

**Shock Assessment-resistant of a Surface Protection Layer for the Maglev
System Ground Coils**

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With respect to the superconducting maglev system, there is a ground coil (a PLG coil) to perform three functions of propulsion, levitation and guidance which the R.T.R.I has developed for construction cost reduction by way of reduction of the numbering coils. The coil has a protective layer on surfacing the vehicle side, aiming for the protection of its surface and prevention of electric shock.

We performed an impact resistance test to evaluate this surface protective layer. As a result, we confirm that the coil covered by the protective surface layer has about 2 times strength in comparison with the coil which is not covered by a protective layer. In this report, we explain the necessity of the protective surface layer, its development process, and its effectiveness too.