WAYS OF IMPROVING DISPENSING OF SEEDS OF AGRICULTURAL CROPS

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Abstract. *In paper considers the issues of improving flow spout that provides a uniform continuous dosing of seeds of agricultural crops regardless of height they fill the hopper until the complete emptying of it.*

The results of studies of the process of precipitation of bulk materials from tanks indicate that the geometric characteristics of tanks and the dosing holes and their ratio, as well as the filling level of the tanks significantly affect the uniformity of dosing of bulk materials flow metering devices volumetric type. Analysis of the dosing device serial treaters indicates that in their designs, these patterns are not taken into account. Dispensers, combining the seeds with the dose distribution and the formation of its thread of the desired density due to the inhibitory action of distribution devices significantly reduce the potential performance of the treater. Therefore, it was necessary to create a flow dispenser that provides a uniform continuous dosing of seeds of agricultural crops regardless of height they fill the hopper until the complete emptying of it. The result of the research proposes an improved design of the dispenser with a hopper and determined the necessary parameters of this design for continuous dispensing of seed crops, important in many branches of agricultural engineering, which requires batching of granular materials, especially in the seed treater liquid preparations. The proposed design allows to increase the uniformity of dosing of seed crops and granular materials in other sectors and the reduction of metal consumption and dimensions of the relevant machines that use these dispensers.

Key words: ***seed treater, tank, fashion, flow, uniformity, pump***