICAL TECHNOLOGIES

BRAM-COR

BRAM-COR REVERSE OSOMOSIS (RO/DI) SYSTEMS are designed to produce compendial purified (PW) and highly purified (HPW) water through several water treatment steps, according to any specific feed water quality and production need.

The treatment steps, necessary to separate the water from organic substances, high and medium molecular weight ions and from bacteria/pyrogenes, may include the following:

- *Sodium hypochloride dosing station for water disinfection and oxidation of organic substances, reducing the bacterial charge*
- *Sodium metabisulphite dosing station for neutralization and chlorine*
- *Double filtration system to eliminate solid substances in inlet water*
- *Single or double osmotic stage*
- *Continous Electro-Deionizer*
- *UV lamps*
- *Final sterile filtration -0,22 µm*

All Bram-Cor systems are designed and manufactured and in accordance with cGMP regulations, completely validatable, and are suitable for use in FDA and EMA regulated facilities. Visit us at: www.bramcor.com

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AWS

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RO/DI, REVERSE OSMOSIS SYSTEM [CROS]

PW IS USUALLY OBTAINED THROUGH

- ***Single stage RO + Electrodeionization***
- ***Double stage RO***
- ***Double stage RO + Electrodeionization***

In each RO stage, water is processed through thin film composite RO membranes, offering the highest rejection of contaminants.

Two different flows are generated by the RO system: permeate water, corresponding to PW specification, and RO concentrate, which is recycled in the system in order to obtain a higher recovery with a lower consumption of inlet water. *An additional devoted RO step might also be added to reduce the amount of concetrate water to be wasted.*

Our ro/di equipment offer range of PERMEATE capacity spanning from 100 up to 20,000 lph, complying with cGMP and FDA regulations, including:

- *Centrifugal booster pump in AISI 316L stainless steel, Electronic pressure transducers automatically regulating the pump capacity*
- *AISI 316L stainless steel membrane vessels*
- *Sanitary in-line instrumentation to monitor product critical parameters, such as conductivity, temperature and pH*
- *Full automation managed through GAMP compliant hardware and software*
- *Framework and control board in AISI 304 stainless steel satin finished*
- *CIP sanitization or HOT WATER sanitization*

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