

## **A Study of Ground Vibration of Ballasted Ladder Track Induced by High Speed Train**

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There are some cases known that the ballasted ladder track, which is used in some meta-gauge lines now, has the property to reduce ground vibration. In this study, 3D-numerical model which consists of the track structure and the ground was developed. The authors carried out parametric analyses in order to study the property of ground vibration of ballasted ladder track induced by high- speed train. As a result, compared with the conventional crosstie tracks, the ballasted ladder track has the property to reduce ground vibration on such soft ground as having shear wave velocity of 80m/s.