

**Development of Ground Coils with Low Eddy Current Loss by Applying the
Compression Molding Method after the Coil Winding**

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In a magnetically levitated transportation (MAGLEV) system, stable performance and reduced cost are essential requirements for the ground coil development. On the other hand, because the magnetic field changes when the superconducting magnet passes by, an eddy current will be generated in the conductor of the ground coil and will result in energy loss. In the study presented in this paper, we examined a low eddy current loss ground coil using the round stranded wire intended to reduce the running costs of the system. Consequently, we confirmed that it was able to improve the size accuracy of the winding coil and uneven thickness of molded resin by applying a compression molding after winding.