



IN PARTNERSHIP WITH



Gas Fuel Optimiser



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In Partnership with Tutum Energy



Gas Fuel Optimiser

- Pre-Designed system specific Clamps (Gas Fuel Optimisers) which are guaranteed to reduce energy consumption and improve efficiency by a minimum of 7.8% on even the most inefficient systems by continually re-organising the molecular structure of the fuel in the immediate supply fuel pipework.
- Average results achieved are around 13.1% improvement, this improvement can be over 20% in some installations.
- Non-Invasive Installation, no system breakins or disruption to any supply services. Safe and straightforward installation.
- Standard or Bespoke Product, choice available dependent on survey.
- 10 Year Guarantee on all installations.
- A low cost, resilient solution.
- ROI 1 - 3 years payback. Usually less than 18 months.



Gas Fuel Optimiser Energy Saving Technology

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All fossil fuels contain Hydrogen in two distinct forms: Ortho and Para-Hydrogen in a 3:1 ratio. Ortho- Hydrogen associates more freely with Oxygen and is therefore more combustible.

Our Gas Fuel Optimiser Clamp system targets the Para-Hydrogen and converts them into Ortho- Hydrogen molecules, thus allowing a more efficient combustion.

This hotter burning of the fuel saves energy and reduces CO emissions into the environment.

Benefits

Fossil fuels, which include natural gas, propane and oil, are used to produce roughly 85 percent of all of the energy we consume. However, they are a non-renewable resource that produce 21.3 billion tons of emissions a year. Nearly half of that cannot be absorbed by nature, therefore, this now becomes one of the leading causes of climate change.

The Gas Fuel Optimiser improves the combustion of fossil fuels for commercial and residential systems and appliances, thus helping the environment by reducing the amount of fossil fuels been used.

Reduces Carbon Use and Cost

The Gas Fuel Optimiser is a proven way to reduce Industrial, Commercial and Residential Fuel Costs.

Our Gas Fuel Optimisers save money and reduces emissions by increasing the combustion efficiency of the fossil fuels (such as propane and natural gas) that power our home furnaces, water heaters and other household appliances. Boilers, plant, equipment, engines and water heaters.

More efficient combustion means the gas burns hotter and cleaner; this means your appliances don't have to work as hard to provide heat, and when they don't work as hard they require less maintenance.

Examples of Flame Before and After Installation of the Gas Fuel Optimiser



This image was taken before we fitted the Gas Fuel Optimisers to the Gas pipe.



This image identifies the effect that applying the Gas Fuel Optimisers has to the efficiency of the plant.



Gas Fuel Optimiser Reduces Carbon Use and Cost

Digren Energy distributes Gas Fuel Optimiser for all markets including commercial/industrial/public

Fuel Efficiency	Cleaner Environment	Energy Cost Savings
Easy to Install	Non-Invasive Product	Lower Carbon + Emissions

We have a unique approach to reducing emissions from carbon based fuels by focussing on the fuels before use. This not only significantly reduces emissions from the consumed fuels but also increases the efficiency and economy of these resources.

Our empirical data collected from many installations has delivered these results:

- 80-90% reduction in hydrocarbon emissions
- 60-80% reduction in carbon monoxide emissions
- 20% reduction in nitrogen oxide
- 10-27% reduction in fuel usage



Industry	Hydrocarbon	Carbon Monoxide	Nitrous Oxide	Consumption
Smelting	Reduced by 68%	Reduced by 52%	Reduced by 11%	Reduced by 14%
Manufacturing	Reduced by 72%	Reduced by 58%	Reduced by 16%	Reduced by 18%
Hotel	Reduced by 78%	Reduced by 63%	Reduced by 14%	Reduced by 21%
Apartment Block	Reduced by 74%	Reduced by 67%	Reduced by 18%	Reduced by 19%
Warehouse	Reduced by 76%	Reduced by 65%	Reduced by 17%	Reduced by 20%

Installation Process

- Client provides copy of previous years bills or networks approved data
- Visit to carry out a survey
- Make proposal, if accepted, return to install equipment

Fuel Applicability

Natural Gas - Propane - Gasoline - Diesel

The equipment will reduce hydrocarbon emissions, carbon monoxide emissions and nitrogen oxide emissions and can reduce fuel usage to up to 27%.

Product Offer

The equipment is offered on a capex model where the client pays for the equipment. In some cases it can be free issue on the basis of an energy share with the client.

Examples of Gas Fuel Optimiser Performance Metrics

- US Air Force - Building 13.6% annual saving
- US Air Force - Accommodation 12% annual saving
- Bourbon Distillery - Operations 19.8%
- Louisville Residential Block - 10.1%
- Charleston Residential Block - 17.3%
- Pizza / Food Establishments - ranging from 11%-23%



Reducing carbon emissions locally and globally



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