

Evaluation of the Influence of Temperature on Vibration Reduction Properties of Track Elastic Materials

Masanori HANSAKA Daigo SATO

Minoru SUZUKI Shogo MAMADA Tatsuya OTA

In railway tracks, various elastic materials made of rubber such as rail pad are used to reduce the vibration and impact force. Because there is a concern that their vibration reduction performances might decrease due to the increase in rigidity as the temperature falls, we measured the vibration and noise at the same point on a viaduct on a meter-gauged line in summer and winter. From the measurement, some results such that the vibration of structural parts under the rail pad increased as the temperature fell which agreed with the theory of track vibration were confirmed.