Abstract

A problem on load-carrying capacity of a statically indeterminable circular plate made of certain class fibrous composite whose constituents possess plastic properties, is considered in the paper. It is assumed that the plate is fastened on both contours in different ways and is under the action of axially symmetric lateral load linearly alternating in radius. Ultimate load is determined depending on mechanical properties of constituents and some typical geometrical parameters. The results of the numerical calculations for different special cases are given in the form of graphs.