



Predictive model of risks in railroad transport when diagnosing axle boxes of freight wagons

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| Keywords: | Railroad traffic safety, Risks, Axle box, Freight wagons, Railroad transport, Diagnostics |
| Abstract: | The research is aimed at developing a predictive model of the risks in railroad transport when using diagnostics of the axle boxes of freight wagons, which will allow assessing traffic safety during the operation of freight wagons. To develop a predictive model of the risks in railroad transport, the approaches of the probability theory were used. The constructed predictive model of the risks makes it possible to assess traffic safety during freight transportations; to determine further measures to reduce them; to evaluate the diagnostic method. The authors developed a predictive model of the risks in railroad transport when using the diagnostic methods of freight wagons' axle boxes during maintenance and repair of axle box. This model includes the probability of failure-free operation of the axle boxes of freight wagons, the probability of identifying of the technical condition of the axle boxes of freight wagons, the significance of the diagnostic parameter and its relative assessment after appropriate maintenance, repair or technical control. |

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