PERFORMANCE COMPARISON OF 4-STROKE GENSET USING GASOLINE AND LPG WITH THE ADDITION OF VENTURY MIXER

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Abstract

Energy deposite oil fuel is decreasing while the demand is increasing. The alternative solution to face the problem is replace oil fuel to LPG (Liquid Petroleum Gas), which is natural gas with substantial resource in Indonesia.

One real step to increase the use of LPG is used it as a genset fuel. In order to do that genset must be modified by adding a ventury mixer. The mixer function is to mix air and LPG prior to entering the cylinder.

After performing constant speed test of genset, the result shows that over all efficiency value of the genset using gasoline fuel is 4.57% while genset using LPG fuel is 12.70%. From these results, it is known that the genset using LPG fuel is more economical than using gasoline because it has higher efficiency value.

Keyword : performance, ventury mixer, gasoline, LPG.