

# FlexRO® Reverse Osmosis Units

# SIEMENS

FlexRO® 100-gpm reverse osmosis units from Siemens Water Technologies are skid-mounted and self-contained. These units feature 3:2:1 (4M) array skids with:

- SS cartridge filter housing
- TEFC high efficiency motor
- Multistage high pressure pump
- State-of-the-art instrumentation
- NEMA 4X 480 VAC motor starter panel with a 120 VAC step-down transformer
- Separate NEMA 4X 120 VAC control panel with AB SLC-5/03 PLC

With a rugged, modular design, FlexRO units are convenient to install, connect, start up and service. They may be site-installed and operated as stand-alone units or located inside a trailer (up to 4 units per trailer) and controlled by the system panel. Combined with other Siemens Water Technologies mobile equipment, FlexRO units are part of a fully integrated water treatment system designed to your specific treated water quality and flow needs.

FlexRO units are economical even on low TDS feedwater. When used as pretreatment to deionizers (DI), FlexRO systems significantly reduce hazardous chemical consumption, labor and waste. They also extend DI service cycles and improve treated water quality. Units may be installed in parallel for single pass or in series for double-pass applications.

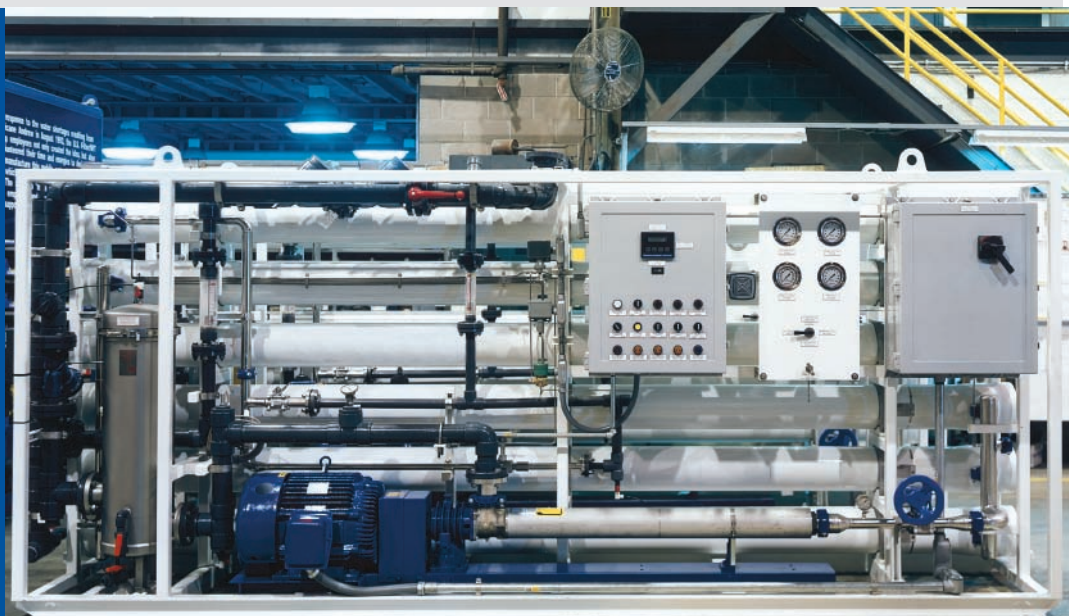
Both thin-film-composite and cellulose acetate membranes may be used in these units.

## TYPICAL APPLICATIONS

- Power plants
- Refineries
- Chemical companies
- Petrochemical
- Pulp and paper
- Steel
- Mining
- Food and beverage
- Municipal
- Any industry where treated water is needed short-term

## FEATURES

- Portable
- Skid-mounted
- High flow rate
- Industrial design



	FlexRO Units			
Flow Rate @ 59°F Permeate/Concentrate/Feed	100/33/133			
Recovery/Flux	75%/16.4 GPD			
Membranes (TFC or CA*) Array/Quantity Membrane Area (sq. ft.)	3:2:1 (4M)/24 365/400/440 (Depending Upon Application)			
Starter Panel Motor Size, HP/Amps Electrical Requirements	NEMA 4X – Includes 120 VAC Step-down Transformer 50/65 100 Amp/460 VAC/3 ph/60 Hz			
Control Panel Option	NEMA 4X with Allen-Bradley SLC-5/03 PLC Remote I/O Panel/PLC Interface			
Connections (Schedule 80 PVC) Feed/Permeate/Concentrate	3" / 3" / 1.5" Flanged			
Dimensions	16' L X 3' D X 6'10" H			
Weight (lbs.) Shipping/Operating	5,200/6,500			
Pressure Gauge	Cartridge Filter In/Out; Pump Discharge (Feed to Membranes); Interstage; Concentrate; Permeate			
Temperature Gauge	Feed			
Flow Indicator	Permeate and Concentrate			
Conductivity Analyzer	Feed and Permeate			
Cartridge Filter Housing	SS, 12 Round x 3 High			
Feedwater Requirements (Min./Max.)	Pressure (psi) 20/100	Temperature (°F) 35/100	SDI (15 Min.) <5	TDS (Design) 2,000

\*Flows and recovery rates may be different with cellulose acetate membranes.

#### FLEXRO UNITS AND OTHER MOBILE EQUIPMENT ARE IDEAL FOR:

- Capacity expansions
- Improved treated water quality
- Pilot plant water
- Interim use until a permanent system is installed
- Process water quality changes
- Minimizing hazardous chemical usage and handling
- Environmental salt discharge problems
- Emergency and scheduled shutdowns
- Seasonal water needs
- Feedwater quality changes

Our large inventory of mobile units, combined with our extensive local service network enable us to respond quickly to customers' seasonal, emergency, pilot or other short-term water treatment needs. We have over 80 service branches to serve you.

Siemens Water Technologies offers the widest range of technologies to solve all your water treatment needs on a short or long-term basis. In addition, our experts can review your specific site conditions and make recommendations about the system that is best suited for your plant. To discuss your requirements for FlexRO units or your temporary water treatment needs, please call 800-435-3223.

The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.

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