Rentar Fuel Catalyst
Reduces Fuel Consumption and Reduces Harmful Emissions
More Energy on Less Fuel

18-Year-Old Established Company * Sole Source Technology with 33 Issued Patents
Verified Effective by EPA Recognized Laboratories
Globally, there are more than one half billion diesel engines and oil-fired furnaces burning billions of gallons of fuel per year and emitting millions of tons of greenhouse gases into the atmosphere.

The Rentar Fuel Catalyst is independently proven to reduce fuel consumption and greenhouse gas emissions by EPA and CARB recognized laboratories.

It is the “Mission” of Rentar Environmental Solutions, Inc. to install Rentar Fuel Catalysts on the world's diesel equipment.
Rentar Fuel Catalyst
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%
- Extend Engine Life Between Engine Rebuilds 20% to 50%
- 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
Rentar Is Independently Verified By:

- Southwest Research Institute
- EPA & CARB Recognized Laboratories
- Aberdeen Proving Grounds
- Olson Ecological Laboratories
- Virginia Tech University
- SGS, SA
- Vale Mining
- Yamana Gold
- CEMEX
- Vulcan Materials
Benefits of the Rentar Fuel Catalyst

- Reduces Fuel Consumption
- Increases Payload Per Gallon / Liter
- 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
How does it work?

The Company’s core product is the Rentar® Fuel Catalyst (“RFC”), which aggressively conditions fuel through a series of complementary processes resulting in a more complete and cleaner burn at combustion. The Rentar® technology works with any fossil fuel combustion process.

Fundamentally rooted in “cracking fossil fuels”, a method of altering organic compounds with large molecules, making them more useful compounds with smaller molecules. The RFC enables the clustered molecules in fuel to temporarily repel each other, allowing more surface area of the fuel molecules to be exposed to oxygen at the point of combustion.

The proprietary combination of rare earth elements contained in Rentar’s catalyst cause the saturated straight chain aliphatic (paraffin) molecules to convert into unsaturated ring compound aromatics which in turn releases a small amount of hydrogen. The hydrogen interacts with the dispersed fuel molecules to achieve a more complete combustion.
Simple Installation

- Fuel Tank
- Fuel Filter
- Fuel Line
- Medium Speed Diesel
- Rentar Unit
Testimonial Letters
Applications

Applications
Increase Payload or Kilowatts Per Gallon /Liter
Reduce Fuel Consumption and Exhaust Borne Pollution

Extend Engine Life 20% Between Rebuilds
Automotive Research Association of India is co-operative industrial research association by the automotive industry with the Ministry of Industries, Government Of India

Testing Conducted on 6SL.8800TA 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
World’s Largest Inspection and Technology Verification Company

SGS Verifies a 17.05% Fuel Reduction*, a 27.5% Reduction of NOx and 32.5% Reduction of CO.

- Over 97,000 employees
- Over 2,600 offices and laboratories worldwide
- Conducted an emissions study on the Rentar fuel catalyst in 2016
- World’s largest inspection and technology verification company

* Computed by Carbon Balance  See Test Study
# 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.
SOTREQ CATERPILLAR, the fourth largest Caterpillar Dealer in the world has acquired the right to distribute the Rentar Fuel Catalyst in the eight largest market in the world, Brazil. In addition to supplying all the new equipment, they maintain tens of thousands of existing pieces of equipment.
VALE SA, a $134 billion company, the largest iron and nickel MINING OPERATOR in the world, is saving $20,000 to $35,000 per piece of heavy-duty equipment annually through fuel savings at a one-time cost of either $5,000 to $10,000. They have more than 2,000 pieces of equipment and they have begun equipping their fleet. They recover the cost of the Rentar Fuel Catalyst in less than four months.
Yamana Gold Inc. is a Canadian-based gold producer which is a listed NYSE company with more than 1.8 billion in sales. They have significant gold production, gold development stage properties, exploration properties, and land positions in Canada, Brazil, Chile and Argentina.

Yamana Gold has installed Rentar Fuel Catalysts at their Brazilian mine and provided this letter of endorsement.
The largest SHIPPING PORT management company in the world, managing more than 80 ports, purchased 90 Rentar Fuel Catalysts and over the first year reduced that ports overall fuel cost by 7.5%.

See Test Study
Del Monte Freighters have achieved 4.5% fuel reduction though the implementation of the Rentar Fuel Catalyst. As a result Del-Monte Food Company equipped their entire fleet of freighters with the Rentar Fuel Catalyst.

See Test Study
Penske Leasing and Toyota Transport equipped their entire fleet of West Coast car carrier transports with the Rentar Fuel Catalyst after successful testing in an EPA recognized laboratory. The test results on an average of 5 trucks was 11.3% fuel reduction and 42.2% particulate matter reduction in highway driving mode.

See Test Study
After EPA protocol testing, Covanta Energy equipped their entire fleet of equipment at their 28 plants with the Rentar Fuel Catalyst.
Credentials

- World’s 4th Largest Caterpillar Dealer
- A Rentar Distributor
- 400 Offices - 4300 Employees

- Export-Import Bank of the United States
- Official Export Credit Agency

- $2 Million International Product Liability Insurance

- American Bureau of Shipping

- California Resource Board Executive Order (CARB)
Rentar Case Studies

**CASE STUDY**

**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. 2020 consolidated operating revenues were $1.55 billion with $397 million in operating cash flow and adjusted EBITDA of $515 million.

COVANTA ENERGY  
for a cleaner world

Installed Rentar Fuel Catalyst on online fleet of heavy-duty diesel vehicles at 26 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.

**CASE STUDY**

**U.S. ARMY**

Located in Hartford County, Maryland on 75,000 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 3599 cu. in., 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.

**CASE STUDY**

**TOYOTA**

Toyota Motor Company, established in 1937, is today the world's largest automobile manufacturer by sales (7,051,000 units FY 2009), with 320,908 employees building autos under the DAHATSU, HINO, LEXUS and TOYOTA brands.

Toyota has installed Rentar Units of all their auto transport trucks operating in the Port(s) of Long Beach & Los Angeles with the following results:

- STEADY STATE (Highway Driving)
  - 11.3% Fuel Consumption improvement.
  - 42.2% Particulate Matter improvement.
  - 9.7% CO₂ improvement.
  - 33.5% Carbon Monoxide improvement.
  - 36.6% Total Hydrocarbon improvement.

Toyota Laboratory Results conducted by EPA & CARB recognized laboratory.
Logos of Rentar Fuel Catalyst Purchasers
I like the Rentar Fuel Catalyst

Contact: Joel S Ratner
+1 (561) 345-0359

Email: JoelRatner@Rentar.com
1115 Gateway Blvd.,
Boynton Beach, Florida 33426 USA
Websites: DieselCatalyst.com