# **«KLEENTEK**

# Introducing Kleentek: Electrostatic Oil Cleaner – eliminate varnishes, oil oxidation product and insoluble solid contaminant

Designed by Dr Akira Sasaki, a pioneer in employing the Electrostatic Principle to remove and eliminate varnishes, oil oxidation product and insoluble solid contaminant due to the prolonged use of hydraulic lubrication system.

Kleentek: Electrostatic Oil Cleaner employ electrostatic charged principle (electrophoresis & di-electrophoresis), a unique electrostatic cleaning method to remove all types and sizes of contaminants, providing an unrivalled levels of oil cleanliness and machine reliability.

Kleentek's technologies removes varnish deposits form and found onto the internal surface of the hydraulic internal surfaces. Without the continuous removal of varnish, oil oxidation and insoluble solid contaminant – it results in these systems gradually reduce precision tolerance and clearance, resulting in increased friction, machine wear and tear leading to machine operation.

• Reduce oil change by 80%

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- Reduce filter replacement costs by 80%
- Reduce machinery failure cost by 56%
- Reduce machine downtime cost by 80%
- Reduce machine maintenance costs by

## **Applications**

Turbine Lubes Hydraulics Lubricant Compressors Oil Gear Oils Transformer Oil Heat Transfer Oil Paper Machine Oil



## Features

70%

Portable Operates On-Line/Off-Line manner Low Running Costs Low Maintenance Cleans up to sub-micro level Remove Varnish

#### How it Works

Inside each cleaning chamber contain a consumable cartridge collector. The contaminants are charged via an electrode, and the polar contaminants are attracted out of the oil using a positive (+) and negative (-) electrodes, which are held onto the collector.

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#### **Benefits**

Improves Reliability Extend Oil Life Protects Oil Additives Reduce System Wear Improves Work Environment Reduces Waste



Technical Specification
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<u>Unit</u>		Cleaning Capacity Guides (in litres) Hydraulic Oil, ISO VG				Pump flow	Physical Dimension (in mm)	Weight	Power Consum ption	Cartridge Collector	Pieces/
	Standard**	<u>32</u>	<u>46</u>	<u>68</u>	<u>100</u>	litre/m in	<u>Length X Width X</u> <u>Height</u>	<u>kg</u>	<u>Watt</u>	Туре	<u>set</u>
EOC-R3SP	CE, IS, JIS	800	560	380	210	1.2	311 x 361 x 531	20	200	CC-R3SP	1
EOC-R6SP	CE, IS, JIS	1,600	1,120	760	420	1.2	359 x 386 x 531	23	200	CC-R3SP	2
EOC-R10SP	CE, IS, JIS	5,000	3,400	2,200	1,200	2.2	675 x 350 x 915	70	270	CC-R10SP	1
EOC-R25TP	CE, IS, JIS	12,400	8,600	5,800	3,200	3.7	675 x 350 x 950	72	320	CC-R25SP	1
EOC-R50TP	CE, IS, JIS	24,000	16,600	11,200	6,000	9.0	710 x 530 x 1080	108	760	CC-R50SP	1
EOC-R100TP	CE, IS, JIS	48,000	33,200	22,400	12,000	12.0	1070 x 515 x 1080	161	1000	CC-R50SP	2

Standard units are suitable for Mineral Oils, PAO, Diand Polyol Esters and Vegetable Oils (for Phosphate Esters and Polyglycols special units are available) Standard units available in 240V and 110V, or 3 phase

available upon request.

Max. temperature  $60^\circ\text{C}$  (special units available for  $80^\circ\text{C})$ 

Max. viscosity: 600cSt

Max. water content: 500ppm (=0.05%)

The above table shows the maximum oil cleaning capacity based a continuous application. The values are approximate and are valid for normal hydraulic and lube systems. \* This type of unit is also available without a pump.

\*\* The ELC-units are manufactured in the following standard.

IS = International Standard; CE = CE-marked for EU countries;

EU = dedicated units (for European machine makers)

Important Notice: For systems with servo valves the above values should be reduced by 20%

For oil with detergents/dispersants of metal or amine type the above values should be reduced. Focus Machinery Pte Ltd, Singapore can advise accordingly.

The life span of the collector is normally at 2000 hours. When initially cleaning a relatively highly contaminated system, the life span of the collector can be significantly reduced.

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