

## TRANSPORT FOR MINING INDUSTRY

**Yushko M. D.**, student

Scientific supervisor – Slesaryonok E. V., senior lecturer

Belarusian National Technical University

Minsk, Republic of Belarus

In our country, about 30 % of metal ores and mining and chemical raw materials are mined underground, but a much larger number of workers are employed in underground work than in open-pit work. This is explained by the fact that with the underground method, less powerful or deep-lying deposits are developed than with the open method.

The main focus of underground mining operations for the extraction of non-ferrous metal ores is the further introduction of high-performance self-propelled equipment with diesel or electric drive for the transportation of minerals, auxiliary cargo and people.

Belt conveyors have become the most widespread in the extraction of potash and manganese ores. With systems for the development of potash ores with long treatment faces and manganese ores with long columns with entry with combine excavation, complete conveyor transport of ore from the bottom to the surface is possible.

Belt conveyors of conventional design with stationary roller supports can transport rock mass with the size of individual pieces no more than 350–500 mm, therefore, when underground mining of strong ores of non-ferrous and ferrous metals, belt conveyors at domestic ore mines are used to transport only crushed ore, mainly for its delivery along inclined shafts to the surface.

Railway and automobile transport are widely used in the open-pit mining of ores. Further development of quarry railway transport is aimed at more complete use of locomotives and traction units with a large coupling weight, increasing the load capacity of dump cars, and the development of motor transport is aimed at increasing the reliability and load capacity of quarry dump trucks [1].

### References

1. Mine transport [Electronic resource]. – Mode of access: <https://helpiks.org/1-103503.html>. – Date of access: 13.02.2022.