

**APPLICATION OF HHO DRY CELL TO FLOW RATE BROWN GAS  
(CASE STUDY OF FI 110 CC MOTOR ENGINES)**

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***ABSTRACT***

*Fossil fuels, especially Oil and Gas (Oil and Gas) are categorized as depleting. In Indonesia the level of oil consumption in a day reaches 1.7 million barrels while production is 781 thousand barrels which is an imbalance between production and consumption resulting in scarcity. Efforts to minimize the impact of the use of motorized vehicles on the environment are efforts to improve combustion using alternative energy which is expected to increase the value of use efficiency and minimize the impact of exhaust emissions. One alternative energy that can be used is Hydrogen Oxygen or what can be called HHO. The innovation made is to modify the design of the HHO Dry cell with modifications of copper electrodes as cathodes and stainless steel plates as anodes as well as variations in the number of plates on the generator with the hope that it will have a very good effect on the productivity flow rate and torque and engine. By using a variation of the copper plate as the cathode, there is an increase in flow rate production of 69 % compared to the results of previous studies with the same wattage and time. The addition of HHO gas to the engine has an increase in torque of 5% and power of 6%.*

***Keywords:*** HHO Gas, Dry Cell HHO Generator, Copper Plate.