### **ECR**<sup>™</sup> Electrostatic Contamination Removal

Ideal for sub-micron insoluble contamination removal in phosphate ester fluids in turbine EHC systems.

Remove fine particulates that are below the range of mechanical filters. Standard Electrostatic Oil Cleaner (EOC) systems are ineffective for phosphate ester fluid applications due to fluid conductivity restrictions. The ECR<sup>™</sup> is designed specifically to solve this dilemma.







#### Unique restoration solution.

Pressure induced dieseling and element spark discharge generate sub-micron insoluble carbon based particles that cannot be removed by traditional particulate filtration. The ECR<sup>™</sup> combines a high voltage electrostatic field with a proprietary collector element design to remove the sub-micron particles that are the cause of dark EHC fluid and high varnish potential values (MPC).

#### Extend your oil life.

ECR<sup>™</sup> improves fluid color and drastically reduces solid contamination levels. When used in conjunction with ICB<sup>™</sup> for acid and dissolved contamination removal and TMR<sup>™</sup>-N2 for water removal, comprehensive fluid maintenance is achieved which, when maintained over time, eliminates the need for chemical flushes.





#### Comprehensive testing & support.

With typical analysis showing as little as 10% of the contamination present, specialized testing is included to document starting contamination levels and demonstrate results.

# **ECR**<sup>™</sup> Specifications

Model	ECR4000	ECR8000
Height	57" (145 cm)	57" (145 cm)
Width	42" (107 cm)	56" (142 cm)
Depth	27" (69 cm)	27" (69 cm)
Weight	426 lbs (193 kg)	567 lbs (257 kg)
Connections	1" MNPT	1" MNPT
Max Flow Rate	4.5 gpm (17 lpm)	9 gpm (34 lpm)
Element Quantity	1 collector element 2 collector element	
Seals	Fluorocarbon Fluorocarbon	
Control Panel	Weather resistant NEMA 4 enclosure	Weather resistant NEMA 4 enclosure
High Voltage Capacity	12,000 V 12,000 V	
Electric Motor	TEFC, 56-145 frame ¾ hp, 1450-1750 RPM	TEFC, 56-145 frame ¾ hp, 1450-1750 RPM
Dirt Capacity	15 lbs (6.8 kg) per element	15 lbs (6.8 kg) per element
Element Lifespan	Approximately 4,000 service hours	Approximately 4,000 service hours
Max Suction Line Pressure Loss	6 psi (0.41 bar), 12.2 Hg vacuum	6 psi (0.41 bar), 12.2 Hg vacuum
Max Water Level	<500 ppm for maximum efficiency	<500 ppm for maximum efficiency
Fluid Compatibility	Phosphate ester based fire resistant fluids.	Phosphate ester based fire resistant fluids.

## ECR<sup>®</sup> Part Number Builder

ECR	Element Type Power Option	
Model	<ul><li>4000 1 collector element</li><li>8000 2 collector elements</li></ul>	
Element Type	Fluid Resistivity Valueomit> 8G-OHMS/cm-LR< 8G-OHMS/cm	Collector Element COL-600990 COL-600907
Power Options	60 Hz, 1750 RPM   12 120 V ac, 1P   22 208-230 V ac, 1P   23 208-230 V ac, 3P   46 460-480 V ac, 3P   57 575 V ac, 3P	50 Hz, 1450 RPM   11 110 V ac, 1P   21 220 V ac, 1P   40 380-440 V ac, 3P   52 525 V ac, 3P

