

عنوان مقاله:

Effect of Material Wet on Silo Obstruction Solution by Impact

محل انتشار:

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خلاصه مقاله:

Vertical silos are large cylinders used for material storage in agriculture and mineral industries. One of the silo problems is its obstruction due to dome and dense packing. Depend on the material properties and silo dimensions several techniques are used to solve this problem. In the present work, possibility of obstruction solution of a laboratory silo by ball impact is investigated. Test materials are magnetite and hematite concentrate and reproducible hematite, having specified wet. Ball impacts fracture the bulk and make it to flow. The profile of fractured regime is captured and the required number of impacts which provide the continuous flow are registered. Results show that different materials do not have the identical behavior during ball impacts. Moreover, it has been revealed that as the wet increases, the obstruction intensity increases and more impacts are required. Results will be used to optimum impactor be designed for obstruction solution of operating silos in Gol-e-Gohar iron ore complex

كلمات كليدى:

Laboratory Silo, Impact, Obstruction, Wet, Vertical Pressure, Granular Materials

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