STUDY OF THE GRAIN MIXTURES TRIER CLEANING PROCESS FROM SHORT IMPURITIES

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Abstract: As a result of experimental studies of the operating and tuning parameters of the trier operation, it was found that the quality of the process for separating short impurities is significantly affected by the rotation speed of the mesh cylinder, the angular position of the receiving tray and the radial clearance between the upper edge of the front wall of the receiving tray and the mesh surface. Moreover, lower angles correspond to a higher degree of separation of the impurity component. With an increase in the cylinder rotation speed, there is a tendency to increase in the rate of separation of the impurity, which is reflected in an increase in the degree of separation.

It was established that, together with impurity particles, particles of the main culture, oriented by the longitudinal axis in the direction of rotation and captured by the meshes of the cylinder, enter the receiving tray. Their number increases with an increase in the cylinder rotation speed, a decrease in the installation angle of the upper edge of the tray, and an increase in the radial clearance between the upper edge of the tray and the cellular surface.

Key words: Mesh surface, Grain mixture, Allocation dynamics, Parameters, Tray installation angle, Process quality.

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