CONSTRUCTIVE ANALYSIS OF CARGO PLATFORMS OF DUMP TRUCKS

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Annotation; This article analyzes the structure of the cargo platforms of dump trucks used in the mining industry, their structural features and efficiency. It also discusses the structural design of various cargo platforms and their impact on the cargo transportation process.

Key words: Load platform of dump trucks, load capacity, structural strength, material selection, technological improvements.

Introduction. In the mining industry, a lot of scientific and practical work is being carried out to ensure reliable and long-term operation of the cargo platforms of heavy-duty dump trucks. Depending on the structure of the transported cargo and the scope of mining, cargo platforms have rectangular, inclined, semi-elliptical, bucket-shaped and shovel-shaped structures. Based on the scope of use of the above-mentioned structural structures, dump trucks with a cargo platform and shovel-shaped structure are widely used in NGMK.

Materials and methods. Currently, there are some problems in the design of the cargo platform, and the accumulation of viscous rocks on the body due to the extraction of minerals from different horizons leads to excess weight and increased energy consumption. Therefore, improving the efficiency and technical and economic performance of the cargo platform by improving it is one of the urgent issues.

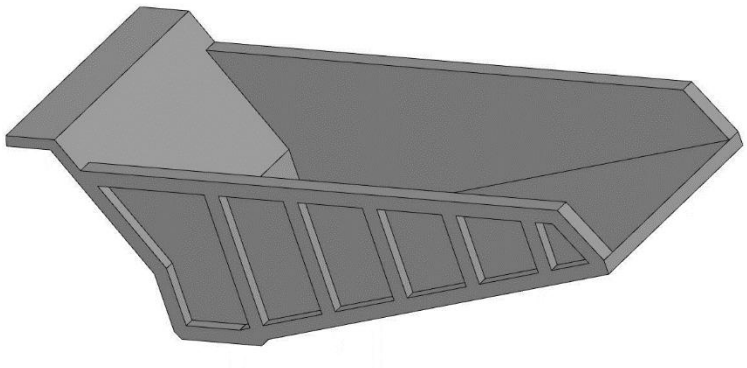

Figure 1:
Cargo platform of A dump truck

The cargo platform of dump trucks, shown in Figure 1, consists of the following main components: the frame and main frame - determine the load-bearing capacity of the cargo platform, the side walls - help to direct the load in one place during

unloading, the outer covering and reinforcing elements - are made of durable materials to prevent vibration and deformation of the platform.

Conclusion and Suggestion The structure of the cargo platforms of dump trucks has a significant impact on the efficiency of the mining industry. By optimizing their design features, cargo transportation is accelerated, fuel efficiency is increased, and environmental impact is reduced. Cargo platforms, developed based on modern technologies, serve to increase the efficiency of mining enterprises. The choice of cargo platform material directly depends on the load-bearing capacity. Typically, high-strength steel alloys are used, and we can see that additional loading can be avoided by installing rubber coatings on the base of the cargo platforms to prevent additional loading.

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