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MATHEMATICAL CALCULATION OF ELASTICOPLASTIC PROBLEM FOR PERFORATED PLATE AT LONGITUDINAL SHEAR

Abstract

Doubly-periodic grating with circular apertures of radius λ is considered. Symmetric linear cracks originate from the contours of apertures. The contours of circular apertures and coasts of cracks are free of load.

Two infinite system of algebraic equations with respect to the coefficient are obtained.

The dependence of the parameter of the length of the plasticity stripe on the quantity of external load is found for different values of cracks and radius of circular apertures.