HBL Power Systems Ltd is a listed Indian company, in business since 1977, with a focus on engineering products and services. Our initial business strategy was to identify technology gaps in India that the company could fill by 'indigenous efforts'.

Brought to you by HBL, leaders in ENERGY SOLUTIONS
Master Distributor for India

Rentar helps to reduce air pollution (CO₂, NOx, CO, SO₂, Particulate Matter and Black Smoke), reduce fuel consumption to save money and also reduce maintenance costs by extending time between oil changes.
HOW RENTAR FUEL CATALYST WORKS

Fuel is passed thru the catalyst’s patented combination of metallic and rare earth elements.
A reaction occurs separating the clustered molecules.
The more fuel molecules that are exposed to oxygen, the more fuel that is burned, leaving less to be blown out of the exhaust as wasted horse power and pollution.

SAFETY AND MAINTENANCE

There is no negative effect on the operation of the engine or vehicle due to the installation of the Rentar Fuel Catalyst.
Apart from the positive results of decreased pollution and decreased fuel consumption, it will run exactly as before installation.
There has never been a problem with an engine or vehicle because of the Fuel Catalyst.

FUEL CONSUMPTION REDUCTION

VERIFIED TEST RESULTS BY REPUTED ORGANIZATIONS

- United States Marine Corps
- US Naval Facilities
- Chesapeake Bay Foundation
- Certified E.U. Govt. Testing Lab
- Harddrives, Inc.

SMOKE & EXHAUST POLLUTION REDUCTION

VERIFIED TEST RESULTS BY REPUTED ORGANIZATIONS

- United States Marine Corps
- US Naval Facilities Engineering
- Chesapeake Bay Foundation
- Certified E.U. Govt. Testing Lab
- Harddrives Inc.
- Greyhound Bus Lines
PRODUCT SPECIFICATIONS

**SIZE:** Available in 3.5, 6, and 7 cms in Diameter and in Lengths of 15 to 45 Cms.  **WEIGHT:** 1 to 3 Kgs

**FITTINGS:** (The catalyst is equipped with JIC 10 hydraulic fittings. The fittings seat metal-to-metal making an impenetrable seal. The end of the unit may be adapted to fit a wide range of applications). The JIC 10 is available with the other end as a JIC 10, JIC 8, JIC 6 fitting. A wide variety of fittings and adaptors are available worldwide.

**PRESSURE TESTING:** The Fuel Catalyst is pressure tested to maintain an internal pressure of up to 350 PSI.

**FLOW:** There is no flow restriction. Each unit is tested to flow 1136 to 1700 liters thru it at 55 PSI. The unit orifice should always be equal to or greater than the existing fuel line. With more than 20 years in test operation, there has never been a report of clogging.

**INTERACTION WITH FUEL LINE AND ENGINE COMPONENTS:** The Fuel Catalyst only affects the fuel and has no affect of any kind on the fuel line, fuel system/injection system or any component of the engine. It simply pre-conditions the fuel to accept more Oxygen/Hydrogen at the point of combustion. The Rentar Fuel Catalyst does not affect lubricity, fuel pressure and is not affected by different types and/or quality of fuel.

**APPLICATIONS:**
- Off Road Engines (Generators, compressors, HEME Etc.)
- On Road Engines (Buses, Trucks, Heavy Transport Vehicles Etc)
- Marine
- Boilers & Furnaces
- Rail Road

**SYSTEM EFFECTIVENESS:**

**Proven and time tested technology:** EPA, CARB & Military recognised laboratories have verified reduced fuel consumption, as well as reductions in CO2, NOx, CO, SO2, Particulate Matter, Soot and Opacity.

**Cost Effectiveness/ Return on Investment:** The Rentar technology pays for itself (i.e. highly attractive ROI). Easy to install, comes with 3 year warranty and a service life of 10 years. Rentar requires no maintenance, extends time between oil changes, reduces engine’s maintenance and extends engine life.

**Greener Solution:** Exhaust pollution is unburned fuel being blown out of the exhaust. It is wasted fuel. The Rentar Fuel Catalyst separates clustered fuel molecules giving oxygen the ability to cover more surface area of the fuel molecules at the point of combustion, resulting in more efficient conversion of fuel into useful mechanical energy.

**BENEFITS:**
- Reduce Fuel Consumption And Extend Range 2% To 12%
- Reduce Oil Fired Furnace Fuel Consumption 7% To 30%
- Reduce Greenhouse Gases (NOx, CO and CO2) Up To 19.2%
- Reduce Particulate Matter (PM) Up To 20%
- Reduce Black Smoke (Opacity) Up To 44.8%
- Reduce Organic And Elemental Carbon Up To 35%
- Recover Initial Investment via savings within 10-24 Months
- Reduces the Engine maintenance costs
- Extends the life of Equipment.

**DOMAINS:**
- Industry
- Telecom
- Road Transportation
- Ports and Marine
- Mines and Infrastructure
Independently Verified by third Party Laboratories

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<tr>
<th>Laboratory/ Organization</th>
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<tbody>
<tr>
<td>Chesapeake Bay Foundation</td>
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<tr>
<td>Esso/ExxonMobil Laboratories</td>
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<td>ESDC Locomotive Laboratory</td>
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<td>Italian Ministry of Defense</td>
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<td>Southwest Research Institute</td>
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<td>Toyota Motor Company</td>
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<td>U.S. Army Aberdeen Test Center</td>
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<td>U.S. Navy faculties Engineering Service Center NAVFAC</td>
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<td>Emission Testing Services</td>
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<tr>
<td>Milbrook Proving Ground</td>
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<td>California Environmental Engineering</td>
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Verified Test Results For Fuel Savings By Category

<table>
<thead>
<tr>
<th>Fuel Savings</th>
<th>Description</th>
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<tbody>
<tr>
<td>2-3%</td>
<td>Marine Gas Turbines, Installed aboard cruise ships, supply ships, fast ferries, Coast Guard cutters, and more than 400 ships in 30 world navies.</td>
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<tr>
<td>2-5%</td>
<td>Over the road class 8 vehicles which would include semi-trucks</td>
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<tr>
<td>4-7%</td>
<td>Off road applications and mechanical injected engines on class 8 vehicles</td>
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<tr>
<td>5-9%</td>
<td>Stationary applications like gen sets, power generators and diesel engines driving various attached items like rock crusher etc.</td>
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<tr>
<td>6-12%</td>
<td>Marine applications, small charter craft to medium sized tug boats</td>
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<tr>
<td>7-30%</td>
<td>Furnace and boiler applications</td>
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</tbody>
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