

## **CURRENT APPROACH TO ASSESSING THE ENERGY EFFICIENCY OF BELT CONVEYORS – AN OVERVIEW**

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Conveyor transport plays a crucial role in ensuring the continuous flow of material, especially in open-pit and underground mining operations. The key parameter that evaluates conveyors' quality from both economic and environmental perspective is their energy efficiency.

The analysis of previous research highlights the latest technological advancements and methods for monitoring and managing energy consumption with the aim of reducing electrical usage and lowering the energy intensity of transportation. Comparative studies on belt conveyors energy efficiency reveal the potential for energy savings and indicate recommendations for effective energy management in conveyor transportation systems.

The proposed evaluation of belt conveyors energy efficiency, that results from an analysis of conveyor design and operational quality, offers essential insights for decision-making related to the modernization and optimization of conveyor systems, particularly in terms of energy consumption.