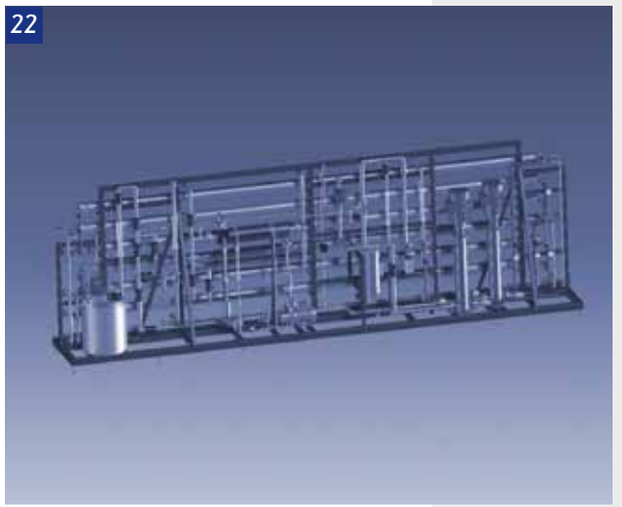
OSMO successful with water processing plants

OSMO is delighted to announce two lucrative orders from the paper industry and medical technology – both follow-up orders from satisfied customers.



22 Water processing plant

Together with a customer from the paper industry, OSMO developed an economic concept for water processing. The additional water processing plant will supply from the middle of the year both the steam generation of the existing paper production and the cooling circuit, which was previously only fed with water that was stabilised chemically in a complex procedure, which resulted repeatedly in deposits in the cooling system.

With the new system, partly desalinated water and hardness-free water is used as the feeding medium for the cooling tower. As such, the virtually ion-free feed-in avoids deposits in the cooling system and the chemical dosage is reduced to a minimum as are the operating costs of the plant.

The plant technology consists of a combined iron removal and manganese removal in the feed-in, the desalination is carried out with a reverse osmosis plant with downstream softening plant. The gas release of the desalinated water is carried out with a contemporary membrane gas release unit, which separates the CO_2 contained with strip gas and a vacuum. The plant with a throughput power of 40 m^3/h works fully automatically, which means that the necessary service work for the operating staff is limited to the filling up of the dosage chemical.

The new plant supplements an already existing smaller water processing plant, which was already commissioned by OSMO in 2004. Not least due to the highly stable and reliable operation of the existing plant, the customer opted for a further plant from OSMO.

It is remarkable that the original membranes are still in use in this plant after 7 years – proof of the good process design.

Deionised water in medical technology

OSMO Membrane Systems GmbH won a further order at the beginning of March of this year from a manufacturer of dialysis membranes from eastern Germany, which is building a new production line. The dialysis membrane will be used in the medical technology for blood washing.

The order includes the supply of several plant systems for demineralised or fully desalinated water (deionised water). The incoming city water is reliably desalinated from a conductivity of 600 µS/cm to permeate values smaller than 5 µS/cm and cleaned from removed carbon dioxide with membrane gas removal, which would adversely affect the production of membrane fibres. Gas removal using membrane contactors has the benefit that hardly any chemistry is needed, as the membranes used are highly hydrophobic and therefore do not let any water through, but only the gaseous components.