

Fuad S. LATIFOV, Asaf A. ALIYEV

FREE VIBRATIONS OF LIQUID-FILLED  
CYLINDRICAL SHELLS REINFORCED BY  
ANNULAR RIBS, UNDER AXIAL COMPRESSION  
AND WITH REGARD TO DISCRETE ALLOCATION  
OF RIBS

Abstract

*The paper is devoted to the investigation of liquid-filled cylindrical shells under axial compression reinforced by discretely distributed cross ribs. It is assumed that the ribs are uniformly distributed on the surface of the shell. The problem is solved by energetic method. Using the Hamilton-Ostrogradskii principle, frequency equations are found and its least root is found. Analysis of influence of external medium parameters of contractive force on parameter of eigen vibrations frequency of the system is carried out.*