

*Design Of Insitu Hydrolysis and Fermentation Equipment in Bioethanol Production*

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***ABSTRACT***

*Bioethanol is ethanol fermented sugar, starch and lignocellulose which can be used as an alternative fuel because it is more environmentally and renewable. Manufacture of bioethanol equipment designed with insitu method which hydrolysis and fermentation process directly in one reactor without removal of material. The process of making bioethanol made with pasteurized and unpasteurized. Based this research, process of making bioethanol with pasteurized produce the average value of fermentation yield is 19,54% and the distilation yield is 3,8%. Process of making bioethanol unpasteurized produce the average of fermentation yield is 13,4% and teh distilation yield is 2,8% which yield results depends on treatment performed. The results showed that bioethanol production method of treatment insitu with hydrolysis and fermentation treatment in a single reactor can produce bioethanol.*

*Keywords : bioethanol, insitu, pasteurized, lignocellulose biomass.*