FUELMAG DIESEL FUEL PROTECTION



- NO MORE PLUGGED FILTERS AND TANK CLEANING
- EXTENDED PUMP, INJECTOR AND FUEL FILE
- ENHANCED COMBUSTION AND FUEL ECONOMY
- **ENGINES RUN BETTER, SMOKE LESS**
- LESS MAINTENANCE AND DOWNTIME

FUELMAG

Controls Microbial Contamination



... prevents plugged filters, and continuously cleans your fuel system by simply running your engine or circulating pump

ECOTECH FUELMAG prevents plugged filters and tank cleaning, increases the life of injectors and pumps, reduces maintenance and downtime while improving engine reliability and safety.

All without the use of toxic biocides!

ECOTECH FUELMAG is easily installed in the fuel line, between the tank and the filter. These units **direct flowthru** and self cleaning with no moving parts.

MICROBIAL CONTAMINATION

Hydrocarbon distillates such as diesel fuel, gasoline, jet fuel, hydraulic oil etc. are organic fluids. They are food for bacteria, fungi, yeast and mould that rapidly deteriorate the quality of the fuel. Microbes can be airborne or waterborne (water is always present in fuel)

Modern refining techniques, additives, fuel storage and transport systems all contribute to contamination and are determining factors in the shelf life of fuel.

Additive, in particular those rich in nitrogen and / or phosphorous, enhance microbial growth and accelerate the process of biodegradation.

TRADITIONAL FILTRATION

- + ECOTECH FUELMAG
- = TOTAL FILTRATION
 - No more plugged filters and tank cleaning
 - Extended pump, injector and fuel life
 - Enhanced combustion and fuel economy
 - Engines run better, smoke less
 - Less maintenance and downtime
 - Lower operating costs
 - Increased safety and reliability



CONTAMINATED FUEL

MICROBIAL DEBRIS

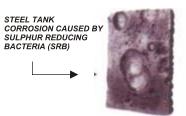
TRADITIONAL FILTRATION

Traditional filtration was designed to remove particulate and water from fuel. Filters have difficulty keeping up with removal of the **by-products of** bacterial and enzyme activity- the sludge and slime commonly referred to as "**the bug**".

The use of biocides often aggravates this filtration problem. Traditional maintenance programs call for changing filter cartridges every 100-200 hours. With clean "bug free" fuel, filters should last 1,000 hours or more.

MICROBIAL SYMPTOMS

Contamination is easily recognized:



- Plugged slimy filters
- Dark, hazy fuel
- Jelly like slime
- Loss of power
- Excessive smoke
- Corroded injectors
- Foul odour

THOUSANDS OF UNITS SOLD IN USA & EUROPE

HOW IT WORKS

ECOTECH FUELMAG[™] is not a filter. It is a magnetic treatment unit. The effect on the bacteria are immediate. As the fuel passes through the unit the bacteria disrupt. The individual spores are in the one micron size range and will pass through the fuel filter/s and burn with the fuel.

The fuel returning to the tank will contain spores that due to the effect of the magnetic field will be in a "dormant form", reduced in size and inhibited from reproducing. These spores will in turn be exhausted through the system giving the engine a continuous supply of clean fuel. Should the fuel supplied to the engine at a later date be contaminated **ECOTECH FUELMAG™** will operate to ensure that microbial contamination does not reoccur.

NEW UNITS WITH INTEGRAL CONNECTORS



Most trucks and vehicles use flexible fuel line, fitting a unit is easy. Check the I.D. of the fuel line, select the correct **ECOTECH FUELMAG™** FXB unit, remove a short length of fuel line, install the barded unit in the line prior to the filters and gain the benefits of bacteria decontaminated fuel

ECOTECH FUELMAG™ SPECIFICATIONS ETA SERIES

Port Size: ETA100







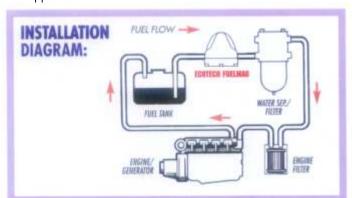


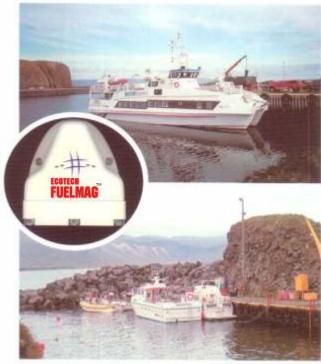
For the full range of **PURAFINER** units, aluminium threaded, steel threaded, fexible fuel line and flanged please refer our website www.purafiner.com.

SELECTION:

Selection of the correct size **ECOTECH FUELMAG**[™] unit is simple. Check the internal diameter of the fuel line and select the correspounding **ECOTECH FUELMAG**[™] unit, i.e. if the fuel line I.D. is 1/2" then select **ECOTECH FUELMAG**[™] model ETA 1000.

MATERIAL: Units are available in marine grade aluminium, steel and stainless steel depending on application.





Fishing Boats - Iceland

NEW IN EUROPE

 $\textbf{ECOTECH FUELMAG}^{^{\text{TM}}} units \ \text{for bunker ships and bulk storage}.$ 45 bunker ships in the Netherlands, 5 in Belgium and 3 in Germany have been fitted with New Zealand made decontamination units. One bunker ship has 6 units fitted.

In the Netherlands, all suppliers of BP diesel fuel.

In Belgium, Agaat N.V. Suppliers of sheel products.

In Germany, suppliers of BP products

Suppliers of Gulf, Mobil and Total-Fina have also fitted



ECOTECH FUELMAG[™] decontamination

units to ensure their customers receive bacteria decontaminated fuel. These large capacity units, up to 6" inlet/outlet treat the fuel as it is pumped into the bunker ship from the shore installation and again on delivery to the barges and workboats operating throughout Europe.

IT WORKS - ANALYSIS PROVES IT!

Manufactured by: **PURA**FINER

P.O. Box 12 144, Christchurch, New Zealand Phone: 64 3 365 1960, Fax: 64 3 365 1961 Email: info@purafiner.com Internet: www.purafiner.com

PURA FINER is a trademark of Purifiner Distributors (NZ)Ltd

South East Asian Representative