

INVESTIGATION ON POST IMPACT TEST ON 25% SHORT FIBER KENAF COMPOSITE WITH ALUMINUM AND WOVEN FIBER GLASS LAMINATION.

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ABSTRACT

Nowadays, a lot of researches continuously do to get superior material with has superior strength, low density and cheap. Therefore a lot of researches have been done to natural fiber composite which it meet the characteristics. In Malaysia kenaf will be the famous plant to be planting due to it have high potential economic plant and will change the tobacco planting. The objective of this project is to see the characteristic of the kenaf short fiber composite and the ability of the composite to withstand it properties when applied by post impact test in different loads. Post impact will be done to the composite and then the tensile test will be done to get the relation from stress-strain curve. Then the fractured composite will be investigated under microscope to observe its microstructure. It expected that aluminum coated kenaf short fiber has high modulus of rigidity compare to woven fiber glass coated to the composite. It also expected that the rigidity of the composite decreasing with increasing of load applied in the post impact test. From the investigation, it hope that the best composite with can withstand high load can be obtain and the result can be use in engineering applications widely.

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