

Examination of the Mold Resin Recycling Technique for Ground Coils

Noriyuki TAKAHASHI Masao SUZUKI

Because the number of the ground coils laid over the whole length of a maglev line is enormous, it seems that recycling becomes important in future. At first we crushed mold resin (Epoxy resin, SMC molding resin, RIM molding resin) of ground coils and confirmed the condition of the crush. Then, we mixed the crushed resin with concrete and performed an examination on its strength. As a result, we confirmed that the strength of SMC resin increased. As another examination, we dissolved resin by the depolymerization under ordinary pressure, and we confirmed the condition of the dissolution. As a result, we were able to dissolve epoxy resin. However, it has been known to us that in order to dissolve SMC resin and RIM resin, it is necessary to raise temperature and pressure because they are hard to melt.