

HYDROPRO, INC. TECHNICAL SPECS

S₂FS SERIES

SEAWATER TO FRESHWATER SYSTEM

CAPACITIES:

4,000 USGPD TO 132,000 USGPD
(15 M³D TO 500 M³D)



OPERATING FEATURES

Produces low TDS water from seawater utilizing the Reverse Osmosis (RO) process with no phase change. Ambient temperature operation reduces corrosion and eliminates problems common to thermal distillation.

Low Energy Consumption by utilizing Energy Recovery Device.
Compact Design.

Run cycle operates automatically by storage level control, with instant start-up/shutdown. Manual override provided.

Product water post-flush minimizes corrosion and removes super-saturated solutions.

Automatic shutdown protects RO pump from low suction or high discharge pressure. Pressure relief valve backup for over pressure condition.

Multiple test points and sample valves simplify data collection and trouble shooting.

Automatic product diversion when product water is off-spec (high TDS). During cleaning, atmospheric product break prevents cross connection to product line. The Cleaning/Flush System is included as standard equipment.

Unattended operation requires only daily data collection and scheduled preventive maintenance.

OPTIONAL ACCESSORY EQUIPMENT

- ◆ PRE-TREATMENT EQUIPMENT
- ◆ CHEMICAL FEED SYSTEMS
- ◆ TEST EQUIPMENT
- ◆ SPARE PARTS
- ◆ UV LIGHT
- ◆ POST-TREATMENT EQUIPMENT
- ◆ REMOTE ALARM STATION
- ◆ ALL SYSTEMS CAN BE CUSTOMIZED FOR SPECIFIC END USER REQUIREMENTS

GENERAL OPERATING SPECIFICATIONS

Inlet Water Salinity: Up to 48,000 mg/l Total Dissolved Solids (Higher salinities, consult Hydropro, Inc.). Inlet Water Pressure: 25-40 psig (2 - 3 kg/cm²).

Inlet Water Temperature: 34° - 113° F (1° - 45° C).

RO Inlet Silt Density Index: Less than 3.

Pretreatment: 5 micron filtration, scale and fouling protection as required for particular application.

Nominal Salt Passage: 1.5% (varies with temperature, pressure and feed water composition).

RO Transmembrane Pressure: 700-900 psig (50-65 kg/cm²).

RO Product (Permeate) Pressure: up to 15 psig (1 kg/cm²).

Environment: Ventilated, indoors, ambient temperature less than 122°F (50°C) and shielded from direct sunlight.

RESISTANCE TO CORROSION

Fiberglass reinforced plastic (FRP) for structural skid members, control panel, membrane support and membrane shells.

PVC Instrument Panel.

All low pressure pipe, hose and fittings constructed of inert thermoplastics.

All high pressure pipe and fittings constructed of Duplex, AL6XN, or inert thermoplastics.

Duplex RO booster pump.

