



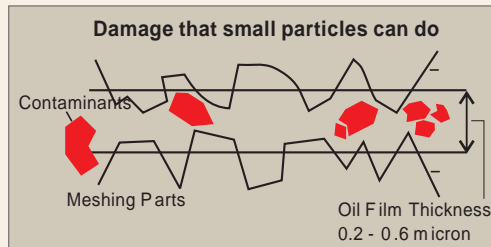
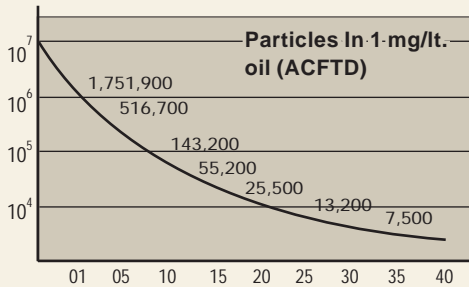
A comprehensive solution for cleaning & analysis of hydraulic & lubricating oils ...



KLEENTEK FERROCARE ELC Electrostatic Liquid Cleaners

**For removal of
solid contaminants
from oil.**

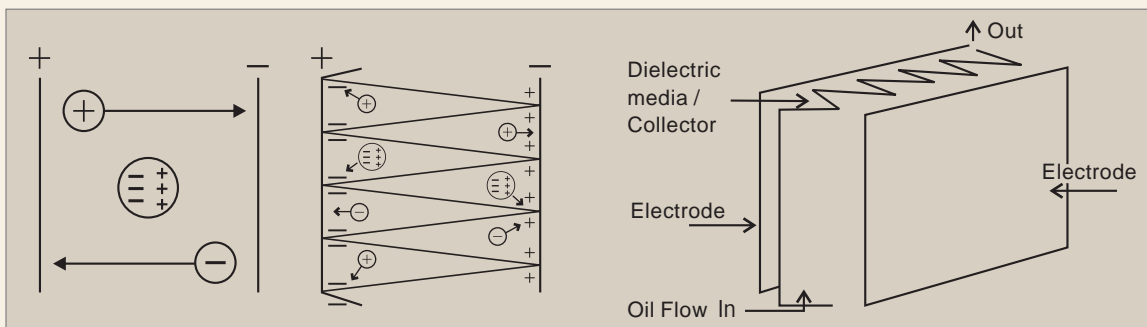
Electrostatic Liquid Cleaning does efficiently what mechanical filtration can never do.



KLEENTEK FERROCARE Cleaning range						
Size	100µm	50µm	10µm	1µm	0.1µm	100°A
Strainer	→					
Filtration	→	→				
Centrifuge	→	→	→			
ELC Cleaning	→	→	→	→	→	→
				Bacteria	Virus & Carbon Black	

- The smaller the particles, the higher their concentration
- Particles which cause wear are between 0.2 & 0.6 microns
- The ELC removes all sizes & types of particles equally well.

Working: The ELCs effectiveness lies in its simplicity.



As fluid flows through the cleaning cell, the particles deposit on either the negative or positive electrode. The ELC removes all sizes & types of particles including bacteria & virus.

Model Selection Guide

Conventional Hydraulics (max. quantity)				
ISOVG	32	46	68	100
Type				
ELC 8LP	2500 l	1700 l	1100 l	600 l
ELC 25A	6000 l	4200 l	2800 l	1500 l
ELC 50C	12000 l	8300 l	5600 l	3000 l
ELC 100LP	30000 l	20000 l	14000 l	7600 l

For NAS 7 and better, derate the above quantity by 50%.

Models' specification:

Model	Electrical Power	Dimensions (L x W x H)	Weight (kg)	Pump Flow (lit / min)
ELC 8LP	250W	610 x 480 x 540	70	2 at 50Hz
ELC 25A	250W	800 x 505 x 680	100	3.5 at 50 Hz
ELC 50C	500W	780 x 505 x 880	140	10 at 50 Hz
ELC 100LP	550W	920 x 630 x 950	180	10 at 50Hz

Operating Conditions:

- Mineral base oils, except IC engine oil
- Moisture content 500 ppm max.
Temperature 60°C max.
- Standard power source: 415v 3Ø 50Hz
- For high temperature applications & fire resistant fluids, suitable models are available.



FERROCARE

LVDH

Low Vacuum Dehydration

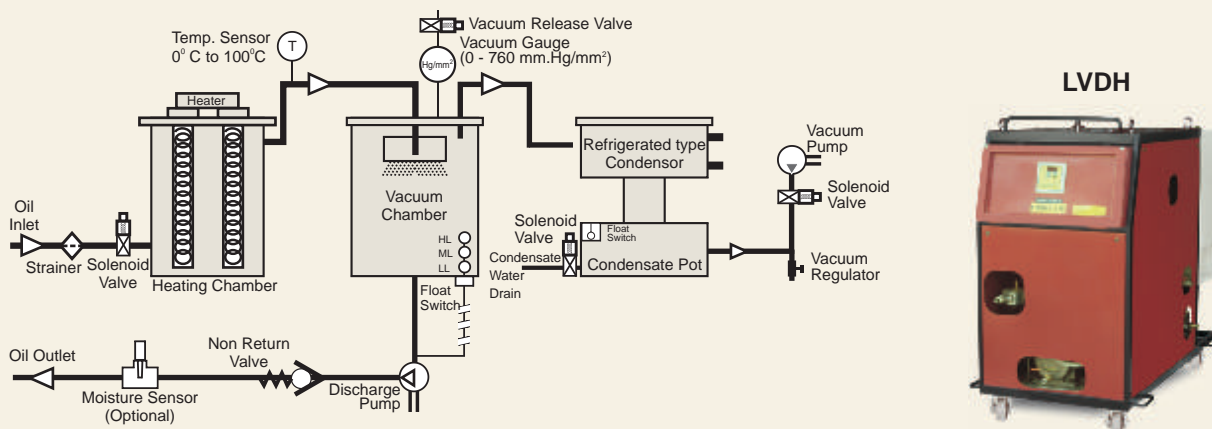
For removal of moisture & gases from oil.

Low Vacuum Dehydration does efficiently what centrifuging can never do.

The LVDH uses a comprehensive process to remove water and gases from oil at temperature lower than 53° C, thus drastically reducing oxidation during the dehydration process. The LVDH is a quick, inexpensive and automatic system that overcomes centrifuging's major drawbacks, especially that of oxidation, emulsified water retention, power consumption & high maintenance.

Working:

Oil is drawn into the vapouriser via the vacuum pump and heater. Water boils below 53° C under vacuum - an efficient condenser collects evaporated water. Dissolved air and gases from oil are bled to the atmosphere via the vacuum pump.



FUNCTION OF CATALYSTS					Note: 1. Time: hours for reaching a certain level of acid value. 2. Test oil is turbine oil with viscosity of 32cSt/100°F (37°C) 3. Tested oil temperature is 200°F (93°C) Acid value indicates formation of "Sludge" and sticky resinous matter which forms hard deposits on valves, pipes.
Test	Catalysts (Metal)	Water	Time (Hrs)	Acid Value	
1	nil	nil	3,500	0.17	
2	nil	exist	3,500	0.90	
3	iron	nil	6,500	0.65	
4	iron	exist	400	8.10	
5	copper	nil	3,000	0.89	
6	copper	exist	100	11.20	

Features:

- Fully automatic operation.
- Ultimate water removal through oil recirculation - to zero-free water content or to 50 % below saturation level.
- Reduces water content in a single pass by 0.25% - 1.5% depending on inlet oil temperature.
- Removal of soluble gases and air.

Application Areas: Hydraulic oils • Turbine oils • Lubricating oils • Gear oils.

Model details

Model	Capacity	Condensor	Vacuum Pump	Weight	Dimensions (mm)	Electrical L x W x H
L-600	8-10 LPM	REFRIGERATED	100 LPM	350 kg	1480 x 780 x 1280	6 Kwh @ 415 volts 3Ø, 50 Hz
L-900	13-15 LPM	REFRIGERATED	180 LPM	480 kg	1560 x 750 x 1490	8 Kwh @ 415 volts 3Ø, 50 Hz
L-2100	30-35 LPM	REFRIGERATED	300 LPM	595 kg	1560 x 930 x 1490	16 Kwh @ 415 volts 3Ø, 50 Hz

Higher capacity LVDH models available. All dimensions are subject to change without notice.

FERROCARE Oil Test Equipment

**Detect & measure
solid particulate &
moisture**

**Contamination
Checking
Kit**



Run contaminated oil through a 'Patch Test' to visually assess levels of contamination for further action.



Contamination level which can damage equipment (10 mg / 100 ml.)



Contamination level which requires immediate cleaning (4 mg / 100 ml.)



Contamination level to which oil can be cleaned to (1 mg / 100 ml.)



Contamination level which requires immediate cleaning (2 mg / 100 ml.)



Contamination level to which oil can be cleaned to (0.5 mg / 100 ml.)

Request for a 'patch test' report. Our Service engineers are equipped to perform these on the go.

Get accurate particle counts and ISO / NAS / SAE codes online and on your PC.



Instantly spot contamination level changes and avoid system damage. Take the guess work out of checking. Get LIVE accurate online particle counts.

PC9001
Online Particle Counter

LOW COST solution to alarm & notify you of changes in contamination levels. Ideal for plotting ISO /NAS cleanliness trends.

The PC9001 gives you direct particle counts in ISO / NAS / SAE codes online and on your PC. The PC9001 allows your preventive maintenance to be planned with real time hard data. Adapts itself to trend monitoring through RS232 output.

Principle of operation: Laser

NAS 1638 Contaminants' Specifications (per 100 ml.)

	00	0	1	2	3	4	5	6	7	8	9	10	11	12
5-15µm	125	250	500	1,000	2,000	4,000	8,000	16,000	32,000	64,000	128,000	256,000	512,000	1,024,000
15-25µm	22	44	89	178	356	712	1,425	2,850	5,700	11,400	22,800	45,600	91,200	182,400
25-50µm	4	8	16	32	63	126	253	506	1,012	2,025	4,050	8,100	16,200	32,400
50-100µm	1	2	3	6	11	22	45	90	180	360	720	1,440	2,880	5,760
> 100µm	0	0	1	1	2	4	8	16	32	64	128	256	512	1,024

For Missiles

For Servo Valves

For CNC M/c

New Oil

An accurate & simple solution to detect moisture in oil.

MOISTURE DETECTOR

Moisture in oil is the biggest enemy of hydraulic & lubricating oils ... even bigger than particulate contamination

There is a clear nexus between presence of moisture and acid / sludge formation in oil. Now with the Moisture Detector, users have a quick, accurate & simple solution to measure moisture in oil.

Displays moisture in ppm and saturation level in percentage.

Principle of operation: Capacitance

Integration with Vacuum Dehydrator and Electrostatic Liquid Cleaner -

A Moisture Sensor installed in the Vacuum Dehydration Unit switches on the Dehydrator and the Electrostatic Cleaner automatically.

Now with early detection integrated, users have a formidable productivity enhancing solution.



Moisture in Oil -
Detect it, Measure it, Remove it!

FERROCARE

*Magnetix Separator &
Gear box oil filtration*

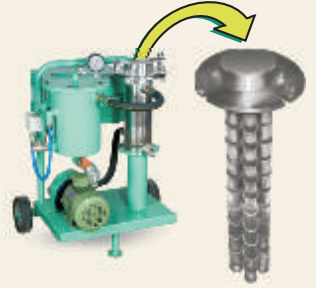
**Gear box, straight cutting,
water based fluids**

Gear Box Oil Filtration Systems



MS6 DHU - Magnet Strainer with mechanical filter

Reduce gearbox downtime while extending oil drain intervals. These units are used for removing ferrous contamination from gear boxes. The MS6 DHU unit can be attached directly to the gearbox and removes metallic wear particles efficiently.



Extend coolant life ... Improve product quality...!

Hi-power magnet separators for cutting oils, coolants, honing & washing fluids. The **MAGNETIX** range of premium quality magnetic separators, are used in operations in varied applications.



**Extraordinary
Magnetic Separator**

Some application areas: Surface grinding, Centreless grinding, Internal / external grinding, Honing, Gear grinding, Superfinishing, Electrical discharge machine.

Models available: From 20 to 400 LPM flow rate.

From
EPT
Canada

**Solutions for
Phosphate Ester, FRF
fluids, control fluids in
power plants**

EHC System for contamination control & maintenance of EHC fire resistant fluids (Phosphate Ester)



Ferrocare now offer solutions for Phosphate Ester fluid maintenance. Remove 100% of contaminants and restore fluid systems to peak performance, including the resistivity requirements.

- Remove & maintain acid number to < 0.1 mg KOH/gm with ICB element
- Eliminate Servo Valve Sticking
- Maintain moisture below 200 ppm and reduce acid levels build up.
- Integrated TMR (Nitrogen generator) removes oxygen and combustible dissolved gases
- Remove particulate & insoluble gel / sludge, with high efficiency.

FERROCARE also offers

Noritake
NORITAKE CO., LIMITED
Abrasives



CHUETSU METAL WORKS CO., LTD.
Copper moulds for casting of steel



NACHI
NACHI FUJIKOSHI CORP.
HSS & Hydraulics



FERROCARE MACHINES PVT. LTD

AN ISO 9001:2008 CERTIFIED COMPANY

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Helping you ... work better ... under pressure