

Mathematical Simulation of the Problem of the Pre-Critical Sandwich Plate Bending in Geometrically Nonlinear One Dimensional Formulation

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Abstract

© Published under licence by IOP Publishing Ltd. In this paper we consider the geometrically nonlinear problem of determining the equilibrium position of a sandwich plate consisting of two external carrier layers and located between transversely soft core, connected with carrier layer by means of adhesive joint. We investigate the generalized statement of the problem. For its numerical implementation we offer a two-layer iterative process and investigate the convergence of the method. Numerical experiments are carried out for the model problem.

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