

150 gpm = 34 m³/h

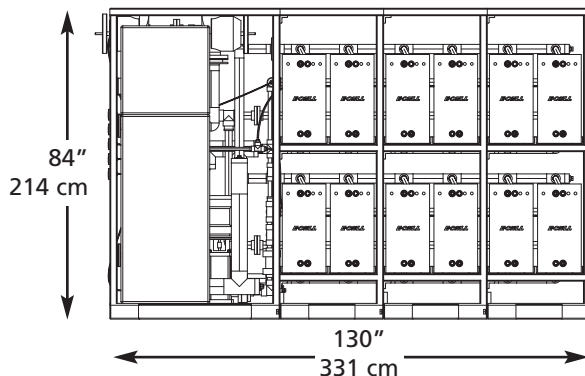
E-Cell System™

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.

150 gpm

34 m³/h



E-CELL™

150 gpm

34 m³/h

Process Design Parameters		
Parameter	US Units	Metric Units
System Product Flow	73 to 150 gpm	16.6 to 34.1 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	130" W x 53" D x 84" H	331 cm W x 135 cm D x 214 cm H
Product Pipe Material	PP	PP
Shipping Weight	5450 lb	2475/ kg
Operating Weight	5800 lb	2640 kg

Operating Conditions			
Condition		US Units	Metric Units
Electrical	Maximum	54 amps @ 600V DC	54 amps @ 600V DC
Product Outlet	Flow Range	73 to 150 gpm	16.6 to 34.1 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	1.8 to 4.2 gpm to Drain	6.8 to 15.9 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	54 gpm	12.3 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	40.0
460	60	50.0
380	60	60.5
220	60	104.5
415	50	55.4
380	50	60.5
Maximum power consumption 35.8 kw		

NOTE: All 3 phase power

E-CELL™

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