

Stress Evaluation on the PLG Ground Coil with FRP Fastening Devices

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Ground coils provided along the entire length of the guideway are essential for outdoor use over a long time in the superconducting magnetically levitated transportation system. Therefore, high reliability is inevitable for ground coils. We are under developing the new fastening devices made of GFRP (Glass Fiber Reinforced Plastics) to prevent from reduction of the axial tension of fastening bolts and stress concentration around the fastening devices. We describe about the stress measurement results for the PLG ground coil with the FRP fastening devices.