

Evaluation of Electrical Characteristics of Superconducting Feeder Cables

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DC electric railway systems are widely used in Japan. However, they have some problems, such as voltage drops, limited use of regenerative brakes and energy transmission losses. We have been developing superconducting feeder cables for DC feeder systems as a next-generation railway system without transmission losses solving these problems. In order to apply this to railway systems, it is necessary to develop the method of connecting a superconducting feeder cable to a feeder circuit, and to meet the required specifications from railway systems. In this paper, we introduce R&D for the application of superconducting feeder systems to commercial lines.