

**Development of the On-board Maintenance Management System for Ground Coils of
Maglev by Using RFID Technology**

Minoru TANAKA Noriyuki TAKAHASHI Masao SUZUKI
Ryohei IKEDA Sei NAGASAKA

In the magnetically levitated transportation (Maglev) system, a huge number of ground coils installed along the entire length of the guide-way are required to withstand a long term outdoor use. Periodical maintenance work is essential for securing reliable operation of the Maglev system. However, maintenance management is not so easy since a huge number of ground coils having the same appearance are installed. An establishment of a reasonable and simple maintenance management method is important. Therefore, we have developed a maintenance support system of ground coils by using a maintenance car and radio frequency identification (RFID) technology.