

عنوان مقاله:

Experimental investigation on effects of addition of carbon nanotubes on QS-PS penetration in the glass/epoxy composite laminates

محل انتشار:

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خلاصه مقاله:

In this study, the effect of adding carbon nanotubes on quasi-static penetration punch shear in glass/epoxy composite laminates is experimentally studied. The nanocomposites have 12 layers of 2D woven glass fiber produced by hand lay-up method. Also in the study of multi-walled carbon nanotubes (MWCNTs) modified with hydroxide (- COOH) with 0, 0.1, 0.5 and 1 weights percentage (relative to the total weight of matrix) were used. Punch shear test results indicate that adding carbon nanotubes not only improve the maximum contact force, but also may reduce the maximum contact force in speciofic weight percentages. The largest increases in the total amount of energy absorbed .%is 4% in 1 wt

کلمات کلیدی:

Hybrid nanocomposites, punch shear test, carbon nanotubes, energy absorbed

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