



IMPROVING THE FOSSIL FUELS & UPGRADE TO PowerFuels
Diesel & any fluid fuel ionization to create a PowerFuel
&
Creating Higher and Cleaner Diesel Combustion

By energy generation there are few points important:

1. Purity | Cleanness (quality) of the fuel;
2. Granting of oxygen for combustion;
3. Condition of the engine.

We offer the way to ionize the any kind of fluid fuel that allow acceleration of the combustion, increasing the energy output by the same volume of the fuel with less CO- output by the same generated energy content.

For the ionization of the fuel we use by us developed concept of turbo-molecular Hydro-Carbon splitting to the molecular fragments with lower molecular mass that is easy to execute by very fast process speed, cheap and with low electric energy consumption.

The ionization equipment is compact and mobile, and can be install at every fuel transport lorry or at gas station. As well in a private house or hotels.

The ionization effect :

is a brand new effect of splitting the hydro-carbon chain to a lower molecular mass molecules that have lower density and viscosity (Viscosities) as follow of it they burns faster and more complete:

for the diesel fuels:

The diesel is in general it is the petroleum fractions with boiling points between 200 °C (392 °F) and 350 °C (662 °F). The materials are largely paraffin and cycloparaffins and aromatics. The average molecule in a diesel fuel contains 10 to 15 carbon atoms. Petroleum-derived diesel is composed of about 75% saturated hydrocarbons and 25% aromatic hydrocarbons. The average chemical formula for common diesel fuel is $C_{12}H_{23}$. After hyper-ionization the diesel fractions with boiling point of 350 °C (662 °F) are mostly splitted to the fractions with boiling points near to 200 °C (392 °F). The largely fractions of paraffins and cyclo-paraffins nearly disappears, that make the combustion more clean and complete, and the engine

inside, - the combustion chamber without black carbon depositions. As follow the lifespan of the equipment increase!

[COMBUSTION VIDEO HERE:](#)



At the same time the rest-water molecule will splitted to 2 fragments: -O and H₂ that will be dissolved at the fuel. By combustion the -O support and accelerate the combustion process and make it less Nitrogen oxide that is emitted from vehicles that burn fossil fuels. It causes saving ozone layer depletion, and is considered a serious air pollutant that gives rise to acid rain and smog.

This clear reduction of polluted exhausts serious contribute to environment saving and costs reduction by production (using fuels).

Useful effects for the users:

- more energy output by the same quantity of burned fuel;
- more power of the engines;
- reduce of fuel consumption up to 15%;

- reduce costs that need to be spent for repair or service the transportation equipment because the fuel burn cleaner and complete without building of black carbon at the mechanic system, of the engine.
- Longer life span of the engine and equipment.
- The low quality diesel becomes excellent, high-quality fuel.

Why to ionize the fuel:



extremely high efficiency of combustion, with less harmful exhaust !

[Here one of the combustion' video here ...](#)



Proposal Processing Plant / ionization of diesel & fuels for city.

Processing (ionization) with diesel Hyper-ionizer to reduce fuel consumption, emissions of diesel-powered engines, provide cleaner exhaust that will benefit the environment and produce at least 3% diesel fuel economy out of the existing consumption. The use of a higher grade and quality fuel diesel will eventually produce more efficiency into any diesel-powered engine or machine.

ESP:

D2 diesel, diesel fuel that is available commercially in gas pump station is not actually the best fuel suitable for any type of diesel powered engine for the reason that it spoils mechanical parts of the engine that subsequently makes harmful emissions. The current D2 diesel will be transformed into "PowerFuel", which is fully combusted in any engine, and gradually restores the characteristics of the engine to a new-like level, and results to improved fuel economy that translates into savings, and eliminates irreversible environmental effects brought about by the emissions of these machines.

What does this mean?

Let's say, for conventions – a city consumes per day of diesel fuel:

100 tons/day or = 30,000 tons per year (average).

Expenditure on fuel for public transport will be at the rate of \$1,000 per ton - \$30million Doll. per year (as a sample)!

The STORM's Hyper-ionizer create the ionized structures of the fuel - , that save at least 3% fuel and has other beneficial effects, like clean environmental issue.

but let' ourselves to limit the calculation only by reducing fuel consumption by only three percent, then:

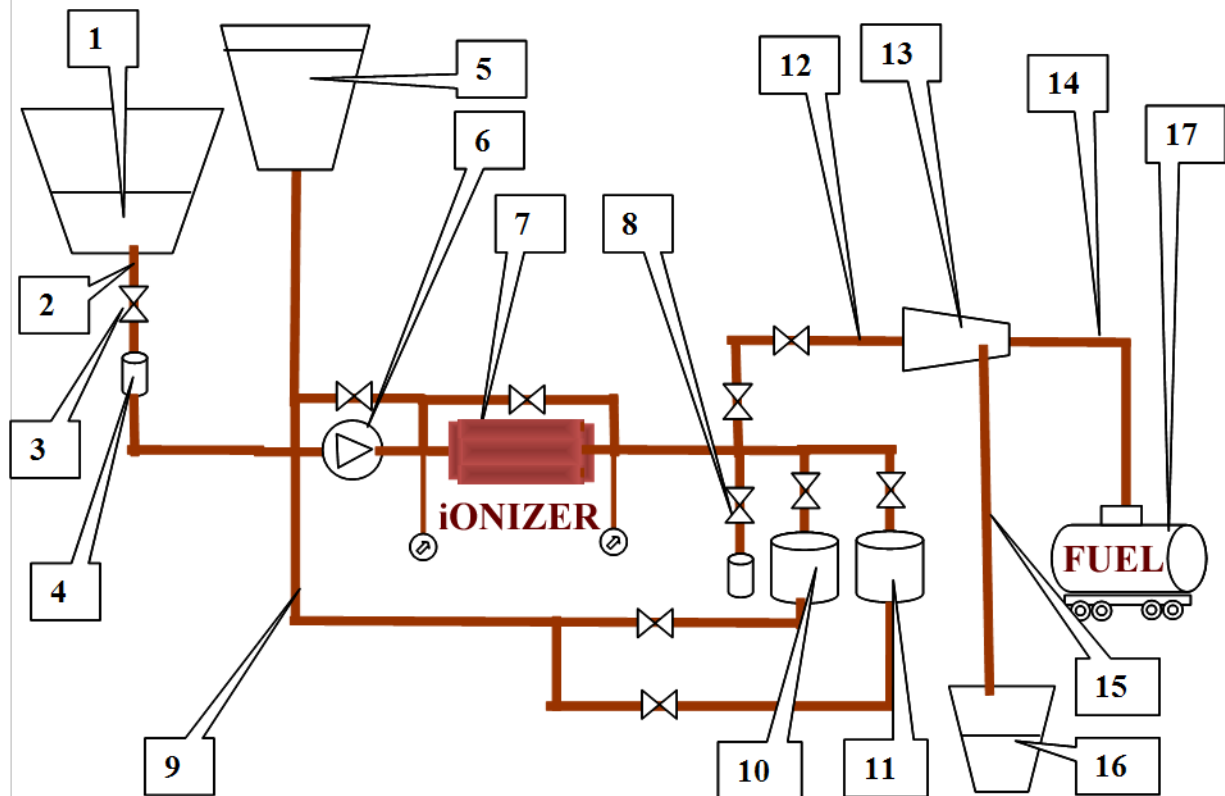
3% of 30000 tons = 900 tons. of saving per year.

And it is only as a result of one cycle (step) of the ionization -

with the introduction of the second cycle: STEP # 2 - savings of up to 19 - 27%. i.e. almost 5-10 times more or ~ \$9 Mill. Doll.

The system is based on a special ionizer and requires flow speed in the fuel line with the capacity from 5 to 6 cubic meters per hour operating with a pressure of 2-3MPa (20-30atm) and working on a temperature range from 10 ° - 60 ° C. System configuration exemplary, to assess the feasibility of application in the existing fuel economy is follow:

The approximate scheme Systems (THE PLANT):



1. Processed fuel in a storage tank
2. suction pipe
3. Input cut-off valve
4. Filter
5. Input capacitance, are not shown meter, pump, valve.
6. Pump with by-pas
7. Hyper-ionizer capacity of 3 ~ 20,000 liters/hour -
8. Output capacity flushing the system with a catch
9. Return line
10. The storage container # 1 with a catch
11. The storage container # 2 with a catch
12. The suction line from the storage container with valves
13. Decanter
14. Product line filling in train or tanker
15. Line loading sludge decanter
16. Tank sludge.
17. Tank truck or railway tank for end-product.



PRICES / DATES / EFFECTS (dry residue)

The price of such a system for a pilot project of 30 tons per day - \$170,000 Doll.

Term of delivery and installation of such a system - 3 months.

Period of testing and launch systems - 1 months.

But over the next 10 months (150 days), the system will process 4500 tons diesel fuel and will save 300 tons, valued at \$300,000 Doll.

That is in the process of testing the system will pay off in full.

Then for the city will need to buy and install another 3-4 such systems.

If, apart from the urban road transport equip more and city fleet of ferries and other vessels - that 10 of these plants are needed.

If there are 2-3 diesel power plants more - that up to 15 plants processing up to 50,000 tons of diesel fuel per year needed, the saving = 1,500 tons of fuel.

During the first month of the start-up and adjustment of equipment,

We run the second cycle to obtain the PowrFuel, which will save - **5 to 9 times more** that increase profitability / efficiency by 5-10 times.

(diesel is chosen just as a sample, the technique works for any kind of the fuels)





The ELECTROMAGNETIC FUEL HYPERIONIZER Improves Combustion Efficiency of the Diesel & other Fuels

FINAL INTRODUCTION

The "HYPERIONIZER" is designed specifically to improve the performance, economy and pollutant emissions of an internal or external combustion, spark ignited and compression engine. It is a result of space age technology and the application of advanced ionization technologies.

STORM's new strategy is to upgrade the quality of all fuels. Our new R&D – Hyperionised fuels – which combine the most advanced technology and progressive facilities with unique skill. What we do is translating big molecular chains of oil into hyperionised smaller ones and if needed mixing water in oil (fuel). When fuel enters engine or combustion chamber the hyperionised fuel causes high temperature burning so the effect of hyperionization is getting better, speeding the efficiency of burning, prolonging the life of facilities, cleaning it and reducing times of maintenance. To associate with STORM's PROJECTs will elevate customers' benefit, create supernumerous profits and reputation of reducer air pollution.

Application :

- Industrial boiler
- Incinerator
- Chemical industry
- Food industry
- Power plant
- Paper industry
- Container ship, cargo ships, oil tanker, fishing boat, cruise ship, barge...
- Truck, bus, train, car...
- Metal, refinery, forging industry
- Dye & textile industry
- Rubber/plastic industry
- Brick & pottery industry



HYPERIONIZATION PROCESS BENEFITS

Benefits from the “HYPERIONIZER”, proven through test and operation, are numerous. Because of the ionization process of the fuel, a more complete burn is obtained. More horsepower and vehicle movement are available from each piston. Because ionization actually elevates the octane rating of the fuel air mixture in the cylinder, lower octane fuels maybe used. The IMPROVEMENT in PERFORMANCE results in more engine efficiency. The combination of improved performance and lower octane fuel requirements will result in substantial DOLLAR SAVINGS IN FUEL alone. The more complete burning of hydrocarbons and the continuous cleaning process add to engine, spark plug and tailpipe life. This cleaner burn and cleaner engine also result in a lower discharge of hydrocarbons and carbon monoxides, thus, CONTRIBUTING TO A CLEANER ENVIRONMENTAL ATMOSPHERE so important to our large cities today.

The “HYPER IONIZER” is a professionally designed device. It works equally well in all types of cars: conventional coil and condenser electrical systems, electronic ignition systems, and computer generated ignition systems. Today, it is being marketed worldwide with outstanding results, particularly in countries where only a low octane fuel or bad quality diesel is available. The car users find the IONIZER attractive because of the savings in fuel and general operating costs and simply because it makes the vehicle's engine operate much more smoothly, the internal combustion is complete with more energy output and less pollution.

For technical information or licenses please contacts us at:

www.PowerFuel.de