

**R & D on Superconducting Maglev and Attempts of Applications of its  
Technology to Conventional Railway System**

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Twelve years have passed since test operations commenced at the Yamanashi Maglev Test Line, and running tests have been smoothly ongoing as scheduled. The Maglev Technology Practicality Evaluation Committee acknowledged in the latest report of July 2009 that necessary technology has been almost established or in a prospect of establishment for commercial services with Superconducting Maglev System.

This paper introduces recent researches conducted by Railway Technical Research Institute on reliability and durability improvement or cost reduction of major components of the Superconducting Maglev System such as ground coils and superconducting magnets. In addition, we have introduced several attempts by which application of superconducting and linear motor technology to the conventional railway system has been studied.