

On the uniqueness of solutions of the boundary value problems of steady vibrations in
the theory of viscoelasticity

Maia Svanadze

The uniqueness theorems for solutions of the boundary value problems of steady vibrations in the theory of viscoelasticity for Kelvin-Voigt materials are proved. The sufficient condition on viscous constants for uniqueness of solutions is established. This condition is necessary and sufficient condition for positive definition of dissipation of energy of material.