Modelling the stability of compressed and twisted rod

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To calculate the stability of a rod under simultaneous effect of axial compressive force and torque we offer an approximate method. It is assumed that the main rod bending rigidity differs slightly, and the rod torsion is very small. We considered rods with clamped ends, with pivot bearings, and rod in the form of a compressed and twisted console. For all cases we received diagrams of dependence of the rod stability parameter for different values of the ratio of its principal bending rigidities.

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