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HYDRAULIC IMPACT OF VISCOUS LIQUID UNDER
THERMODYNAMIC EXPANSION

Abstract

Problem of hydraulic impact of the moving viscous liquid with account of thermodynamic expansion during its motion in cylindrical pipe is involved. The problem is physically developed and solved on the base of Charny's equations system. It is theoretically established, that the value of hydraulic impact decreases with comparison to nominal one, supporting experimental data. At flow stationary regime ($t \rightarrow \infty$) there is an oscillating character of viscous liquid motion even if input pressure is constant by time.