



HydroFLOW HS38 for Emission (Fuel and Diesel)



1) FUEL

Vehicles installed with *Hydro*FLOW HS38 and ran on fuel type Octane 88 (USD0.5/litre) would get power similar to Octane 95 (USD1.1/litre).

2) DIESEL

Test showed that with *Hydro*FLOW HS38 installed at fuel pipe will reduce opacity. Cheaper common diesel with high sulphur contain (USD0.5/litre) can be used instead of the more expensive premium type with low sulphur contain (USD1.00/litre) and still keep the engine clean.

Note: All prices are from Indonesian market.



<Case 1> FUEL TEST (Octane 88)

*Hydro*FLOW HS38 was installed on a Mitsubishi Grandis vehicle and ran on gasoline octane 88. Emission data was collected before the installation and 10 minutes after the installation.

4 Gas	4 Gas
Emission BEFORE HydroFLOW	Emission AFTER HydroFLOW
Analyzer	Analyzer
2011/07/13	2011/07/13
PM·12:22	PM 12:39
CAR NUMBER: 8790	CAR NUMBER: 0000
CO : 0.01 ×	CO : 0.00 %
HC : 15 ppm	HC : 0 ppm
CO2 : 12.5 ×	CO2 : 12.4 %
O2 : 0.04 ×	O2 : 0.08 %
LAMBDA: 1.001	LAMBDA: 1.004
AFR : 14.7	AFR : 14.7
FUEL : GASOLINE	FUEL : GASOLINE
H/C : 1.8500	H∠C : 1.8500
O/C : 0.0000	O∠C : 0.0000



Result:

- 1. HC Hydrocarbon was reduced from 15ppm to 0ppm. This means complete combustion of the fuel because there is no HC in emission.
- 2. AFR/Air Fuel Ration 14.7% no change.
- 3. CO Carbon monoxide is reduced from 0.01% to 0%. CO is dangerous to health.

All the above indicates complete combustion and fuel is saved (about 10%) without changing of engine timing.



<Case 2> DIESEL TEST

*Hydro*FLOW HS38 was installed on an ISUZU vehicle which ran on diesel on Sept 28, 2011.



The vehicle belonged to the Xtrans shuttle fleet running from Bandung to Jakarta, Indonesia. Before installation, 5 emission tests data were collected by pushing the pedal gas. The average opacity was 47.4% which was over the maximum allowable opacity for vehicle made after 2007.

The maximum allowable opacity is 40% and 70% for vehicle made after 2007 and before 2007 respectively. The engine was run for 10 minutes and 5 sets of emission data was collected again by pushing the pedal gas again. Average opacity was reduced to 12.9%.











*Hydro*FLOW HS38 helps complete combustion of diesel fuel which means:

- 1. More acceleration of engine power
- 2. More efficient on fuel consumption
- 3. Reduce emission
- 4. Less expensive common diesel (USD0.5/litre) could be used instead of the premium diesel (USD1.00/litre)
- 5. If common diesel contained high percentage of sulphur, injector may be cleaned every 2 months interval. Hydropath technology provided complete combustion and kept the injector clean.

NOTE:

OPACITY means black smoke from diesel engine emission. Higher opacity indicates more sulphur dioxide (SO2).

Our agents have expanded the same application to Fork Lifts, diesel engine generators and Tug boats which use diesel fuel for running.



Reference photos:

MITSUBISHI PAJERO SPORT (Diesel)



MITSUBISHI (Diesel)





Reference photos:



DIESEL ENGINE



BEFORE



Reference photos:



DIESEL GENERATOR



TUG BOAT



TUG BOAT – DIESEL ENGINE



Reference photos:



DIESEL GENERATOR



DIESEL FUEL TANK

