

PROJECT WORK REPORT ON
“DESIGN OF HHO GENERATOR AND ANALYZE ITS
PERFORMANCE ON DIESEL & PETROL ENGINE”



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ABSTRACT

The designed 'HHO Generator' is a device which produces hydroxy gas (HHO) on demand from water by using electrolysis process. Electrolysis of water is the process by which water is decomposed into oxygen and hydrogen gas, when electric current is passed through it. The process is known popularly as the HHO technology. Here electric current is taken from vehicle battery which is being continuously charged by the vehicle dynamo. KOH or NaOH are used as a catalyst. . Catalysts are used to diminish the bonds between oxygen and hydrogen. Hydroxy gas is used as a supplementary fuel in a two stroke single cylinder petrol engine, air cooled and four stroke Ganga diesel engine for various loads without any modification and without need for storage tanks. Its effects on engine performance characteristics and specific fuel consumption (SFC) are investigated.

Designed HHO Generator is using to increase the mpg (mileage per gallon) performance of automobiles and reduces the harmful emissions dramatically. It would be topical to study process of such fossil fuel saving and environmental friendly devices in the present day economical situation in India where the fuel prices are incessantly increasing. The present work shows there will be considerable improvement in the performance of the engine and emission. The HHO gas can be used as a supplementary fuel which reduces the emission and increases the thermal efficiency.

KEYWORDS: Hydrogen, Hydroxy, Electrolysis, Performance, Emission, specific fuel consumption.