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Method of investigation of deformations of solids of incompressible materials

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Abstract

© Published under licence by IOP Publishing Ltd. The aim of this work is development mathematical models, algorithm for the investigation stress-strain state of elastic solids, taking into account the incompressibility materials. The constitutive equations are received using a potential energy of deformations. The system of the linear algebraic equations is received by linearization of a resolving equation. The penalty method is applied for a modelling of the incompressibility of the material. The finite element method is used for numerical solution of the problems.

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