
An experimental method for determining the damping coefficient of the divider of two-coherent liquid in a tank

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The article presents results of an experimental study on determination of damping coefficient in a rigid cylindrical tank with a permeable divider between two layers of liquid. We developed an installation for initiation of symmetric fluctuations of liquid in a tank. Analytical dependence for determination of damping coefficient on the basis of the exact analytical solution of the corresponding boundary problem is received for the first time.

Keywords: ideal liquid, axisymmetric fluctuations, viscous resistance, damping coefficient.

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