

RECTANGULAR CANTILEVER PLATE BENDING WITH REGARD TO TRANSVERSE SHEAR DEFORMATION

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The paper proposes an iteration method of correction function superposition for initial estimate in the form of hyperbolic-trigonometric series by two coordinates, which as they are superimposed, mutually compensate the misclosures they generate in boundary conditions. The misclosures decrease as the number of iterations grows and a solution can be obtained with any degree of accuracy. Numerical results of calculating deflections and bending moments of a Reissner cantilever plate under uniform loading are presented. Comparison with the classical theory is given.

Reissner rectangular cantilever plate, bending, iteration method, Fourier series, exact solution

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