

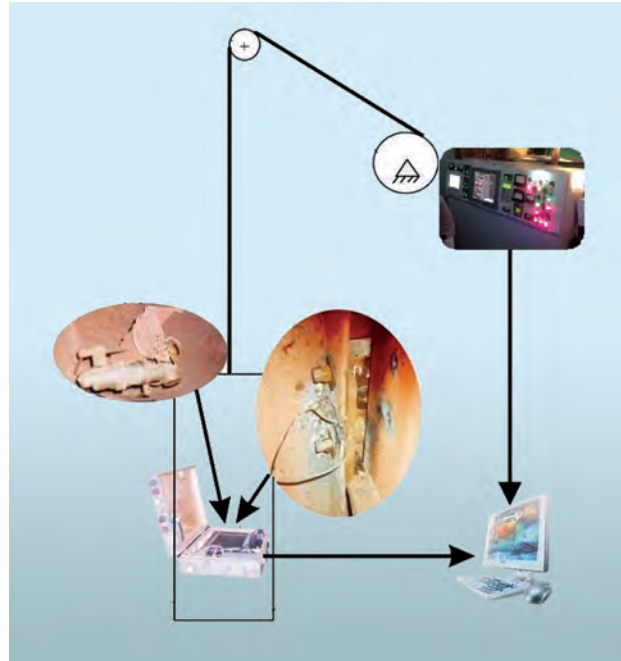
## INFORMATION TECHNOLOGY FOR DIAGNOSTICS AND MONITORING OF TECHNICAL CONDITION OF HOISTING PLANT FACILITIES

### Areas of Application

The technology is to be used for improving the technical condition of hoisting plant facilities in order to enhance their reliability and to increase hosting speed for escalating the quantity of minerals elevated to surface

### Specification

The hardware component is multitasking hardware and software system consisting of PC, multichannel controller with analog-to-digital converter, strain amplifier, contactless acceleration sensors, force measuring pads with contact sensors, and record remote controller. The software performs systematic data processing of measurements of reinforcement wear, spatial distortions of conductor profiles, vessel horizontal ride quality and vertical speed, and dynamic stress-strain state of conductors and spacers



Flowchart of technology for diagnostics and monitoring of technical condition of hoisting plant facilities

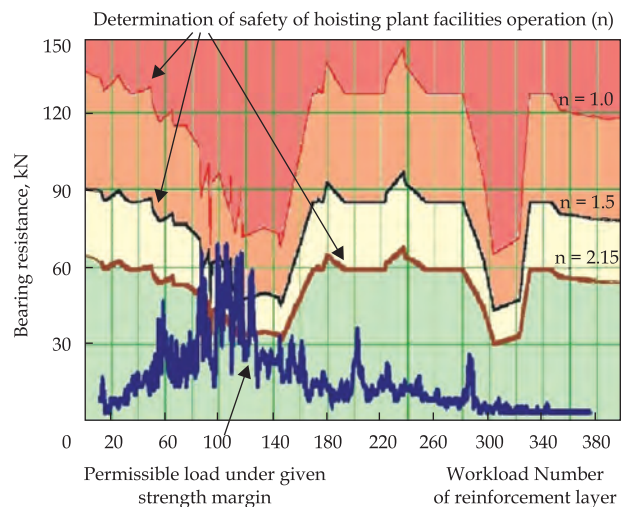
### Advantages

Unlike the similar technologies, this one enables to control the dynamic interaction of all safety guides of the hoisting vessels with rigidly reinforced conductors and to assess the dynamic state and safety level of vessel-reinforcement system

### Stage of Development. Suggestions for Commercialization

IRL8, TRL8

Upon request, the dynamic parameters of hoisting vessel-rigid reinforcement system of vertical shaft sections are surveyed and measured; recommendations on the improvement of their operating condition and safety are provided



Determination of safety of hoisting plant facility operation

### IPR Protection

IPR1, IPR2, IPR3

### Contact Information

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