

> Floor mounted rope driven railway type KS-650/900/63/100



Description

Floor mounted rope driven railway type KS-650/900/63/100 with track spacing 650 or 900 mm and pulling force of 63 or 100 kN is intended to realize the following transport tasks in underground headings of mines:

- > transport of materials directly on platforms or in containers (e.g. loose materials), of long loads to 7,5 m, as well as loads with large dimensions, including machine parts
- > powered roof support sections, etc. in horizontal headings and headings with inclination to $\pm 30^\circ$
- > transport of personnel in cabins mounted on carrying or pulling-carrying platforms and on braking trolleys in horizontal headings and with inclination to $\pm 25^\circ$
- > simultaneous transport of materials and personnel in a cabin mounted on a braking trolley in horizontal headings and in ones with inclination to $\pm 25^\circ$

Floor mounted rope driven railway route can be laid in mining headings on all kinds of floors, including sandy floors.



Construction

Floor mounted rope driven railway consists of the following main units:

- > driving unit
- > rope
- > drive tracks with roller assemblies guiding tensioning
- > stationcable
- > return station
- > transport set
- > electronic equipment

Pulling cable is driven by means of an electro hydraulic drive, which consists of:

- > hydraulic aggregate
- > windlass
- > control station

Railway is driven by an endless rope guided in various sets of rollers, which enables transporting in headings with variable inclination, i.e. with sheers and dips, as well as on arcs. Driving track consists of repeated sections of straight and arc rails, adapted to the route.

Depending on conditions of a localization and needs, the following tensioning stations can be used:

- > proportional
- > pneumatic – in versions: single and double
- > hydraulic – in versions: single and double
- > weight-based

At the end of the route there is a returning station, which can be of various construction, depending on the needs.

When forming the transport set, a general rule is obeyed that it should consist of the minimal amount of indispensable components. Selection of subassembly of the driving unit, including amount and distribution in the set, can be arbitrary according to the user's needs. Every set must have one braking trolley, which can be placed in any place in the driving set and one pulling-carrying platform.

Transport set can be composed of:

- > pulling-carrying platform with load-carrying capacity of 100, 150, 200 kN
- > braking trolley type: 60, 90, 120 or 180
- > carrying platform 100, 150, 220, 320, 350 kN
- > trolley with a drum for redundant rope
- > connecting pull rods
- > cabins for personnel

Maximum weight of transported load units depends on the applied platforms in a transport set and can reach maximum of 35T for one platform.

Railway type KS-650/900/63/100 is suited to transporting personnel in cabins mounted on top of pulling-carrying platforms or on a braking trolley.

Control station is equipped with indicators and allows controlling and monitoring of railway operation correctness (indicators of: pressures, driving speed, distance covered, interlocking devices).

During the travel, driving speed can be regulated based on movement conditions.