

Composite laminate plates, fabricated by bonding fiber-reinforced layers, were dynamically analyzed under different combinations of number of layers, type of cutout, hole dimensions, angle of lamination and type of dynamic loading . This work was achieved by the well-known engineering software (ANSYS). The toughness of composite plates was evaluated in terms of the normal stress in the direction of loading at the periphery of the cutout. The toughness was found to increase by increasing the number of layers, by setting the lamination angle at around 40o ,by selecting hole dimensions to width of plate ratio of around 0.4 and by employing square cutouts or avoiding triangular cutouts. Also, composite plates were found to be more strain-rate-sensitive in ramp loading, with least number of layers and with triangular type of cutout.