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Experimental Analysis of Elastomeric Sleepers Vibration Isolation Efficiency in Operational Conditions*

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Abstract

Solution of the problem of limiting the spread of the dynamic and acoustic emissions from rail and road traffic requires application of new elastomeric materials are characterized by both high acoustic insulation as well as being part of vibroisolation system between the source of vibration associated with the movement of vehicles and construction engineering structure. The article presents the results of experimental vibration isolation effectiveness of three types of rail sleepers used in vibration isolation systems of railway and tramway tracks . In the article the methodology of research and quality assessment algorithm vibration isolation system based on the recorded measurement data is also presented.

Keywords: dynamic and acoustic emmision from rail traffic, vibroisolation, rail sleepers

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