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# Special features of pressure changes in the pipeline at its closing

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*The paper considers unsteady motion of an ideal compressible fluid in a homogeneous elastic tube, caused by the activation of the cut-off device. The stable difference scheme is used for solving the equations of motion and continuity of flow. The authors demonstrate the application of the scheme on a single-stranded pipeline in case of reducing the mass flow rate to zero for a given linear law. In the particular case it was found possible to stop pressure fluctuations of the fluid in the pipeline when it was fully closed. Generally, at any time of activation of the cut-off device, pressure changes in two possible ways, which are presented as two generalized graphic dependences.*

**Keywords:** pipeline, fluid flow rate, difference scheme, pressure, phase of hydraulic shock.

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