

Construction-related Inspection of Cable Wiring of Ground Coil Type of PLG

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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 number of coils. On the other hand, for this coil type of PLG, it is necessary to constitute a guidance circuit by connecting facing coils with a high voltage cable, thus making cable connection complicated and intricate. Therefore we manufactured a guide way model in order to examine how to reduce the wiring. Then, in order to verify the construction easiness of this optimal wiring system obtained by this examination, we performed a test by an actual size model. As a result, we found the necessary area of the section of a duct line. Further we identified the necessary length of the connection cable, the appropriate wiring procedure and the effective wiring layout. Then, we got the prospect that the cable wiring of the PLG could be undertaken without a problem based on this test result.