

Water Hammer Phenomena and Interaction Waves in the Mixture of Liquid with Vapour Bubbles

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Abstract: The liquid and gas mixtures are met in many natural and industrial processes. In the paper the results of the investigation of intensity and velocity of the reflection waves caused by a rapid valve closure in flow of a mixture liquid - vapour, and the amplification of pressure in the interaction process of the waves in the mixtures are presented. The effect of the initial and boundary conditions, velocity of the mixture and volume fraction of vapour phase in the mixture on the behavior of the increase pressure in the mixture liquid - vapour are studied.

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