Permanently Refine Your Fuel...

By Advanced Power Systems, Int’l Inc.

www.fitchfuelcatalyst.com

Info@fitchfuelcatalyst.com

888-881-2774

GSA Contact GS07F-0300N

UL Compliant

By Advanced Power Systems, Int’l Inc.
Topics of Presentation

How to Achieve Corporate Goals of:

- Reduced Gasoline & Diesel Fuel Use
- Reduced Fuel Related Operating Costs
- Reduced GHG Production
- Reduced Maintenance Expense

- Conveniently and Effectively
Fitch Customers choose our products to achieve fuel related cost reductions

- easily and effectively,
- with minimal expense
- with less than one year payback
- with no change to existing operations
Customer Satisfaction

The Fitch Fuel Catalyst is:
A simple proven retrofit to gasoline and diesel powered equipment that provides real benefit in terms of cost and operational savings. Guaranteed.
Cost / Benefit Analysis

Cost for a Fitch retrofit to a vehicle is:
$350 to $1,000 per diesel truck
$175 to $300 per gasoline vehicle

Total Savings per year depend upon usage (mileage) but payback of 3 or 4 to 1 in year 1 are typical.
Thereafter the product continues to produce benefits at ZERO incremental annual expense.
Strengths and Advantages

The Fitch Fuel Catalyst is the only product in this category with the breadth and depth of credentials required to satisfy a F 500 class company.
The Fitch technology is the result of a collaborative Research Program with the Dept of Defense

- **Objective:** Extend the capabilities of the fuel catalyst developed for gasoline to:
  - Military Fuels - DF2 and JP Fuels
  - This has been accomplished with respect to DF2
Measuring how the Fitch product performs in the customer application is simple

Every engine in the fleet has an on board EMU computer that collects data continuously. This EMU computer will automatically record the difference the vehicle will experience with the Fitch product installed. The data is easily retrieved by the engine technician for before and after Fitch installation comparisons.
Engine Dyno Tests Demonstrate the Fitch Fuel Catalyst Improvement in Fuel Economy and Emissions Reduction
Engine Dyno Test – Cummins 14L

Increase in Power & Torque
The Fitch Fuel Catalyst is a heterogeneous metal alloy that transforms gasoline and diesel into a superior quality of fuel allowing a combustion engine to extract the maximum amount of energy with minimal emissions.

The Fitch Fuel Catalyst, a permanent fuel treatment aftermarket device that re-refines real world fuels, resuscitates partially oxidized fuels, and suppresses growth of bacteria in fuels on board a machine.
Fitch Research Facility Dept of Chemistry

University of Connecticut
How Does Fitch Change Diesel?

- Polynuclear Aromatics are reduced
- Aliphatics simultaneously increased
- The H-C ratio is increased.
- Percentage of long chain hydrocarbons ideal for combustion are increased.
- Cetane number is increased.
- Lubricity is increased
- Fitch Fuel Catalyst reverses the natural degrading process of diesel.
How Does Fitch Effect Gasoline?

- Molecules in the C1, C2, C3, C4 (which contribute to pre-ignition) are markedly diminished.
- Highly branched molecules in the C7 – C11 range are increased. These are ideal for optimal combustion.
- Octane Rating Increases.
- Oxidation Stability improves as measured with ASTM D525.
- Fitch Fuel Catalyst reverses the natural degrading process of gasoline.
- Bacterial growth is suppressed.
Bolt-on “DIY” Auto Application

Drop-in Tank Auto Application

Outdoor Power Drop ins

Recreational Vehicles Drop ins
Installation Process

- Fitch drop in applications are installed directly into the fuel tank in about 20 seconds

- Bolt-on car/truck applications install in the fuel line using OEM “quick connect” fittings and required simple hand tools – installation ranges between 10 – 45 min.

- In line applications for heavy duty trucks, marine and equipment takes no more than 30 - 60 minutes and is easily done in the course of routine maintenance.
Typical Light Duty Diesel Truck & Gas vehicle installations
Diesel Engine Test – CVS 75

Engine: 2002 6.6 Liter Duramax GMC Diesel
Test Procedure: CVS 75 – Urban Drive Cycle of FTP 75
Results: 12% Fuel Economy Increase
          21% Average Emissions Reduction
OEM Truck Manufactures Offer Fitch

Oshkosh Trucks, Pierce Manufacturing, Crash Rescue, and Emergency-One will install Fitch at OEM level
Oil Burner Flame

CLEAVER-BROOKS 6.5 Ton Imperial Queens Park Hotel Bangkok

Burner before Fitch  Burner after Fitch
Hse 334 (Furnace) - Average Efficiency

Initial efficiency test reduced nozzle by .15 (.65 to .5)

Installed Fitch Adjusted Excess Air Efficiency after three weeks Efficiency after three months

<table>
<thead>
<tr>
<th>Date</th>
<th>Action Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/19/06</td>
<td>Initial efficiency test</td>
</tr>
<tr>
<td>2/19/06</td>
<td>Reduced nozzle by .15 (.65 to .5)</td>
</tr>
<tr>
<td>2/19/06</td>
<td>Installed Fitch</td>
</tr>
<tr>
<td>2/19/06</td>
<td>Adjusted Excess Air</td>
</tr>
<tr>
<td>3/5/06</td>
<td>Efficiency after three weeks</td>
</tr>
<tr>
<td>6/6/06</td>
<td>Efficiency after three months</td>
</tr>
</tbody>
</table>

Graph showing efficiency and CO (PPM) levels over time.
Furnace inspection before and 48 hours after Fuel Catalyst Installation
Fitch Benefits

- Insure Fuel Quality During Storage
- Increase Gasoline Octane & Diesel Cetane
- Improve Engine Performance (Horsepower & Torque)
- Improve Fuel Economy (5 – 15%)
- Reduce Carbon Footprint (earn carbon credits)
- Reduce Emissions (cleaner burn)
- Reduced maintenance
  - Lower soot content in the lubricating oil
  - Minimize injector and fuel system maintenance
  - Minimize exhaust system maintenance
Experience the Difference