

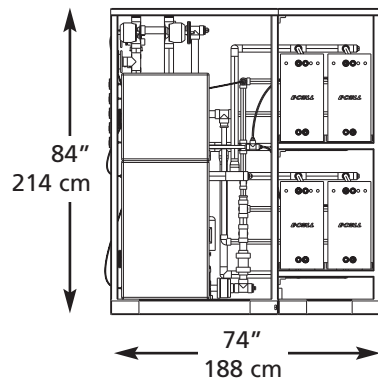
E-Cell System™

E-Cell™ is a revolution in chemical-free deionization. E-Cell™'s robust, modular electrodeionization (EDI) technology is cost-effective for all flow rates.

No regeneration chemicals are needed, no hazardous waste stream is produced, operation is simple and continuous, and facility requirements are reduced.

50 gpm

11 m³/h



E-CELL™

50 gpm

11 m³/h

Process Design Parameters		
Parameter	US Units	Metric Units
System Product Flow	24 to 50 gpm	5.5 to 11.4 m ³ /h
Nominal Recovery	90 to 95%	90 to 95%
Temperature	40 to 100°F	5 to 38°C
Inlet Pressure	45 to 100 psig	3.1 to 6.8 bar
Feed to Product delta P	20 to 35 psi	1.4 to 2.4 bar
Dimensions	74" W x 53" D x 84" H	188 cm W x 135 cm D x 214 cm H
Product Pipe Material	PP	PP
Shipping Weight	2580 lb	1170 kg
Operating Weight	2650 lb	1205 kg

Operating Conditions			
Condition		US Units	Metric Units
Electrical	Maximum	18 amps @ 600V DC	18 amps @ 600V DC
Product Outlet	Flow Range	24 to 50 gpm	5.5 to 11.4 m ³ /h
	Quality	>16 MOhm.cm	>16 MOhm.cm
	Pressure Drop	20 to 35 psi	1.4 to 2.4 bar
	Temperature Rise	4.3°F maximum	2.4°C maximum
Electrolyte Outlet	Flow	0.6 to 1.4 gpm to Drain	2.4 to 5.4 lpm to Drain
	pH	7.0 to 9.0	7.0 to 9.0
Concentrate Bleed	Flow	Determined by Recovery Rate	Determined by Recovery Rate
Concentrate + Electrolyte Inlet	Total Flow	18 gpm	4.08 m ³ /h
	Pressure	5 psi < Feed Water Pressure	0.3 bar < Feed Water Pressure
	Concentrate Conductivity	150 to 1250 µS/cm	150 to 1250 µS/cm
Concentrate Make-up	Flow	Determined by Recovery Rate	Determined by Recovery Rate
	Water Quality	Same as Feed Inlet	Same as Feed Inlet

Feed Water Requirements			
Constituent	US Units	Metric Units	Range
TEA including CO ₂	ppm CaCO ₃	mg/l CaCO ₃	<25.0
pH			5.0 to 9.0
Hardness	ppm CaCO ₃	mg/l CaCO ₃	<1.0
Silica (Reactive)	ppm	mg/l	<0.5
TOC	ppm	mg/l	<0.5
Free Chlorine	ppm	mg/l	<0.05
Fe, Mn, H ₂ S	ppm	mg/l	<0.01

NOTE: The feed water to the E-Cell™ must be RO permeate or equivalent.

Power Requirements		
Voltage	Hz	Max AC Current (Amps)
575	60	14.0
460	60	17.5
380	60	21.2
220	60	36.6
415	50	19.4
380	50	21.2
Maximum power consumption 12.6 kw		

NOTE: All 3 phase power

E-CELL™

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