

*If 'oil is the life blood of the engine'.....*

*.....then EDI is the Kidney*



**EDI 4000 LPS**



The EDI Lub Oil Purifier was specifically developed to extend oil life in engines or closed lubrication system such as hydraulic systems, gearboxes, bow and azimuth thrusters, stern tubes etc.

Removing all water, fuel, acid etc and contaminants greater than 1 micron. Through a clear two stage process the EDI effectively cleans oil to better than ISO 12/9 (NAS 3-4).

### Diesel Engines

Connected as a bypass to the lub oil system the unit is fed at 40 l/hr from the engine and returns direct to the sump. Oil passes first through a 1 micron filter then onto an evaporation chamber which removes water, glycol, gaseous acids and even diesel fuel. It will maintain the viscosity and TBN of the oil in "as new" condition easily extending drain periods by many hours. Depending on application, the EDI usually gives a return on investment in 3 months. As the oil is significantly cleaner engine bearings etc., will last longer resulting in extended overhauls if required.

### Closed circuit oil systems

Hydraulic systems, gearbox, stern tubes, thrusters etc., connected directly to the system whilst the machinery is operating ensures water and contaminants are treated immediately. Alternatively available as a stand alone unit with integral heater and pump for 24/7 off line cleaning.



**Smaller EDI 150 unit**

- Extends oil life in engines / closed circuit lubricating systems
- Cleans to 1 micron & removes water, acids & fuel dilution
- Maintains Viscosity and TBN
- Real time monitoring available



**EDI 800 - Self-contained mobile unit**

## EDI Rental



Also available, as a fully portable system, the EDI is mounted on a frame complete with heater and flow and return pump to enable "off-line" operation of multiple systems. This unit is available as a gravity return to a header tank or fixed directly into any high pressure closed system ensuring 24 hour operation. The EDI Purifier is available to rent as a stand alone unit for flushing a system or positioned over its own 600 or 1000 litre (IBC) tank to provide cleaning of the oil during equipment maintenance

# EDI Lube Oil Purifier removes

- **Solid contaminants** - for example wear metals, soot (carbon), dirt (silicon), sludge etc.,
- **Liquid contaminants** - water, fuel (NB light hydrocarbons), etc.,
- **Gaseous contaminants** – sulphur dioxide, sulphur trioxide, nitrous oxide etc.,
- **Acidic contaminants** – sulphuric acid, nitric acid.

Through a clear two stage process of filtration and evaporation the oil is maintained in “as new” condition with viscosity and TBN remaining within manufactures recommendations.

## Filtration

Entering the bottom of the unit at a regulated 40l/hr the oil passes into an easily replaceable canister consisting of long strand, unprocessed cotton, compressed to provide absolute filtration capacity to 1 micron. The use of raw cotton is key to the process, being cellulose it reacts with and attracts any liquid acids so effectively removing these acids from the oil and ensuring the TBN is not depleted.



## Evaporation

On exiting the filter canister the oil cascades as a very thin layer over a heated plate allowing any water, glycol, gaseous acids of Sulphur Dioxide/Trioxide and diesel fuel to be evaporated out through the evaporation valve to the atmosphere.

As the gaseous acids are evaporated they can not go onto form liquid acids so complementing the effect of filtration above.



## Oil Analysis Service


We offer a full spectrographic web based oil analysis service to ensure your equipment is never compromised. This managed service enables us to monitor your equipment closely and report immediately on any irregularities to give you confidence the oil is fit for further service.

If you are not currently using an extended oil drain product but would like to analyse your oil and assess it's condition simply give us a call.



## Real Time Oil Monitoring

Through an oil quality sensor with an analogue output of 4-20mA your oil can be monitored in real time and linked to a local digital display unit or connected to a vessel's data logger. Alternatively we can supply a portable oil testing kit using the same sensor measuring the dielectric capacitance and conductance. This latest technology provides a reading that is, on average, up to 60 times more sensitive to the change in quality of the oil.

An environmental company 

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