

HYDROPRO, INC. TECHNICAL SPECS

MS₂FS SERIES MEMBRANE SOFTENING SYSTEM

CAPACITIES:
5,000 TO 240,000 USGPD
(18.9 TO 908.4 M³D)



MS₂FS-20

OPERATING FEATURES

Produces low TDS water utilizing low pressure spiral wound Nanofiltration Process.

4" or 8" diameter thin film composite membranes available with element hardness rejections from 90% to 95%.

Instrument board containing all process instruments, gauges and recorder.

Control panel includes ON/OFF control power switch for instant start-up/shutdown of unit.

Pre- and post-flushes to minimize water hammer and remove supersaturated solutions.

Automatic shutdown on high storage level and automatic start-up on predetermined level or operator initiated actions.

Extensive test points and sample valves for ease of data collection and trouble shooting.

Grooved type cleaning connections for easy maintenance/cleaning with independent stage by stage cleaning operation.

Atmospheric break in product line during cleaning to eliminate cross-connection to process water.

Unattended operation possible, requires only daily data collection and scheduled preventative maintenance program.

RESISTANCE TO CORROSION

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

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

All high pressure pipe and fittings near SS control valves are constructed of 316 SS.

GENERAL OPERATING SPECIFICATIONS

Inlet Water Salinity: up to 1500 mg/l Total Dissolved Solids (higher salinities, consult Hydropro, Inc.).

Inlet Water Pressure: 25-60 psig (2-4 kg/cm²).

Inlet Water Temperature: 35° F - 113° F (1° C - 45°C).

Inlet Silt Density Index: Less than 4.

Turbidity: Less than 1 NTU.

Pretreatment: 5 Micron Filtration, scaling and fouling protection as required for particular application.

Nominal Hardness Passage: 5 to 10% (varies with temperature, pressure and feed water composition).

Transmembrane Pressure: 75-135 psig (5-10 kg/cm²).

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

Electric Characteristics: 230/460V, 3 Phase, 60 Hz standard (other voltages and 50 Hz available).

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

OPTIONAL ACCESSORY EQUIPMENT

- ◆ MEDIA FILTERS
- ◆ CHEMICAL FEED SYSTEMS
- ◆ pH INDICATOR AND pH RECORDER FOR INLET WATER pH
- ◆ AUTOMATIC INLET VALVE
- ◆ RAW WATER BOOSTER PUMP
- ◆ FRP FORCED DRAFT DEGASIFIER W/ CATCHMENT TANK.
- ◆ FRP MICRON FILTER WITH 5 MICRON POLYPROPYLENE CARTRIDGES
- ◆ TRANSFER PUMPS
- ◆ STORAGE TANK
- ◆ HYDROPNEUMATIC SYSTEMS WITH CONTROLS
- ◆ HIGH SERVICE PUMPS
- ◆ CLEANING SYSTEM
- ◆ TEST EQUIPMENT
- ◆ SPARE PARTS