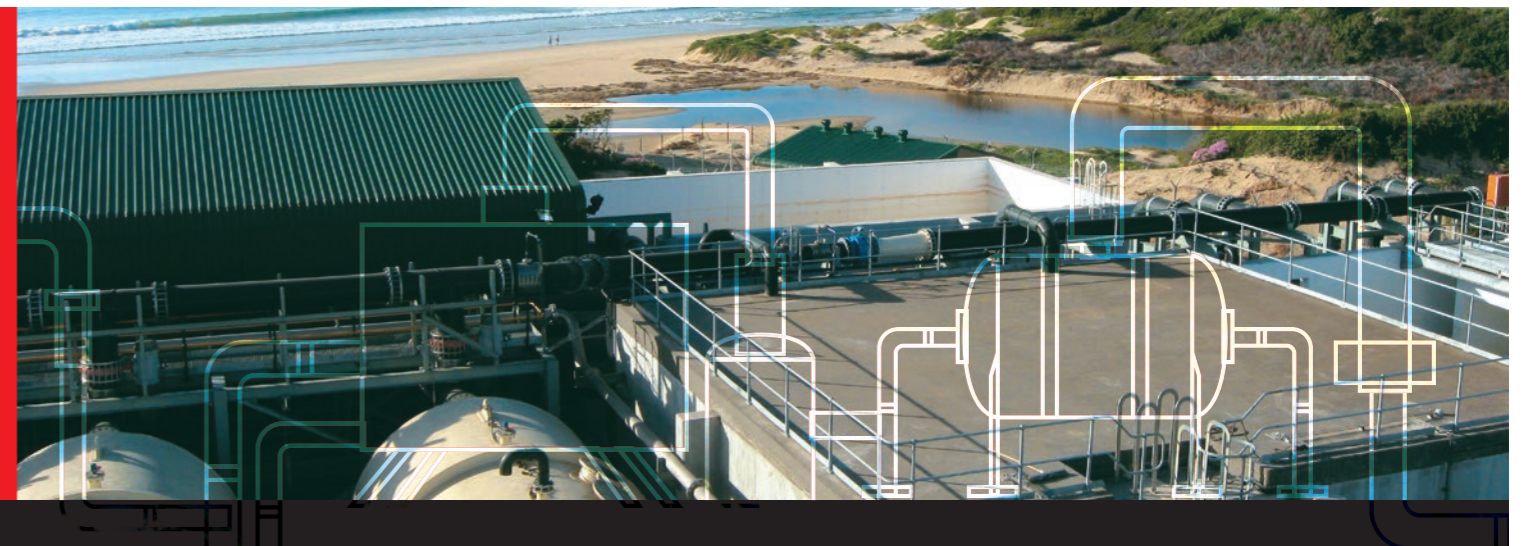


SEA WATER DESALINATION

DESALINATION IS PARTICULARLY SUITED FOR COUNTRIES UNDER WATER STRESS AND WITH LIMITED WATER AND ENERGY RESOURCES.



Our reverse osmosis process involves passing screened and filtered sea water through semi-permeable membranes at very high pressure. This causes the salt to stay behind, while pushing through desalinated water on the other side. The concentrate (brine) produced is sent to a dedicated brine tank. Energy recovery systems help save electricity whilst backwash water and brine are stored before being slowly released back into the ocean.



Flow rates up to 3 MLD

Over the years, Veolia Water Technologies has gained unrivalled expertise and moved into the leading position in the use of this technology, with 6.75 million cubic meters of desalinated water produced per day in more than 1 950 plants operating across the world.



TECHNICAL PERFORMANCES

TYPICAL UTILITY REQUIREMENTS

VOLTAGE	400V – 3 phase 50Hz
INSTRUMENT AIR	Dry, Oil Free, 6 – 7 bar

INTEGRATED SOLUTIONS

- Various standard complementary pre-treatments are available
- Additional standard post-treatments options are available

TYPICAL MATERIALS OF CONSTRUCTION

PRE FILTER	Polyamide / Polypropylene
PUMPS	Stainless Steel AISI 904-L or Super Duplex Impeller and Casing
RO PRESSURE VESSELS	FRP
RO MEMBRANES	Link Crossed Aromatic Polyamide (8")
PIPING	For Sea Water Applications AISI 904-L (Standard) or 254 SMO Stainless Steel
SKID	Epoxy Painted Carbon Steel

For specific design treatment requirements, flowrate, recovery ratio, membrane selection and process options based on client feed water quality. Please enquire with your local Veolia representative.



FEATURES & BENEFITS

- Ease of operation
- Energy recovery device for high flow rate models; energy savings up to 55%
- Short lead time
- Easily integrated into existing systems
- Quick installation & start up
- Compact plant design
- Pre-assembled and Factory Acceptance Tested (FAT)
- Fully automated
- Wide range of packaged modular units designed to treat flowrates up to 3 MLD
- Available in a skid mounted or containerized configuration.
- Integrated PLC and HMI
- Flushing and chemical cleaning system
- High pressure pump with variable frequency drive; efficient and quiet operation
- Feed water Salinity up to 40 000 mg/L TDS
- Chemical Pre-Treatment protects the RO membranes



APPLICATIONS

TOURISM	MUNICIPAL	POWER	MINING
DW	DW	PW	PW

DW: Drinking Water - PW : Process Water - WW: Wastewater