

Analysis of a Goods Wagon Running on a Railway Test Track

Ján Dižo

Faculty of Mechanical Engineering, University of Žilina. Univerzitná 8215/1, 010 26 Žilina. Slovak republic. E-mail: jan.dizo@fstroj.uniza.sk

An intermodal transport is nowadays an inseparable part of a transport system. Designs of longer wagons are the result of efforts to achieve universality, transport capacity increase, reducing of noise and maintenance needs. In this paper are presented results of selected parameters of a long goods wagon driving on a test track. The long goods wagon and test rings models have been created by using the ADAMS/Rail software. The analysed wagon has been equipped by the Y25 bogie. Simulations of the long goods wagon running have been performed on the model of railway test rings – VÚŽ Velim, Cerhenice. For the dynamic analysis of the long goods wagon have been selected two sections of the railway test rings. For the ride properties wagon assessment have been selected output signals of vertical forces Q , guiding forces Y and the Y/Q ratio. There have been detected, values of assessed parameters have not been exceeded the limited values and therefore wagon runnings have been safety.

Keywords: Goods wagon, Y25 bogie, Railway test track, Ride properties

Acknowledgement

This paper was created during the processing of the project “RAILBCOT - RAIL Vehicles Brake Components Test Stand”, ITMS Code 26220220011 based on the support of Research and Development Operational Program financed by European Fund of a Regional Development.

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Paper number: M2016126

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