

## **Development of High-Speed Test Facility for Pantograph/OCL Systems**

Tatsuya KOYAMA

Railway Technical Research Institute (RTRI) has developed a new pantograph test system, "High-Speed Test Facility for Pantograph/OCL Systems," to develop pantographs for high-speed train and wear resistant contact strips. This test facility mainly consists of four pieces: a rotating disk with attached contact wire which can rotate at high speed up to 500 km/h, exciters which reproduces lateral arrangement and vertical movement of overhead contact lines, an energizer which applies large current to a pantograph up to 1000 A, and environmental control devices which can control temperature from  $-20^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$  and humidity from 10% to 90% in test chamber. This paper shows the function, performance, and usage example of this test facility.