



EC-2000 SIDE-STREAM PARTICLE PRECIPITATOR

TECHNICAL DESCRIPTION

**APPLICATIONS: HVAC AND PROCESS OPEN LOOPS
UP TO 2,000 TONS**

ElectroCell’s EC-2000 system is designed for HVAC and process open loops up to 2,000 tons. All ElectroCell systems are designed and produced in Easton, Pennsylvania.

The ElectroCell system is not a filter or a chemical replacement system. We offer totally automated modular skid systems capable of removing 98-99% of all suspended solids down to 1 micron by coalescing particles. This flocculation, via low-voltage electrodes imparting equal amounts of positive and negative charges on suspended particles, is then mechanically removed in vessels containing static mixers designed to remove smaller particulate from 5 to .5 micron. All sediment is collected at the bottom of the vessel and is removed by the bleed cycle of the existing chemical program. The system will also purge once daily to self-clean. After particles are removed the final stage involves a high voltage electrode generating a static field, which reduces water surface tension and, in turn, reduces drag that affects laminar boundaries that increase thermal transfer. The end results are that 98-99% of all suspended particles are removed and laminar boundaries are reduced, thereby saving energy, water and maintenance and enhancing the chemical program.

The EC-2000 will replace existing filters and separators and is designed to perform for 15 years. It is easy to maintain, requiring approximately 45 minutes every 90 days to rinse the two static mixers and two low-voltage electrodes in a utility sink. Installation requires a 2” inlet, 2” outlet, 1.5” to drain and a 3-phase 460V electrical feed. The EC-2000 comes with a 3-hp pump with VFD using approximately 3-4 amps of energy.

SPECIFICATIONS

Weight: 1,200 lbs.	Modular Skid Mounted
Footprint: 72”L x 32”W x 66”H	Steel Construction w/Stainless Steel Vessels
Pressure: 150 psi (max) – Optional 300 psi avail	Piping: 2” In, 2” Out, 1.5” Drain w/flow meter
Temp Range: 50° - 120°	Electrical: 460VAC, 3-Phase, 3.6 Amp (std)
GPM: 30-70	Pump: 3-hp w/VFD

SYSTEM COMPONENTS

ASB Processor (SE) w/BACnet IP Interface	Two SS Vessels w/static mixers
10” Touch Screen (Panel Mounted)	One High Voltage Power Supply
Totalizers - GPM/System/Make-up/Bleed/Evap	One High Voltage Electrode
Conductivity Meter	Two Pre-Treatment Electrodes
Auto Purge/Bleed	One 3-hp Circulating Pump w/VFD
Condenser Temp Sensor	Manual Valves (3) – In / Out / Bleed
Remote Monitoring	PSI Sensors (2) – In/Out

ElectroCell Systems

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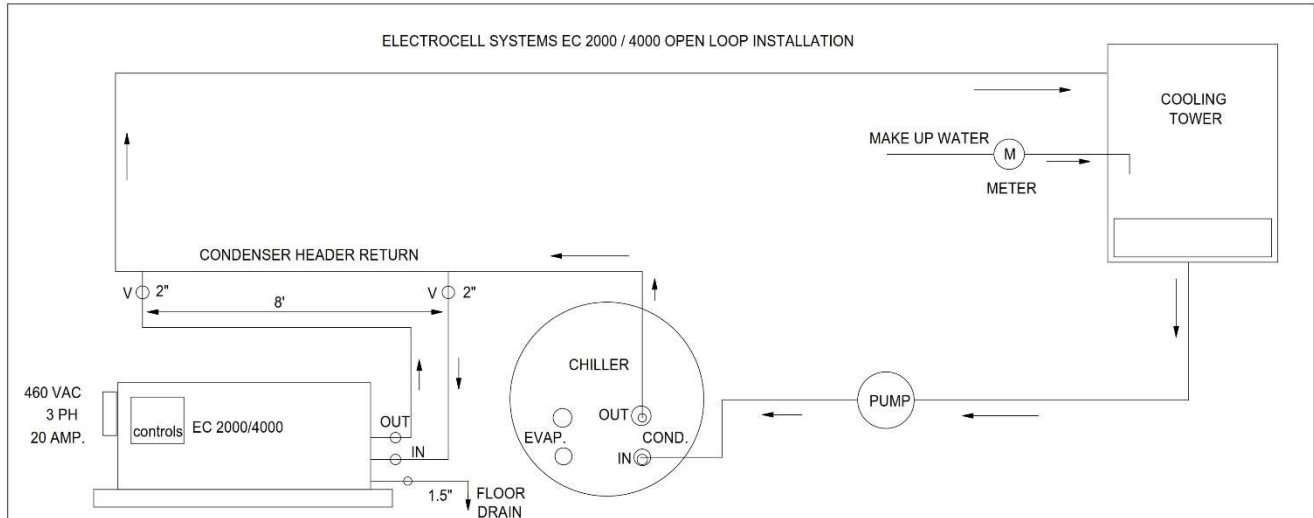
web: www.electrocellsystems.com



Proudly Made in USA

EC-2000 - Open HVAC Loops up to 6,000 Tons

INSTALLATION



NOTE: INPUT WIRING REQUIRED TO EC SYSTEM FROM CUSTOMER MAKE-UP AND CONDUCTIVITY METERS

Dwg: EC-2000/4000 Installation Rev 22-1
Date: 05-02-2022

SYSTEM FLOW DIAGRAM

