PERFORMANCE COMPARISON OF HHO GENERATOR USING SS304 PLATE AND SPIRAL ELECTRODE

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ABSTRACT

Application of technology more to be developed as an effort from human being for searching some new sources energy. One of the way is brown gas or HHO gas, technology that using water for fuel, still be improved until nowadays. This final project has purpose to know about generator HHO performance that using SS304 plate and spiral electrode, then the result will be compared.

This research experimentally using KOH electrolyte 0.65 gram and mixed with 1 litre aquades. The electrode is SS304 in form plate and spiral. Plate electrode has 50mm width, 50mm height and 3mm thick. Then spiral electrode with Φ 3mm has 26mm outer diameter and 16mm inner diameter. Wire to be formed into spiral has 600mm height. All test is about performance of HHO generator.

The result for the largest amount of HHO flowrate is produced by HHO generator that using plate form as electrode with maximum value 0.001175 g/s. Then the highest HHO generator efficiency is resulted by HHO generator that using spiral electrode with 54.72% as maximum value at 25° celcius.
Temperature reach maximum value at 74° celcius and maximum current is 4,5 Ampere, both for HHO generator with plate electrode form.

**Key Word :** Brown gas, plate electrode, spiral electrode, HHO generator’s performance.