



Extreme Lubricants For Oil & Gas Equipment



DIESEL FUEL OPTIMIZER

Fuel Catalyst & Conditioner to reduce injector, valve, and fuel system failures

- Breaks Down Larger Fuel Particles Creating More Oxygen
- Fuel Now Burns at Lower Temperatures
- Reduces Engine Temps & DEF Consumption
- Reduces Emissions & Particulates
- Virtually Eliminates Carbon & Soot Deposits
- Adds Lubricity to ULSD Fuels

DIESEL FUEL OPTIMIZER

Diesel Fuel Optimizer is a highly concentrated diesel fuel catalyst & conditioner designed to address engine performance, failure, and maintenance problems caused by insufficient fuel combustion and deposits. Diesel Fuel Optimizer breaks down hard to burn particulates into smaller fuel molecules creating more oxygen and lowering the temperature at which fuel burns, resulting in more complete combustion of fuel particles, liberating fuel's chemical energy, and REDUCING engine temperatures.

Diesel Fuel Optimizer quickly and thoroughly cleans soot and carbon build-up from the injectors, valves and fuel system components, resulting in better atomization of fuels. Reducing the carbon and soot which is created by unburned fuel reduces injector clogging and failures, contaminated oil, and detrimental wear in cylinders and valves, while optimizing engine performance and lifespan of your equipment.

DFO adds lubricity to the ULSD low sulfur diesel fuels used today using PXP positive-charged technology to bring badly-needed lubrication to injectors & fuel system components, which improves performance and operating life. It is extremely concentrated and powerful with a treatment range of 1:2500 to 1:3500, delivering a treatment cost as low as \$.04 per treated gallon.

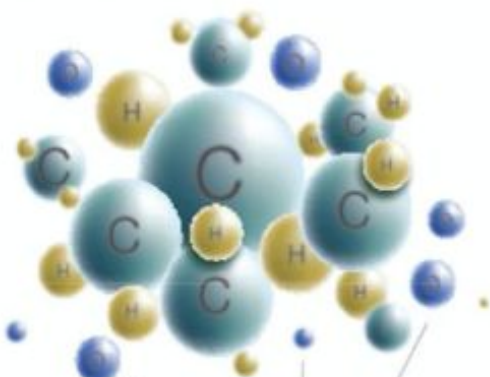
- Breaks Down Larger Fuel Particles
- Creates more oxygen
- Reduces Fuel Burn Temp
- Lowers Engine Temp
- Removes Carbon From Injectors
- Cleans Entire Fuel System
- Reduces NOX
- Reduces DEF Consumption
- Eliminates Carbon Buildup
- Reduces Fouling
- Powerful Corrosion Inhibitor
- Adds Lubricity to Injectors & Pumps
- Reduces Upper Cylinder Wear
- Increases Fuel Atomization.
- Increases Fuel's Energy Output
- Increases Injector Spray Pattern
- Reduces Injector & Valve Failures
- Reduces Ash Formation
- Increases BTU's
- Increases Engine Performance
- Adds Lubricity to Low Sulfur Fuels
- Reduces Particulate Emissions
- Low Treated Gallon Cost
- Reduces Oil Contaminants



HOW IT WORKS

BEFORE FUEL OPTIMIZER

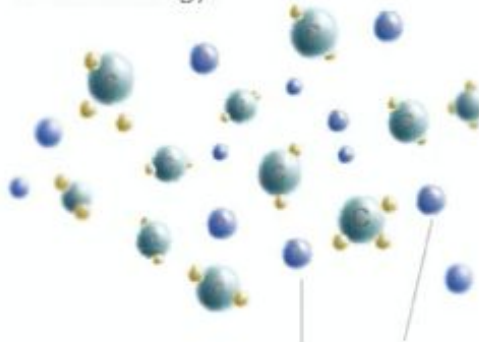
Fuel's chemical energy is stored in a hydrocarbon. In this state, Hydrocarbons do not burn completely resulting in carbon, soot, and increased emissions.



Oxygen is required to create efficient combustion.
Unfortunately its ability to perform its function is diminished by not being accessible to larger, crowded fuel molecule resulting in unburned hydrocarbons. These unburned particles create soot, and carbon build-up on valves, EGR valves, filters, fuel pumps, and contaminate engine oil.

AFTER FUEL OPTIMIZER

Fuel Optimizer is a highly concentrated and powerful fuel catalyst that breaks apart larger hydrocarbons, or fuel molecules into smaller particles. This creates more oxygen which accelerates the chemical reaction and more complete combustion liberating its chemical energy.

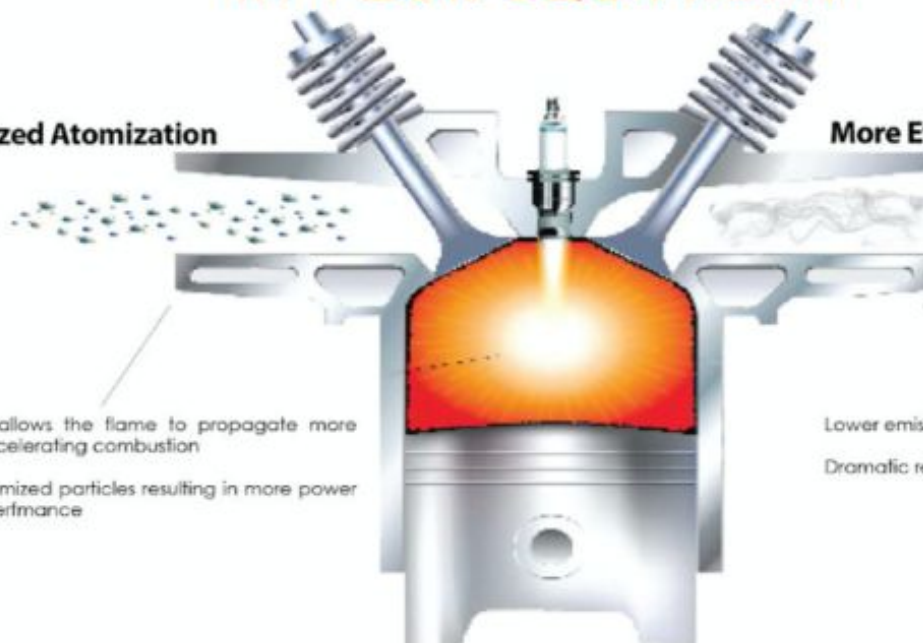


Makes Oxygen available to burn more completely.
Smaller hydrocarbon particles create less density and more oxygen allowing for more thorough combustion. This leads to cleaner total fuel system, cleaner oil, less emissions, and better fuel economy.

IN YOUR EQUIPMENT

Optimized Atomization

Atomization allows the flame to propagate more efficiently accelerating combustion
Burns the atomized particles resulting in more power and better performance



More Efficient Combustion

Less Unburned Hydrocarbons - HC's
Less Carbon Monoxide - CO
Less Nitrogen Oxides - NOx

Lower emissions per unit of fuel burned
Dramatic reduction of ash and unburned carbon

INJECTOR SPRAY

Common injector malfunction is caused by carbon build-up, contaminated fuel, and lack of lubrication from Low Sulfur and Ethanol Fuels



Before Fuel Optimizer



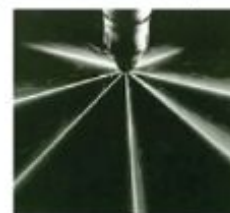
After Fuel Optimizer

Carbon build up clogs injectors reducing spray pattern further reducing efficient combustion
Clean injectors increase Spray pattern to fully atomize fuel

Fuel Optimizer helps safely remove pre-existing carbon build-up, allowing injectors to operate more efficiently.



Before Fuel Optimizer



After Fuel Optimizer



2505 W. 2nd St. Odessa, TX
432-223-0200
www.permianlubes.com
sales@permianlubes.com