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MODERNIZATION OF THE SAW GIN GRATE

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Based on the analysis of studies on the reliability of the genie grate, it is shown that the assembly of the grate is extremely time consuming and requires high expenditures of highly skilled labor due to the unresolved issues of accuracy and also the lack of manufacturability of the grate design itself and its elements. To solve this problem, a grate design with a replaceable element in the working area has been proposed, which makes it possible to increase the grate service life, as well as to compensate the errors in the assembly of the saw grate system. Experimental data on determining the lateral displacement of the insert plate are presented, methods for adjusting the grate gap, which in turn affect the quality of the ginning process, the tightening forces calculation that helps to keep the removable plate in place, are worked out.

Keywords: saw gin, saw, grate, disc, shaft, bar.

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