

Electrostatic Purifier

Purifier

Comparison ELC 500 vs Solge SEC 100M

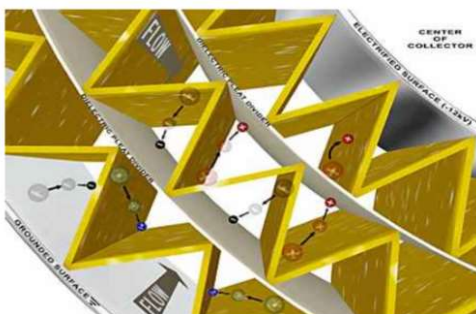
Electrostatic Filtering Machine Comparison		
Model	Ferro care ELC50C	Solge SEC 100M
Electrostatic Filtering	Conventional Flat Type	Innovative Circular Type
Maintenance	Very inconvenient/Electrode plates and all media shall be replaced respectively	Very convenient/ Only element replacement is required
Filtration Area	Limited./To increase filtration area, size of the equipment should be bigger.	As a circular type, bigger filtration area can be obtained by small sized equipment
Filtration Efficiency	Low filtration efficiency due to limited filtration area.	Circular type brings maximized filtration area and high filtration efficiency accordingly
Installation	Difficulty to install at limited space	Compact size and no problem with installation

Varnish MPC membrane patch

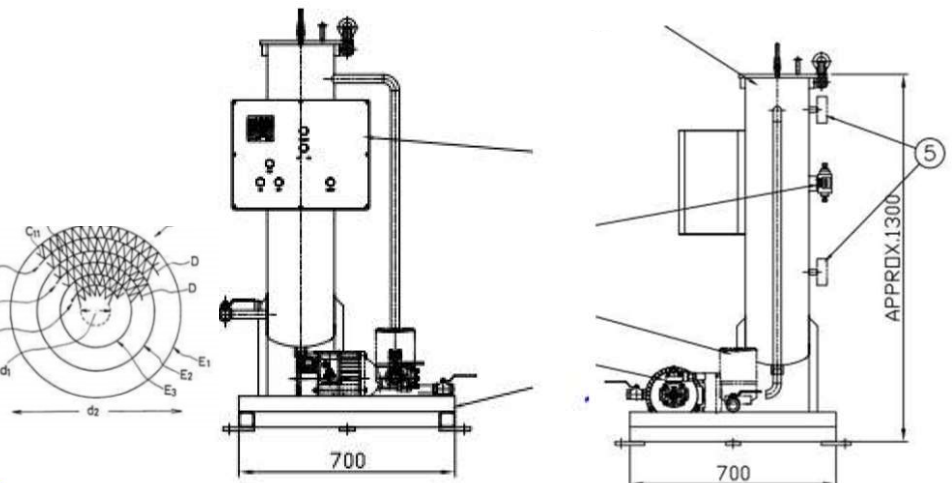
P/N	Pump Flow	Housing	32cst	46cst	68cst	100cst
SEC-100M	10 Lpm	1 EA	14,400 liter	9,960 liter	7,200 liter	3,600 liter
SEC-200M	20 Lpm	2 EA	36,000 liter	31,200 liter	16,800 liter	9,200 liter
SEC-300M (Premium)	45 Lpm	2 EA	60,000 liter	45,000 liter	31,000 liter	25,000 liter

Working Process

Working: The SEC as fluid flows through the cleaning round cell, the particles and deposit On either the negative and positive electrode. It removes all size particles including varnish and deposits.



Element Component Diagram



2D Drawing

Electrostatic Purifier

Purifier

Performance SEC 300M_Case study

§ Test Oil : EHC Oil (46cSt) /200 Liter

▪ **Particle removal**

- Below ISO17/14/12

▪ **Acid removal**

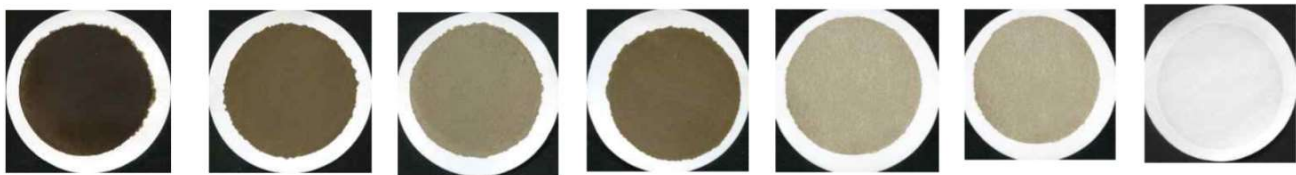
- EHC Oil : 2.0 → ~0.08

▪ **Water removal**

- EHC phosphate ester oil : 2,000ppm → ~ 80ppm



MPC Level and Water Level



Jan. 13

Jan. 18

Jan. 30

Feb. 14

Mar. 20

Mar. 25

Apr. 16



The acid value, MPC value, and moisture value improved more than the new oil standard value within about two months after the SEC-300M was put into operation. However, as mentioned above, it seems that the EC filter removes the soluble contaminants and the solubility of the oil increase, so that the sludge and varnish adhered to the inside of the pipe and the inside of the pipe are increased. Since then, the continuous operation of SEC-300M has completely dropped the pollution level.