

Reduction Effect of Ground Vibration and Rail Corrugation by Floating Track with Under Sleeper Pads

Shota FUCHIGAMI Tsutomu WATANABE Hirofumi TANAKA Takatada TAKAHASHI

Various types of vibration-reducing tracks have been developed to reduce noise and vibration during train running. Of these vibration-reducing tracks, although floating track with coil-spring units installed on conventional lines has shown excellent effects of reducing ground vibration, rail corrugation on the high rail has been observed in some sharp curve sections. Therefore, we have proposed a floating track with under sleeper pads in order to reduce the occurrence of rail corrugation on the high rail in floating track with coil-spring units. In this paper, we introduced the proposed floating track with under sleeper pads and evaluated its effectiveness in reducing ground vibration and rail corrugation by analytical methods.