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APPROXIMATE - ANALYTICAL SOLUTION OF STABILITY PROBLEM OF NONHOMOGENEOUS ELASTIC

RECTANGULAR PLATE LYING ON NONHOMOGENEOUS BASE

Abstract

In the paper the stability problem of nonuniformly elastic nonhomogeneous plate under the action of two-sided pressure is considered. It is assumed that modulus of elasticity depends on two space coordinates, and the Poisson's coefficient is a constant quality.

Differential equation is partial differential equation with variable coefficients. Solution is constructed by means of method of small parameter and Burnov-Galerkin method.