

FORCED VIBRATIONS OF A SPHERICAL SHELL WHEN TANGENTIAL DISPLACEMENTS AND RADIAL STRAINS DON'T EXIST ON ITS FACE

Abstract

In the paper we analyse non-axial symmetrical dynamic mixed boundary value problem of elasticity theory for a spherical shell. Due to spherical symmetry the general boundary value problem is divided into the potential and whirlwind problems and investigated. Firstly this problems is exactly solved, after this the roots of variance equations of the spectral problems derived from them asymptotically investigated, corresponding different group roots (special value) for setting displacements and strains situation is obtained simple asymptotic formulae of a spherical shell.