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**SOME PROBLEMS OF OSCILLATION AND STABILITY  
OF ROTATION SHELLS CLOSE TO CYLINDRICAL ONES**

Free oscillations and stability of rotation shells whose shape is close to that of cylindrical ones are considered. It is assumed that preliminarily the shell is subjected to the action of normal pressure. The considered shells are of medium length. The shape of the generatrix of the shell middle surface is described by a sufficiently smooth function of constant sign. Low frequencies, which are practically the most important ones, are considered. The respective equations and boundary conditions are investigated and written in a simpler form. For the case, in which the generatrix of the surface middle part changes by the parabolic law, the given equation, as different from the known one, contains an additional term that may have the same order as the other terms taken into consideration. The considered shells are both of positive and negative Gaussian curvature. Cases are investigated, in which both edges of the shell are freely supported, rigidly supported, and one edge is freely supported, while the other is rigidly supported. Formulas and graphs are given for determining minimal frequencies and wave formation forms depending on a type of boundary conditions, prestress and an amplitude of deviation of the shell from the cylinder (of thickness order). Formulas are given for determining critical load. Calculations are performed. A different degree of the influence of boundary conditions on a minimal frequency and critical load is shown for shells of positive and negative Gaussian curvature.