

Vibration Characteristics Evaluation of Connection Cable of Propulsion Coils for Maglev

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High voltage is applied to the propulsion coil which propels vehicles in superconducting maglev systems at the time of the passage of the vehicle. We need to treat the connection cable for connecting the propulsion coils as high-voltage equipment because high voltage is applied to the cable. The connection cable is used in unique conditions: connection at an extremely short space, electromagnetic force applied by the variable magnetic field of superconducting magnet of the vehicle. In this paper, we describe vibration characteristics of the connection cable obtained by the electromagnetic excitation test using magnetic field of superconducting magnet.