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INTERACTION OF PREFRACTURE STRIPS IN FRICTION LINING

Abstract

Mathematical description of crack initiation in friction lining under braking is given. It is assumed that crack initiation and fracture of lining's material occurs under multiple braking. The problem on equilibrium of friction lining with nuclear crack is reduced to the solution of the system of nonlinear singular integrodifferential equation with Cauchy type kernel. The condition of appearance of a crack is formulated taking account of the criterion of the limit traction of the bonds in the material.