Lateral Buckling of Nanoparticle Additive Composite Beams

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Abstract : In this study, lateral buckling analysis of composite beams with particle additive was carried out experimentally and numerically. The effects of particle type, particle addition ratio on buckling loads of composite beams were determined. The numerical studies were performed with ANSYS package. In the analyses, clamped-free boundary condition was assumed. The load carrying capabilities of composite beams were influenced by different particle types and particle addition ratios.

Keywords : lateral buckling, nanoparticle, composite beam, numeric analysis

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