Influence of the Dimensions of the Mesh of the Fiber Grid Reinforcement of Composite Materials

Authors Kamal Ait Tahar, R Bahar Publication date 2013 Conference **Key Engineering Materials** Volume 550 Pages 9-16 Publisher Trans Tech Publications Ltd Description Article Preview Article Preview Article Preview Currently, the composite materials make important great strides, considering their high

mechanical properties. The studies relating to the conceptual, technical aspect and modeling of their mechanical behavior are more than desirable. The mechanical properties of the composite material depend on several factors as the nature of fibers, the fiber/matrix ratio, compatibility, homogeneity... In this study, we present the results of an experimental analysis of the behavior of the composite material, under a static and a dynamic loading. The composite material is composed respectively of the glass and metal fiber reinforcement. A various dimensions of the mesh are considering. The resin used is polyester Resow 55 E. The dynamic test (Knoop test) is carried out on various specimens made up of an polyester resin RESOW 55 E reinforced with varied powder nature. It makes it ...