

LVDH

Low Vacuum Dehydration

Low Vacuum dehydration does efficiently what centrifuging can never do.



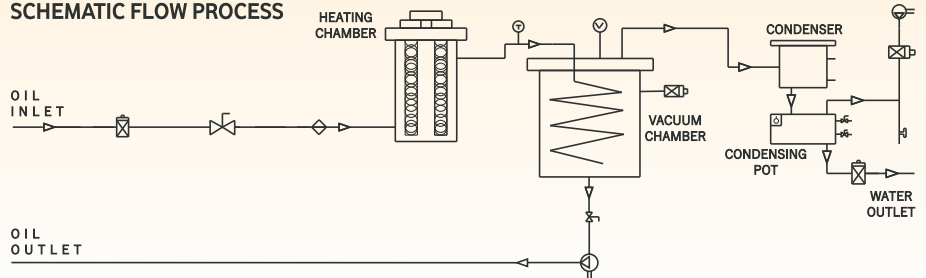
For removal of moisture & gases from oil

The LVDH unit 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 promotion of oxidation because of high temperature, inability to remove emulsified water, high power consumption & high maintenance costs.

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.

SCHEMATIC FLOW PROCESS



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
- Synthetic Oils.

FUNCTION OF CATALYSTS

Test	Catalysts (Metal)	Water	Time (Hrs)	Acid Value
1	nil	nil	3,500	0.17
2	nil	exists	3,500	0.90
3	iron	nil	6,500	0.65
4	iron	exists	400	8.10
5	copper	nil	3,000	0.89
6	copper	exists	100	11.20

Note: 1. Time: hours for reaching a certain level of acid value.
2. Test oil is of 32cSt/100°F (40°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.

SELECTION GUIDE All figures are indicative only

Conventional Hydraulics (max. quantity)					
Model	Capacity	Condensor	Weight (Kg)	Dimensions L x W x H (mm)	Power
LVDH-600	8-10 L/min	Refrigerated	390	1470 x 785 x 1480	6kw @ 415 VAC 3P+N+E (50Hz)
LVDH-900	13-15 L/min	Refrigerated	480	1470 x 785 x 1480	8kw @ 415 VAC 3P+N+E (50Hz)
LVDH-2100	30-35 L/min	Refrigerated	600	1575 x 945 x 1580	16kw @ 415 VAC 3P+N+E (50Hz)
LVDH-3000	40-50 L/min	Refrigerated	650	1610 x 1050 x 1460	16kw @ 415 VAC 3P+N+E (50Hz)
LVDH-6000	80-100 L/min	Refrigerated	850	2100 x 1455 x 1945	24w @ 415 VAC 3P+N+E (50Hz)

Specifications subject to change without prior notice.



The Integrated Unit

Removes free and emulsified moisture and suspended particulate matter from hydraulic & lubricating oils.

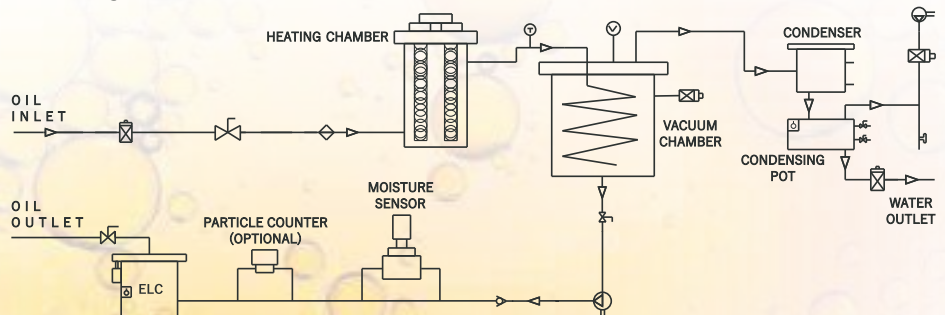


All units offered with IOT & MODBUS Processors

Transmit data to your android phone or computer in real time.

Benefits of ELC & LVDH In a Single Platform

- Automatically read moisture level in ppm or water solubility
- Automatically read particulate purity in NAS / ISO
- Read out on android smart phone / computer in real time
- Self diagnostic touch screen



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Conventional Hydraulics (max. quantity)					
Model	Capacity	Condensor	Weight (Kg)	Dimensions L x W x H (mm)	Power
I-600	8-10 L/min	Refrigerated	610	1470 X 1320 X 1260	6 Kwh @415 Volts, 3Ø, 50Hz
I-900	13-15 L/min	Refrigerated	700	1470 X 1350 X 1260	8 Kwh 415 Volts, 3Ø, 50Hz
I-2100	30-35 L/min	Refrigerated	865	1745 X 1560 X 1260	16 Kwh 415 Volts, 3Ø, 50Hz

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