Axisymmetric Deformation in Transversely Isotropic Thermoelastic Media

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ABSTRACT

The present investigation deals with the axisymmetric deformation in anisotropic thermoelastic solid due to thermomechanical sources. Laplace and hankel transform techniques are employed to solve the problem. The integral transform have been inverted by using a numerical technique to obtain the displacement, stresses, conductive temperature. Effect of anisotropy at the various temperatures is depicted graphically. Concentrated normal force and normal force over the circular region have been taken as an application of the approach.some special cases of interest are deduced.

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