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Mechanical Characterization of a new hybrid Jute/ Glass reinforced laminates

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Abstract : The greatest challenge, nowadays, in all science fields is to face the rarefaction of fossil resources. The solution in civil engineering and in transportation is to lighten the construction materials. For this end, the composite materials have been, logically, imposed since the second half of the past century thanks to their specific mechanical characteristics. In the two last decades, extraction and use procedures of natural fibers have known an important increase for the reinforcement of composite materials called Biocomposites. This category of fibers possesses a lot of advantages upon those traditional synthetic such as: Abundantly available, reduced cost, lightness and satisfactory specific performances. The current study has the aim of characterizing a new hybrid laminate made up of 4 plies; the upper and lower ones are reinforced with glass mat fabrics while the two central ones are reinforced with natural Jute woven fabrics. The main idea of this work is to preserve sufficient mechanical characteristics by reinforcing the most solicited

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