



21st Century Water Purification

RO-EDI

Reverse Osmosis (RO) > Electrodeionization (EDI)

Industrial Water Purification

An RO>EDI water purification unit represents a **Quantum Leap** over other water purification technologies.

RO-EDI – Reverse Osmosis membrane technology integrated with Electrodeionization in a single device that will provide ultra high purity water directly from soft city water.

RO-EDI Performance

An **RO-EDI** unit is a high performance membrane/resin system that is simpler to operate than any existing water purification technology. High product/waste water ratios (~75%) conserve water and reduce pre-treatment costs. The system employs state-of-the-art high rejection TFC Reverse Osmosis membranes that send the RO product water directly to Electrodeionization (EDI). The output of an RO>EDI system is ultrapure water between 16,000,000 to 18,000,000 ohms/cm³.

With an RO>EDI unit, there are no regeneration chemicals, labor or down time. The system is both safer and more environmentally friendly than any competing technology. Note: An RO>EDI system must be fed soft, chlorine free water, which can be provided by an inexpensive Cal water pretreatment skid.

ADVANTAGES



Model:
RO-EDI-27-MG

- A Cal Water RO-EDI is a water purification "BLACK BOX" that requires only electricity and soft water to produce better than distilled quality water. No chemicals. No regeneration steps. No labor.
- RO-EDI units are mechanically simple when compared to any other water purification technology.
- Continuous operation 24/7 with no halts for deionizer regeneration.
- Membranes and electricity replace chemicals and labor.

**For More Information Please Call
1(800)CAL-WATER - (800) 225-9283**

FEATURES

Mega-Feature: Unitizing RO with EDI (RO-EDI) enables a single device to produce high purity water of 16 to 18 Megohms without the chemicals required by conventional ion-exchange technology. An RO-EDI unit uses membranes and electricity to replace hazardous chemicals and the wastewater neutralization headaches associated with chemically regenerated deionizers.

Standard Features:

- Electropure XLx00 Cells w/5 year Components.
- Magna Power 400 VDC Rectifier.
- TFC Reverse Osmosis Membranes – Low pressure – High Rejection – High Recovery
- Grunfos SS pressure pumps
- Liquid filled SS pressure gauges
- Thornton 770 multi-channel water quality monitor for feed, intermediate, and final water quality measurements
- All necessary control valves, pressure gauges and flow monitoring rotameters
- Powder coated carbon steel frame
- Epoxy control panel

Options:

- Soft Water/Filtration Pretreatment Skid
- Stainless Steel Frame and panel
- PLC Control, Programmed for Intuitive Operation w/Ethernet connection
- Touch Screen Controls
- Visual, back-lit Electrolyte monitoring panel
- Thornton - Stainless steel turbine flow, temperature and pressure sensors.
- Plumbing, feed, product and sensor connection are available in fusion welded polypro or PVDF.
- TriClover style Sanitary Connections
- Large economical DI cartridges (Exchange or Throwaway) for 18.3 megohm applications
- Windows based Computer Automation

FLOW RATES AND CAPACITIES

Model	Product GPD	Pct. Recovery	Flow Rates (GPM)			Pipe Size	RO-EDI Modules		Dimensions			Shipping Weight #
			Feed	Product	Waste		RO	EDI	H	W	D	
RO-EDI - 1 - MG	1,440	50%	2	1	1	3/4"	1	1	48"	18"	24"	180
RO-EDI - 2 - MG	2,880	67%	3	2	1	3/4"	2	1	48"	18"	24"	210
RO-EDI - 4 - MG	5,760	67%	6	4	2	3/4"	4	1	48"	18"	24"	270
RO-EDI - 6 - MG	8,640	67%	9	6	3	3/4"	6	1	48"	18"	24"	330
RO-EDI - 8 - MG	12,000	67%	13	8	4	1"	8	1	48"	18"	24"	400
RO-EDI - 17 - MG	24,000	67%	25	17	8	1 1/2"	16	2	60"	36"	24"	650
RO-EDI - 27 - MG	38,400	75%	36	27	9	1 1/2"	5	3	60"	44"	24"	950
RO-EDI - 37 - MG	52,800	75%	49	37	12	2"	8	4	72"	36"	24"	1,250

RO-EDI Feed Water Requirements:

Water Hardness: 0.1 ppm Max.
 Iron (Fe+++): 0.05 ppm Max.
 Free Chlorine/Chloramine: 0.01 ppm Max.
 Minimum Inlet Pressure: 35 psi
 Maximum inlet pressure: 80 psi

Minimum Inlet Temperature: 45°F
 Maximum inlet temperature: 90°F
 NOTE: Silica and carbonate content in the feed water dictate the quality of the water produced.
 18.3 Megohm quality cartridges optional.

Limited Warranty: Cal Water guarantees labor and material for 1 year from the date of an installation. In case of defect in equipment, labor, material or service, Cal-Water's sole responsibility is for the replacement or repair of the defect and cannot be held liable for losses of any kind. (Please see Terms and Conditions of sale.)

Cal-Water has been selling, installing and servicing water purification equipment since **1946**

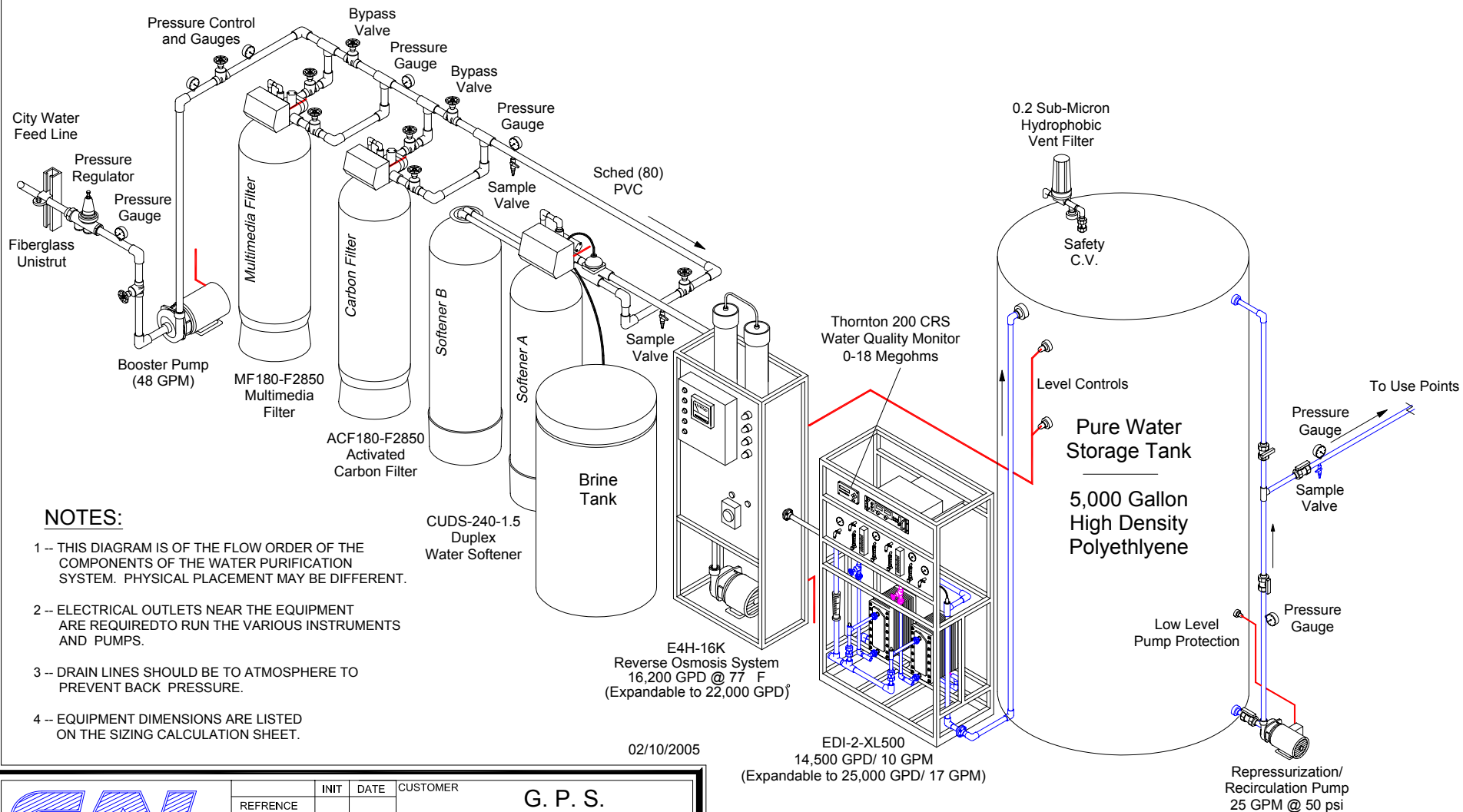
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 Los Angeles County (323) 663-8335
 San Diego County (858) 457-8411

G. P. S.

RO/EDI System - 10.0 Expandable to 15.5 GPM

16.5 to 17.5 Megohms



NOTES:

- 1 -- THIS DIAGRAM IS OF THE FLOW ORDER OF THE COMPONENTS OF THE WATER PURIFICATION SYSTEM. PHYSICAL PLACEMENT MAY BE DIFFERENT.
- 2 -- ELECTRICAL OUTLETS NEAR THE EQUIPMENT ARE REQUIRED TO RUN THE VARIOUS INSTRUMENTS AND PUMPS.
- 3 -- DRAIN LINES SHOULD BE TO ATMOSPHERE TO PREVENT BACK PRESSURE.
- 4 -- EQUIPMENT DIMENSIONS ARE LISTED ON THE SIZING CALCULATION SHEET.

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"A better solution!"
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REFERENCE	INIT	DATE	CUSTOMER
DRAWN BY	DNP		G. P. S.
APPROVED			DESCRIPTION: RO/EDI SYSTEM W/UV - STORAGE
REVISIONS		SCALE:	DRAWING NO.: RO-EDI GPS01

NOTICE:

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The equipment layout and flow order depicted is for illustration purposes. Upon installation, the actual location of components may vary depending on available space and maintenance needs.

Color Code
 General
 Stainless Steel
 Deionized Water
 Electrical
 Text