**Hydraulic Single Pump with Combined Higher Volume Compensator Operation Analysis**

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Abstract

The article dwells on the operation peculiarities of a mortar pump with a hydraulic drive, ball suction and spring-loaded discharge valves, a special insert in the suction chamber and an increased volume compensator. A comparative analysis of the mortar pump operating modes with various drives is presented. Based on theoretical studies of determining the productivity and volumetric efficiency, it is proved that a hydraulic drive mortar pump with a combined compensator of increased volume works more efficiently in relation to a mortar pump with a combined compensator of increased volume. The rational operating modes areas of the hydraulic drive mortar pump are determined.

Keywords

* **Mortar pump with a combined compensator of increased volume**
* **Hydraulic drive**
* **Capacity**
* **Volumetric efficiency**
* **Power**
* **Solution mobility**

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