Application of the Condition Monitoring System by Vibration Analysis to Driving Devices on Railway Vehicles in Operation

Kosuke NISHITANI Minoru KONDO Tatsuro TAKASHIGE
Yuta KATAOKA Keita NOGUCHI

We are developing a condition monitoring system by vibration octave spectra and machine learning to monitor the conditions of driving devices on railway vehicles. Their vibrations change because of their long-term use, and fluctuations in external temperature or climates. Therefore, it is necessary to acquire long-term (at least one year) data under normal conditions for machine learning intended for understanding the vibration changes. In this paper, we show the result of the vibration analysis of failures of driving devices which occurred when the method proposed was applied to them on railway vehicles in operation.