

Analisis rancangan baterai Lithium Iron Phosphate (LiFePO₄) sebagai pengganti accu sepeda motor matic (*Analysis of Lithium Iron Phosphate (LiFePO₄) battery design as a replacement for automatic motorcycle batteries*)
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ABSTRACT

This study aims to determine the effect of the comparison of Lithium Iron Phosphate (LiFePO₄) batteries with dry and wet batteries as a substitute for batteries in automatic motorcycles. The method used in this study is to compare the efficiency value against each yield value of Lithium Iron Phosphate (LiFePO₄) batteries, dry batteries, and wet batteries. The results of this study are when testing the discharge (discharger) and charging (charger) the results of the calculation of the efficiency of Lithium Iron Phosphate (LiFePO₄) batteries are 38.40%, dry batteries are 33.90%, and wet batteries are 36.8%. The results of efficiency testing on automatic motor vehicles obtained the highest efficiency value from Lithium Iron Phosphate (LiFePO₄) batteries, namely 49.4%, wet batteries obtained efficiency results of 39.61%, and dry batteries obtained efficiency values of 26.33%.

Key words : Lithium Iron Phosphate (LiFePO₄) battery, efficiency, dry battery, wet battery