

IS 1856 : 2021

Steel wire ropes for haulage purposes - Specification Fourth Revision

Steel wire ropes for haulage purposes are critical components in mining and industrial operations, designed to handle heavy loads and ensure safe transport which are not suitable for human transport. These ropes are constructed from high-strength steel wires, which are twisted together to form a robust, flexible product capable of withstanding the harsh conditions typically encountered in mining environments.

The specification for these wire ropes outlines essential requirements regarding their construction, including acceptable core materials such as fiber or steel, as well as strict guidelines on dimensions, breaking forces, and manufacturing processes. For instance, the ropes must adhere to specific tolerances in diameter and must be preformed to enhance their performance and longevity. The sizes ranges from 8 mm to 40 mm.

The standard emphasizes minimizing joints in the wires to maintain structural integrity, while also permitting certain types of joints that are properly treated to prevent weaknesses. Options for rope lay include ordinary and Lang's lay, each offering different benefits depending on the application.

Marking requirements ensure traceability and safety, detailing critical information such as size, construction type, and manufacturing details. Overall, steel wire ropes for haulage purposes are engineered for durability, reliability, and efficiency, playing a vital role in the safe movement of materials in various industries.