Military Applications

Sole Source Technology with 33 Issued Patents

Energy and Emission Solutions
Rentar Fuel Catalyst
Is Independently Verified To:

• Reduce Fuel Consumption And Extend Range 2.0% To 12.0%
• Reduce Oil Fired Furnace Fuel Consumption 7.0% To 30.0%
• Reduce Greenhouse Gases (NOx, CO and CO₂) Up To 19.2%
• Reduce Particulate Matter (PM) Up To 58.2%
• Reduce Black Smoke (Opacity) Up To 44.8%
• Reduce Organic And Elemental Carbon Up To 35.0%
  Reduce Volatile Organics up to 63.0%

Results vary based on the applications, type of engine and type of fuel utilized
Benefits of the Rentar Fuel Catalyst to the United States Armed Forces

- Extends Equipment Range
- Reduces Infrared Exhaust Signature
- Reduces Fuel Consumption
- Reduces Greenhouse Gas Emission
- Extends Engine Life
- Extends Oil Life
- Reduces Engine Maintenance
- 10 Year Warranty
- Easy to Install
- Pays for Itself in Fuel Savings in 3 to 12 Months
Rentar Is Independently Verified By:

- Southwest Research Institute
- EPA Recognized Laboratories
- CARB Recognized Laboratories
- Aberdeen Proving Grounds
- Naval Facilities Engineering Services Center
- U.S. Marine Corps
- Olson Ecological Laboratories
- EPA And California Air Resource Board (CARB) Recognized Laboratory
- Virginia Tech University
- Italian Ministry Of Defense
- England's Millbrook Proving
Improve Range, Signature and Engine Life
Reduce Fuel Consumption and Exhaust Pollution

Type of Equipment Ideal for the Rentar Fuel Catalyst
Government Recognition

H.R. 4546 THE NATIONAL DEFENSE AUTHORIZATION ACT

House Military appropriations bill – Written in bill: “Given the magnitude of potential fuel savings and emissions reductions, the committee does not understand why the Department (of Defense) has not taken advantage of this technology. The committee urges the Secretary of Defense to take immediate steps for the application of this new technology as soon as practicable.”
Automotive Research Association of India is a co-operative industrial research association by the automotive industry with the Ministry of Industries, Government of India.

Testing Conducted on 6SL8800TA 200 KW Kirloskar 250 Genset Engine
Tested with ISO: 8178 D2 - 5 Mode Test Protocol

- 3.04% Fuel Improvement
- 58.2% Reduction of Particulate Matter
- 7.9% NOx Reduction
- 35.4% CO Reduction
- 15.4% Hydrocarbon Reduction

See Test Study
Testimonial Letters

Tata Motors Limited

To Whom It May Concern

This is to certify that HBL RENTAR Fuel Catalyst has been installed on the following equipments:

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Model No.</th>
<th>Qty</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HBEN-2012</td>
<td>500</td>
<td>12.5 KWh batteries</td>
</tr>
<tr>
<td>2</td>
<td>HBEN-2012</td>
<td>500</td>
<td>12.5 KWh batteries</td>
</tr>
</tbody>
</table>

Since the installation, fuel catalysts are performing to our satisfaction at above mentioned DG sets. We are pleased to confirm that we have achieved a saving of 12.37% on specific fuel consumption.

For Tata Motors Ltd.

V. M. Singh
DOOM - Plant Services

Mahindra & Mahindra Ltd

TO WHOM SO EVER IT MAY CONCERN

This is to certify that HBL RENTAR Fuel Catalyst has been installed on our generators and winter applications.

The performance of HBL RENTAR Fuel Catalyst has been good and about 8% EHS saving achieved.

We appreciate the great efforts of HBL Power Systems Ltd. towards reducing the fuel consumption and carbon emission.

YAMANAGOLD

March 21st 2019

We at Minas Marcantes do Distribuição do Brasil, a YAMANAGOLD partner, have successfully installed the RENTAR fuel catalyst model HBEN 2012 on our CAT 785C haul trucks with results that surpassed our objectives for fuel efficiency with a payback of less than a year. As a result, we have purchased the RENTAR fuel catalyst for installation on our fleet.

We are pleased with the support from SSTREK, our RENTAR dealer, and from the direct relationship with the manufacturer itself. We are also pleased with the trouble-free performance of the catalysts, to date.

We are looking forward to our continued use of the RENTAR fuel catalysts.

Fábio Nogueira
Maintenance Coordinator
Tel: +55 24 3134-1265

YAMANAGOLD 15 ANOS

Minas Marcantes do Brasil 41130-010 - Patos de Minas-MG
Alto Horizonte 101 - Brazil
RJ 231-0001
http://www.yamana.com
Results: Using No. 2 diesel fuel

- 3.6% Fuel Consumption Improvement
- 14.1% CO2 Improvement
- 12.0% NOx Improvement
- 17.4% Carbon Monoxide Improvement
- 12.6% Hydrocarbons
- 10.9% O2 improvement

See Test Study
EFFECT OF RENTAR FUEL CATALYST ON EMISSIONS AND EFFICIENCY FROM A COMMERCIAL BOILER FIRING NUMBER 2 HEATING OIL.

Virginia Polytechnic Institute / Alexandria Research Institute

Commercial Boiler Firing Number 2 Heating Oil Furnace
Located At the Everett Meredith Middle School – Delaware

Study Paid for by the State of Delaware

Results:

7.6% Fuel Consumption Improvement
13.0% NOx Improvement
4.0% Carbon Monoxide Improvement
13% Total Hydrocarbons
7.6% CO2 Improvement by Carbon Balance Assumption

See Test Study
Proven Effective by

U.S. Army’s Aberdeen Proving Grounds

Tested with EPA Equipment and EPA Protocol
Results Using Number 2 Diesel Fuel

- 3.6% Fuel Reduction
- 14.1% CO₂ Greenhouse Gas Reduction
- 12.0% NOx Reduction
- 17.4% CO Reduction
- 12.6% Hydrocarbon Reduction

See Test Study

U.S. Naval Facilities Engineering Center

21.0% Fuel Improvement
50% to 39% Reduction in Particular Matter

United States Department of Navy

See Test Study
5 Vehicle Test Results
Conducted by USMC 7th Motor Transportation Battalion
Camp Pendleton
38.7% Fuel Reduction
44.8 Opacity Reduction

See Test Study

4.0% Fuel Improvement
Simple Installation
Generators / Gensets

Stationary Generators Fuel Consumption Reduced 4% to 12%
Caterpillar 777D
Schedule of Annual Fuel Savings at Various Fuel Cost
Using the Rentar Fuel Catalyst

<table>
<thead>
<tr>
<th>Per Gallon Price</th>
<th>$4.00</th>
<th>$6.00</th>
<th>$8.00</th>
<th>$10.00</th>
<th>$12.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>2% Savings</td>
<td>$9,600</td>
<td>$14,400</td>
<td>$19,200</td>
<td>$24,000</td>
<td>$28,800</td>
</tr>
<tr>
<td>4% Savings</td>
<td>$19,200</td>
<td>$28,800</td>
<td>$38,400</td>
<td>$48,000</td>
<td>$57,600</td>
</tr>
<tr>
<td>6% Savings</td>
<td>$28,800</td>
<td>$43,200</td>
<td>$57,600</td>
<td>$72,000</td>
<td>$86,400</td>
</tr>
<tr>
<td>8% Savings</td>
<td>$38,400</td>
<td>$57,600</td>
<td>$76,800</td>
<td>$96,000</td>
<td>$115,200</td>
</tr>
</tbody>
</table>

Assuming the Caterpillar 777D
Consumes 20 GPH / 20 Hours per Day / 6 days per Week / 50 Weeks per Year

Results vary based on the applications, type of engine and type of fuel utilized.
Heavy Duty Equipment

Wheel Loader 980H with Cat C15 | USA
5.6% Improvement in Fuel Efficiency

Cat 797B with Cat 3524B Engine | Chile
6.3% Improvement in Fuel Efficiency
Generators / Gensets

Genset with Cat 3306 Engine | Saipan
5.3% Improvement in Fuel Efficiency

Genset with Cat 3516 Engine | Alaska
6.1% Improvement in Fuel Efficiency
Rentar Case Studies

**COVANTA ENERGY**
Covanta Holding Corporation (NYSE: CVA) is an international owner and operator of Energy-from-Waste power generation projects converting municipal solid waste into renewable energy for numerous communities throughout the United States. 2009 consolidated operating revenues were $1.55 billion with $397 million in operating cash flow and adjusted EBITDA of $515 million.

Installed Rentar Fuel Catalyst on entire fleet of heavy-duty diesel vehicles at 28 plants around the United States.
- 5% reduction in fuel consumption.
- 43.6% reduction in CO2 emissions.
- 75.9% reduction in CO.
- 47.7% reduction in NOx.
- 52.6% reduction in particulate matter.

**U.S. ARMY**
Located in Hartford County, Maryland on 79,000 acres with research capabilities in Automotive, Environmental Effects & Technologies, Fire Control, Firepower, Support and Survivability/Lethality, Warfighter & Support Equipment.

The Aberdeen Test Center tested Rentar units on a Navistar International 3559 c.i., 170 hp, diesel engine and reported the following:
- 3.6% Fuel Consumption improvement.
- 3.6% Extended Range improvement.
- 12% NOx improvement.
- 14% CO2 improvement.
- 17.4% CO improvement.
- 12.6% HC improvement.
- 10.9% O2 improvement.

**TOYOTA**
Toyota Motor Company, established in 1937, is today the world's largest automobile manufacturer by sales (7,051,000 units FY 2009), with 320,808 employees building autos under the DAIHATSU, HINO, LEXUS and TOYOTA brands.

Toyota has installed Rentar Units of all their auto transport trucks operating in the Port of Long Beach & Los Angeles with the following results:
- 11.3% Fuel Consumption improvement.
- 42.2% Particulate Matter improvement.
- 9.7% CO2 improvement.
- 33.5% Carbon Monoxide improvement.
- 36.8% Total Hydrocarbon improvement.

Toyota Laboratory Results conducted by EPA & CARB recognized laboratory.
Logos of Rentar Fuel Catalyst Purchasers
Rentar Environmental Solutions, Inc.
Contact: Joel Ratner  (561) 331-1012
Email: JoelRatner@Rentar.com
Website: DieselCatalyst.com

Results vary based on the applications, type of engine and type of fuel utilized