

THE STUDY OF SLOSHING IN THE PARALLEPIPED CONTAINER

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Abstract: The sloshing phenomenon, that means any motion of a free liquid surface in a container (tank, cistern etc.), in the condition of resonance container oscillation with free surface motion, has the result the sudden increasing of hydrodynamic loads that can damage the inside systems and the container structure. The paper is focused on methods applied for the sloshing load estimation, analytical and numerical. The results obtained are compared for numerical method validation.

Key words: Sloshing, liquid, container, free surface, load