



Technology
for a **Green** Tomorrow



Reduce Emissions and Fuel Usage

Proven Technology, Economical,
Reliable, and Clean



Reduce CO₂ - Reduce Global Warming

The most recent report from the UN's Inter-Governmental Panel On Climate Change (IPCC) states that global warming is occurring faster than previously believed. CO₂ is a major contributor to global warming.

According to the European Automobile Manufacturing Association "The amount of CO₂ a car emits is directly related to the amount of fuel it consumes" The less fuel consumed the less CO₂ is emitted which is verified by an EPA formula for determining the reduction in CO₂.

Independent testing facilities including those supported by EPA procedures, report the Fitch Fuel Catalyst (FFC) reduces fuel consumption and thus CO₂ emissions. In particular, when the weight of CO₂ emissions has been measured before and after installation of the FFC the decrease in CO₂ has ranged from 6.39% to 32.18%

Testing Facilities Prove CO₂ Reduction

| Facility | CO ₂ Reduction | % Reduction Fuel |
|---|---------------------------|------------------|
| Vehicle & Engine Emissions Testing Service | 115.56 grams/mi | 12.08% Diesel |
| Ocean Air Environmental LLC | 224.65 grams/bhp | 32.11% Diesel |
| Vipac Engineers/Scientists Ltd | 35.2 grams/km | 10.95% Diesel |
| Automotive Testing and Development Services | 43.11 grams/mi | 6.39% Gasoline |
| Automotive Testing and Development Services | 174.75 grams/mi | 25.90% Gasoline |

For a further understanding of the importance of this reduction in CO₂:

Take the average car or truck reporting 20 miles per gallon and driven for 12,000 miles per year. By installing a FFC System and experiencing an average benefit of a 10% reduction in CO₂ emissions, that same vehicle will produce 12,000 pounds less CO₂ per year. This is very significant.

The Truth About Fuel

Engines are designed to operate on refinery grade fuel. At the time fuel is refined, it is at its purest state, however, it deteriorates rapidly as it oxidizes and is attacked by a host of microorganisms (bacteria, yeast, molds) that change the molecular structure of the fuel. The end result is that over time, less of the fuel is what the engine was designed to combust and many of these modified components become only partially combustible.

Fuel that does not combust completely does not contribute useful energy to the engine. It forms smoke, carbon deposits and gums which cause maintenance problems. The Fitch Fuel Catalyst reverses this natural aging process by inducing a chemical reaction using a patented metal alloy catalyst that reformulates the fuel, creating a more combustible, cleaner burning fuel.

Proven

Hundreds of thousands of vehicles, marine vessels, boilers, generators, outdoor power equipment and recreational vehicles are currently operating FFC systems worldwide. FFC is a proven technology, well understood application that is easily installed and maintenance free. FFC systems have an established operating performance history, and both retail and commercial customers investing in FFC can expect a well-designed product to perform at very high rates of reliability over the lifetime of their warranty.

Technology

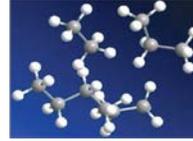
Fitch Fuel Catalyst (FFC) is a TRUE definition of a catalyst. A substance that induces a chemical reaction without itself undergoing any permanent chemical change. Treating any fuel with (FFC) Fitch metal alloy catalyst elements is like blowing air on a fire (adding oxygen) to get it started or to make it burn brighter and hotter. Fitch, using a different mechanism, does the same thing by oxygenating the fuel. That applies to any hydrocarbon fuel including natural gas and propane.

What Does This Mean For Better Combustion?

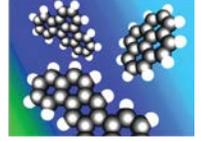
With oxygen already attached to the HC molecules, but not combusted since the chain is still intact (not cracked), the fuel will more readily combust. Just like blowing air on a campfire to get it going.

The Chemistry

THE REMOVAL OF hydrogen atoms from ring-shaped aromatic molecules (such as benzene) changes them into branched aliphatic molecules, which can accept oxygen more readily. The freed up hydrogen is redistributed to other molecules. This reduces diesel exhaust particulate matter by as much as 35% and diesel smoke by as much as 100%.



Aliphatic Molecules



Aromatic Molecules

Reliable

The FFC Commercial Systems is warranted for 500,000 operating miles or 10,000 hours and the Retail Systems for 250,000 miles and 5,000 hours. Engines remain in service longer and require less maintenance when a FFC System is installed.

"Your Product is very easy to use and very economical.... I can physically see the results in my fuel system and exhaust.

Westwind Tugboat Adventures – Bob Jordan

"There has been a clear reduction in smoke and a significant reduction in carbon build up which translates into reduced engine maintenance and unscheduled downtime." ***Golden Alaska Seafoods, LLC – Mark Purdue, Chief Engineer***

"By installing the FFC System, the residual carbon/soot build-up was eliminated. The boiler operated at maximum efficiency without additional maintenance." ***Jim Apgar – Apgar Oil & Energy***

Installation of FFC System on various Air Force vehicles. " A distinct change in fuel sample clarity was noted. In addition, test vehicle (G30 Van) had a 66% decrease in O2 sensor replacement than the previous year." ***US Air Force***

Clean

High efficiency, low emissions FFC systems have been recognized as the centerpiece of sustainability strategies at premier housing properties such as Newmark Knight Frank, Food Processing and Delivery Companies such as Tyson Foods, Commercial Fishing Vessels, as well as Government Agencies like Air National Guard and US Navy. Analysis performed to meet ASTM guidelines, and evaluation report by The Center for Emissions Research and Analysis, indicate that the Fitch Fuel Catalyst System (FFC) can expect to generate up to 20% percent reduction in greenhouse gas emissions. A building, automobile, commercial vessel or even a motorcycle can all reduce its greenhouse gas impacts by as much as 20 percent with a single investment in high efficiency FFC System for their engine. The significant reduction in emissions/carbon footprint translates to as much as a 20% reduction in fuel consumption and improvement in efficiency, and no less than 5% with most engines.