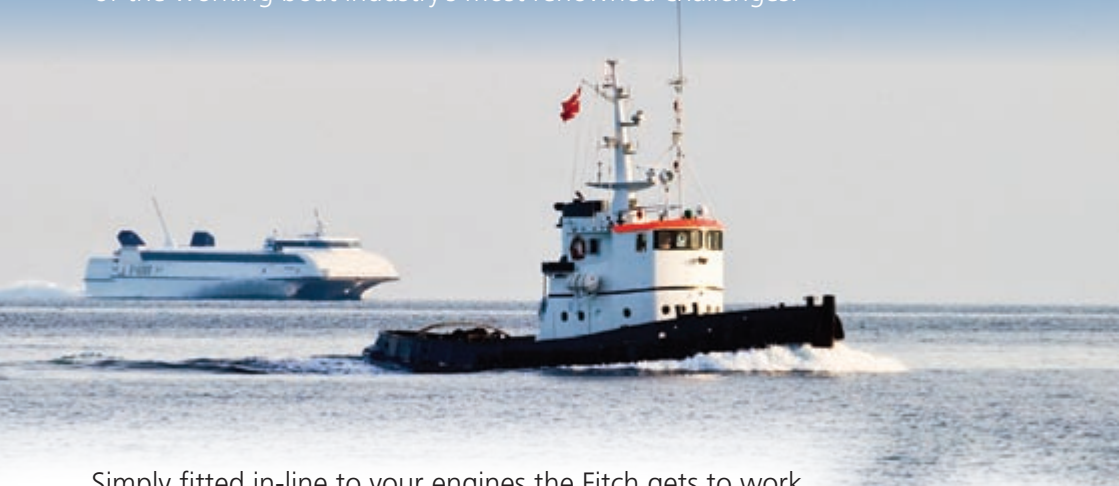


# The Fitch Fuel Catalyst will work on your working boats!

The Fitch Fuel Catalyst, distributed exclusively in the UK and Ireland by Fuel Harmonics Plc, is a fuel saving and emissions reducing device that will work for you and your fleet.

Whatever working vessels you operate, the Fitch provides a solution to many of the working boat industry's most renowned challenges.



Simply fitted in-line to your engines the Fitch gets to work immediately as a permanent fuel treatment and stabiliser.

## The Fitch facts speak for themselves:

- Save up to 7% on fuel consumption
- Reduce noxious emissions: CO<sub>2</sub>, NO<sub>2</sub>, NO<sub>x</sub> and carbon monoxide by up to 15%
- Suppresses bacteria growth and eliminates plug fouling
- Allow a more complete combustion
- Promote a cleaner engine
- Improve performance



FUEL HARMONICS PLC



[www.fhplc.co.uk](http://www.fhplc.co.uk)

## Frequently asked questions about the Fitch:

### 1. Does the Fitch Fuel Catalyst work in all grades of diesel?

Yes. It benefits all grades including MDO and even HFO.

### 2. Is it expensive to buy?

No, the unit is relatively inexpensive and in most commercial applications you can expect to see returns within 90 days. In any other application, including domestic, it will pay for itself in the medium term.

### 3. How does it work?

It is very simple. Most fuel is made up of high energy constituents, which burn with a fairly high degree of efficiency. However, in addition to these high-energy fuel constituents, there are others which tend to cause problems during combustion. These are the lighter components which burn too fast causing pre-ignition and the heavier ones which burn too slowly causing hydrocarbons. Fitch treatment allows these constituents to burn at the same time as the rest of the fuel contributing to higher efficiency

### 4. Will it improve the engine's performance?

Yes! Horsepower and torque are both improved in all cases.

### 5. How will the Fitch's benefits impact environment?

In two major ways; firstly by remarkably, and visibly, reducing your vessel's pollutant emissions such as CO<sub>2</sub>, NO<sub>2</sub>, CO and NO<sub>x</sub> by the more complete combustion of the fuel. Secondly, by using less fuel!

### 6. How long will the Fitch remain effective for?

The unit will work for anything between 5000 hours and 10000 hours dependant on application.

### 7. How does the Fitch improve the quality of my fuel?

The permanent fuel treatment transforms the fuel back to its optimum state by reversing natural degrading processes and suppressing bacteria growth hence eliminating plug fouling.



To find out more about the Marine range

# Your fleet can benefit from up to **7% off** its fuel costs - **TODAY!**

Inshore, harbour, marina and offshore, high impact and commercial fleets can make remarkable savings on fuel costs when the Fitch Fuel Catalyst is fitted.

This coupled with the ever more topical environmental issue of reduced emissions makes the application of the Fitch in the working boat and ferry businesses a guaranteed success on many levels. And none are more vital than the benefits to the actual engines onboard all types of working/commercial vessel.

The Fitch facilitates a cleaner and therefore more efficient combustion - this leads to cleaner engines, less frequent servicing therefore less time out of the water and more time doing business.

Those working boats, high impact tugs and barges, commercial passenger vessels from in-shore to offshore all enjoy the fuel economy benefits of the Fitch when applied to their fleets.

The Fitch can be found on the Condor Express and Condor Vitesse – both SeaCat fast ferries and the Carnival Cruises' Aurora.

An improvement of up to 7% in fuel consumption on ships this size is as dramatic as the reductions in emissions.

The shipping market is one in which the Fitch has an enviable record and expansion program and it's time for your business to subscribe this success.



## The Barrus Report:

E. P. Barrus was approached by Fuel Harmonics to test a fuel catalyst made by Fitch on a marine diesel engine. The test was to evaluate the improvements in fuel economy and emissions with the use of this catalyst.

### The Test

The test was applied to a Yanmar 4LHA engine which had been used for a military evaluation engine prior to the test. After an initial warm up period, the engine was run at four different speeds for two hours at each speed.

The engine was first tested with no catalyst and the fuel consumption and emission results were recorded for a baseline result. The catalyst was then fitted to the engine and it was run for sixteen hours for a conditioning period.

The Fitch catalyst was then fitted inline into the fuel system prior to the fuel injection pump. A test was then carried out taking measurements at two hour intervals at identical speeds and loads as the base line test.

It was found that the Fitch catalyst gave up to 5.7% improvement in fuel consumption throughout the entire speed range tested. It was also found that some pollutants were reduced. These were NO<sub>2</sub>, CO and NO<sub>x</sub>. This was probably due to a more complete combustion of the fuel.

If the engine was run for much longer it would become much cleaner.

The Fitch fuel catalyst did make an improvement in fuel consumption. The total period of the test with the catalyst in place was 24 hours. The assumption is that the catalyst was still in the conditioning stage and that a longer period of running would have shown further improvements in both fuel consumption and emission levels. This assumption is made on the basis of another trial that was carried out using an external pipe fuel catalyst on four of the company motor vehicles where as previously mention the results got worse before there was an improvement. These improvements took approximately 2000 Kilometres which equates to a run time (at an average speed of 60 Km/hr) of approximately 33 hours.

**To read the full report, please visit our website and click on 'Benefits'**

To discuss your company's needs and for an intellectual consultancy contact FHPLC on:

**01189 880710**



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