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TORSIONAL VIBRATIONS OF A TRANSVERSALLY ISOTROPIC SPHERICAL SHELL

Abstract

The torsional vibrations of a transversally-isotropic spherical shell when lateral surfaces are free of stresses, were studied by the method of homogeneous solutions. A variance equation was constructed and its roots were studied. Asymptotic formulae for displacements and stresses admitting to calculate stress-strain state at different values of frequency of forcing forces were obtained.