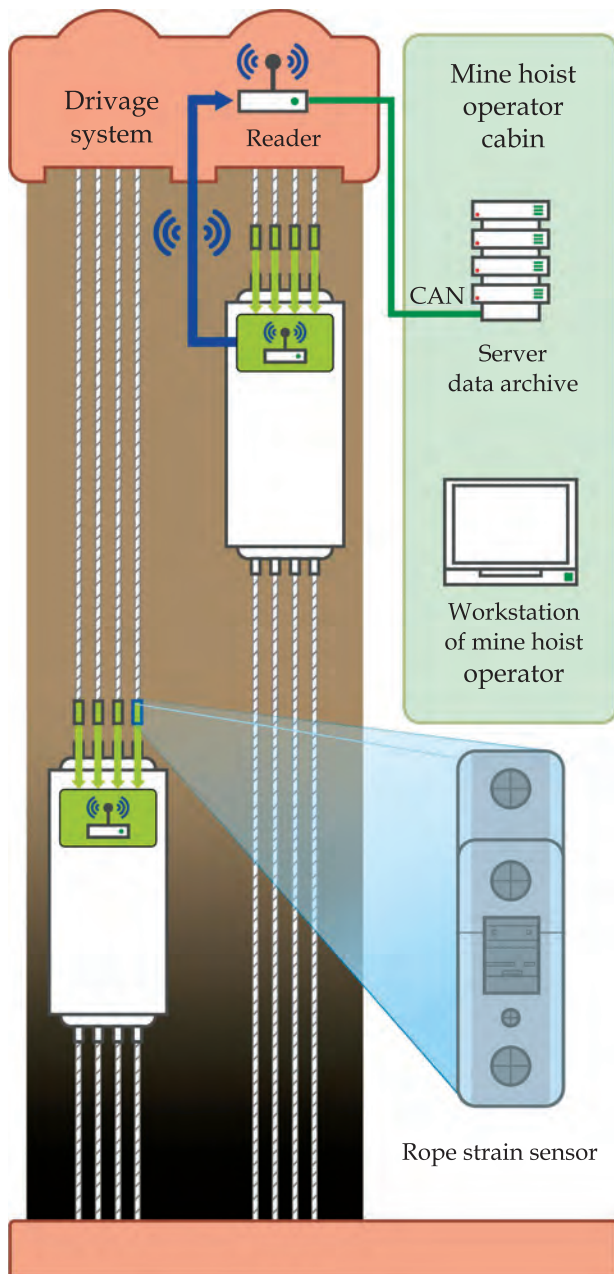


INFORMATION TECHNOLOGY FOR CONTINUOUS MONITORING OF ROPE TENSION IN MULTIROPE HOISTING PLANTS



Flowchart of technology for continuous monitoring of rope tension in multirope hoisting plants

Areas of Application

The technology is to be used in rope tension digital monitoring systems

Specification

The technology is based on automated processing of data from digital controllers measuring the main rope tension in multirope hoisting plants. It includes methodology and software installed on hoist operator's workstation. Hardware technical support is provided by *Corum Group* and *Alliance-D* (Ukraine)

Advantages

Unlike the similar technologies, this one enables continuous monitoring of rope tension on both sides of hoisting plant, rope slips on the guide and angle pulleys, slip margin for each rope, and the total nonslip margin for all ropes in emergency situations; weight control of skip download and unload; calculation of adjustments of rope length and pulley groove radius; and automated issue of recommendations for adjusting the rope and pulley liner parameters to increase their service life

Stage of Development.

Suggestions for Commercialization

IRL3, TRL3

The technology and equipment are provided and customized at user's site, upon request

IPR Protection

IPR1, IPR2

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