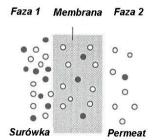
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JP3RO unit for purification/concentration of liquid radioactive wastes by reverse osmosis









Membrane separation

Composite membrane

3-stage reverse osmosis installation

Control panel

3-stage JP3RO installation, capacity of 1 m³/h of pure permeate consists of three stages of reverse osmosis operating at pressure not higher than 2.2 MPa. The first two are purification stages consisting of two RO 8"×40" SU 720R (Toray) modules connected in series; the third one is a concentration stage consisting of four RO 4"x40" SU 810 (Toray) modules placed in two parallel vessels, two modules in each vessel. The installation produces a permeate of specific activity of 10 kBq/m³ and solute concentration not higher than 0.1 g/dm³. The concentrate obtained in the RO unit has specific activity not higher than 10⁷ kBq/m³ and salinity not higher than 250 g/dm³.

