

Eco-Miser *Big Reduction of Fuel Cost*

High Efficiency Combustion Supporting Device

By Supporting the Combustion of Internal Combustion Engines

The Eco-Miser System Aims at Reduction of Fuel Cost

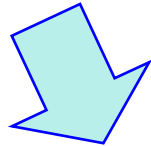
& Preventiing Pollution



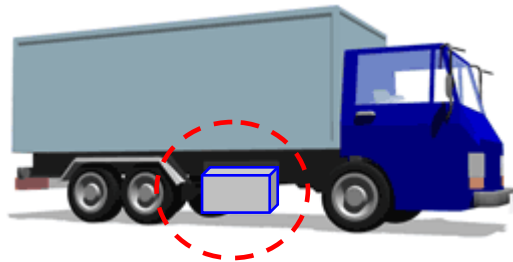
What is the Eco-Miser System?

Eco-Miser System generates Oxy-hydrogen gas. . . Gas produced by a special device, supplies it for the engine and improves combustion efficiency

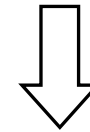
Without the system



With the system



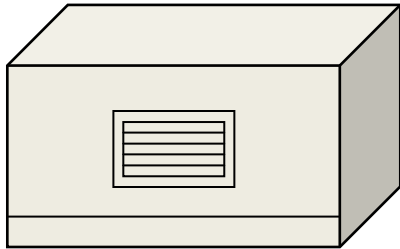
Increasing engine output by the injection of oxy-hydrogen gas will result in increased power output.



Reduced fuel costs are achieved from from more efficient use of fuel by the same engine, it leads to the reduction of fuel costs.

The reduction in CO₂ exhaust also leads to reduced levels of nitrogen oxides (NO_x) and particulate matter (PM).

The Eco-Miser System unit

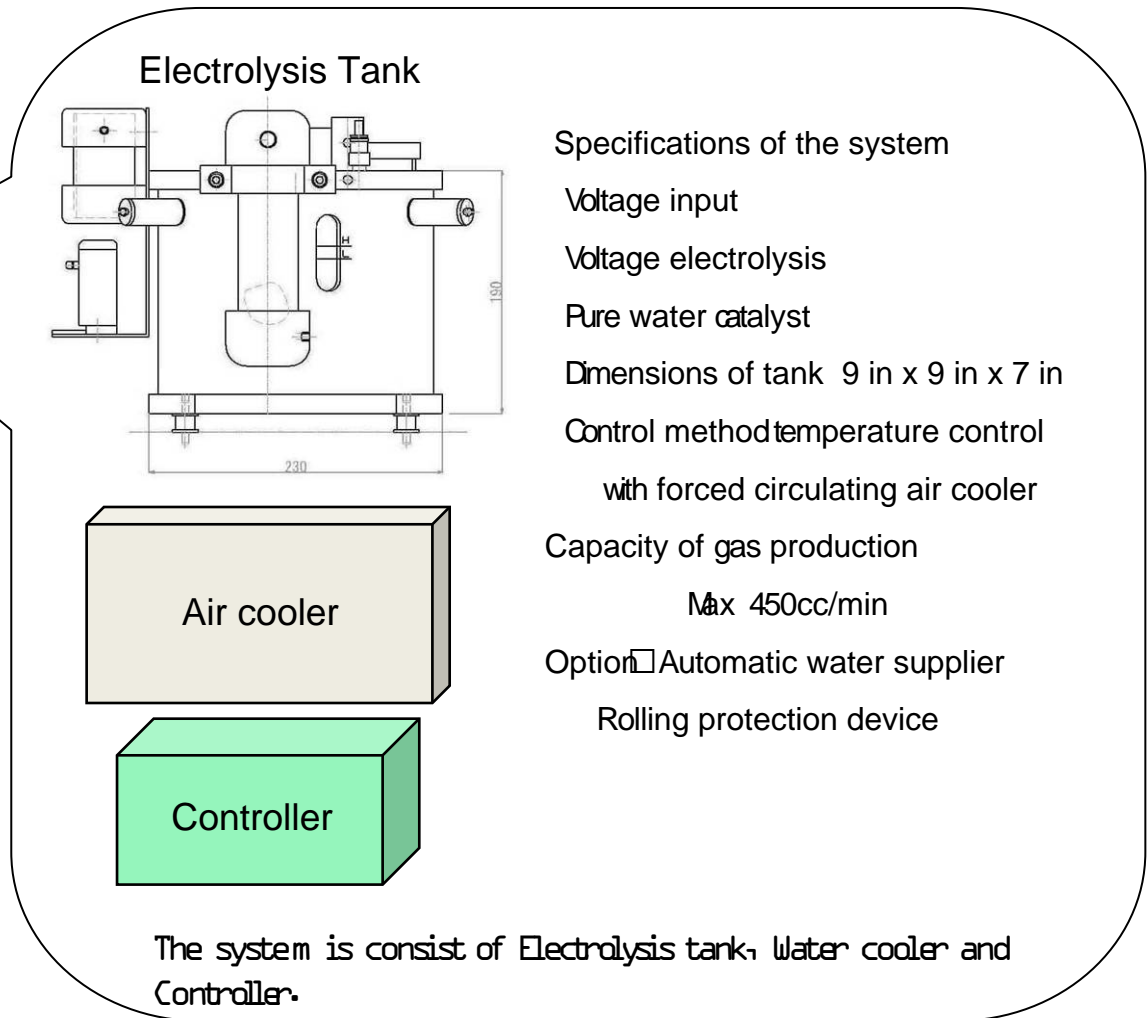


Dimensions

20 in × 16 in × 18 in

Small modification is allowed according to the installation space.

One quart of pure water should be supplied approx. every 625 miles.



Introduction of Eco-Miser System

The Eco-Miser System is designed to be adjustable -- to the engine and the installation space. Therefore, the specifications of the vehicle or the marine vessel should be confirmed beforehand.

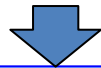
Prior confirmation items

- Type of vehicle
- Manufactured year
- Type of engine
- Displacement



Confirmation of the vehicle

- Installation space
- Position of installation



Preparation of setting bracket



Installation of the system



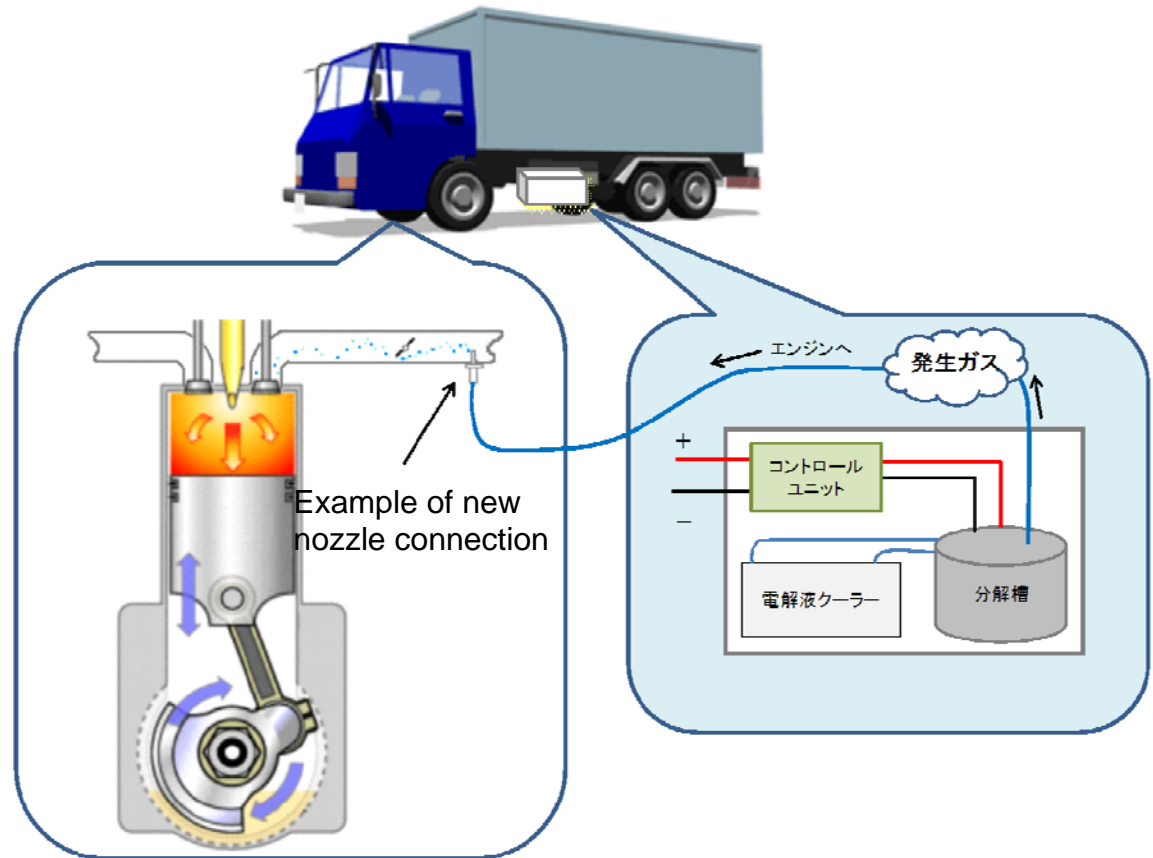
In the case of a truck, it is recommended to install the system on the chassis.

Installation of Eco-Miser System



Connection of gas tube

HHO gas tube to be inserted into
Air intake pipe of the engine.



Installation work is completed after mounting the device, electric wiring , gas nozzle fitting and gas tube connection.

Running Test of Eco-Miser System on Trucks

Eco-Miser Booster System Driving Test

Vehicle Tested: Izuzu 4.5 Ton Loading Truck – recorded by digital tachograph				
Departure Point: Nanao City, Ishikawa				
Date	Destination	Miles	Effect (mpg)	Remarks
Nov 1 (Tue)	Kanazawa	244	11.4	Without Miser *
2 (Wed)	Kanazawa	209	13.5	With Miser
3 (Thu)	Kanazawa	243	14.2	
4 (Fri)	Kanazawa	238	14.0	
7 (Mon)	Kanazawa	238	14.0	
8 (Tue)	Kanazawa	238	14.0	
9 (Wed)	Kanazawa	238	14.0	
10 (Thu)	Kanazawa	566	14.0	
11 (Fri)	Fukui	213	14.0	
14 (Mon)	Fukui	235	14.0	
15 (Tue)	Fukui	206	14.0	
16 (Wed)	Kanazawa	238	14.0	
17 (Thu)	Kanazawa	233	14.0	
18 (Fri)	Kanazawa	233	14.0	
21 (Mon)	Kanazawa	238	14.0	
22 (Tue)	Kanazawa	227	14.2	
24 (Thu)	Takasaki	573	14.0	
25 (Fri)	Kanazawa	229	14.2	
28 (Mon)	Kanazawa	226	14.2	
29 (Tue)	Kanazawa	236	14.2	
30 (Wed)	Kanazawa	239	13.5	
		5536 miles		

Average driving time: 8:30 am to 5:00 pm

*Benchmark: 11.4 miles per gallon

Achieved reduction of 20% plus (to a maximum of 30%) in fuel costs.

Average fuel cost also improved by 25% from 11.4 mpg to 14.2 mpg

The truck used for the test was driven by the same driver, who said that he felt increased engine output.

For other trucks, fuel efficiency improvements of 20 - 30% were observed. Variables included: traffic, amount of mountain driving and load weight.

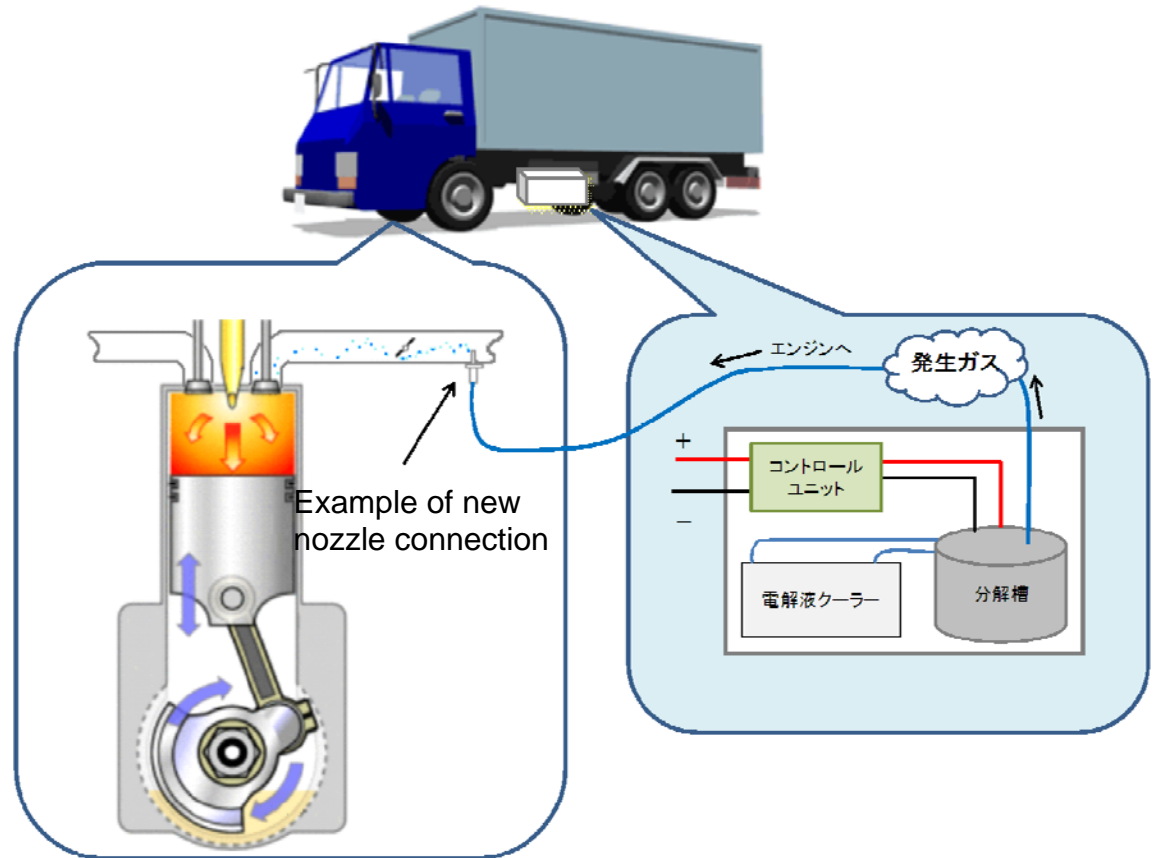


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Applications For Eco-Miser



FUSO Trailer Head



The body is installed on the chassis and gas pipes are on the engine.

20 systems were in the testing program (in one year)



6 systems were installed on marine vessels.

A system with gyroscopic functions is in development for marine vessels and construction equipment.

Many transportation firms, fisherman and marine associations are now studying feasibility of the system.