

RENTAR® Fuel Solutions

Product range



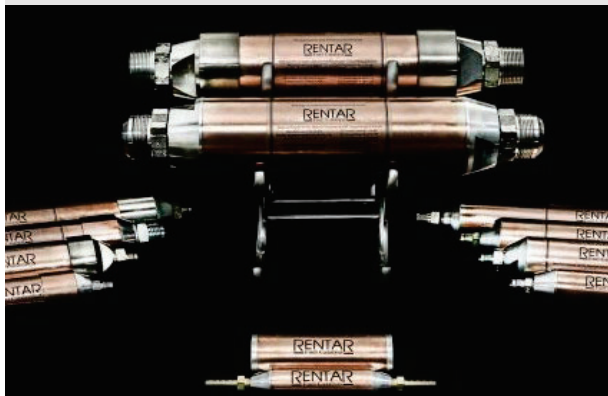
	On-road assets	Off-road assets	IoT connectivity
	<p>Short and long-haul transport vehicles and coaches have lower torque engines designed more for efficiency than productivity. These engines operate at higher RPMs and produce net power that ranges from 200 hp (150 kW) to 560 hp (418 kW).</p>	<p>Diesel equipment used for Off-road applications are powered by lower speed engines with more horsepower to handle bigger gross machine weight and higher payloads. These engines use more fuel on average and have a multitude of productivity variables that affect fuel consumption.</p>	<p>GHGsolve™ Solution provides comprehensive fuel data analytics and other key performance information. Connected onboard fuel and oil sensors give real-time data and fuel usage more accurately than existing systems that rely on “snapshots” of data from the engine control module (ECM) estimations and/or the tank-refueling database.</p>

Areas of application

Advantages at a glance:

- ▶ **Delivers GHG-compliant emissions** by reducing local hot spots during combustion
- ▶ **Increases fuel efficiency** using a patented technology to lower vapor density in the fuel
- ▶ **Lowers the total cost of ownership on diesel assets**, through decreased fuel costs and reduced engine wear
- ▶ **Extends engine life** by reducing unburned hydrocarbons with a more complete fuel burn; real-time oil quality data empowers proactive decisions

RENTAR Fuel Catalyst



The RENTAR Fuel Catalyst pre-conditions fuel to burn more efficiently in any make and model diesel engine.

RENTAR[®] Fuel Catalyst

Overview

When diesel fuel combusts in an engine, the heat of the compressed air ignites the fuel spontaneously. If the fuel and air do not mix thoroughly this creates fuel-dense pockets that produce soot when ignited. While most of the soot easily escapes through the exhaust, some gets past the piston rings and ends up in the engine oil. This has a negative impact on engine life and horsepower. The RENTAR Fuel Catalyst pre-conditions fuel so it burns more completely during combustion to achieve higher productivity, lower OPEX, and a substantial reduction in GHG emissions.

The science: pre-combustion fuel conditioning from the RENTAR technology

Diesel fuel molecules have a natural tendency to cluster, which means they do not burn completely. The RENTAR catalyst is designed to take advantage of the moisture in fuel to create a galvanic effect that polarizes the electrons to cause the fuel bonds to break. In conjunction with this cracking process the patented technology causes catalysis which changes the proportion of alkanes to aromatics and lowers the vapor density and boiling point to condition the fuel for more efficient combustion.

