

Development of a Monitoring System for Spring Point Machine

Syunsuke SIOMI Yoshinobu IGARASHI

Yoshikazu OSHIMI Tomoaki HARA

Increase of a switching load, which is the force required to switch movable rails on a turnout, is one of causes of switching disablement. Switching load is influenced by lubrication conditions and contact forces at contact surfaces of sliding portion of a turnout and switching mechanisms. However, to keep the contact surfaces in good conditions by normal maintenance work is difficult as most turnouts and switching mechanisms are installed outside. To solve the issue, a monitoring method of switching load has been developed. A monitoring method for electric switching machines, which estimates the load from the operation current and voltage, has already been developed. Moreover, some of electric switching machines are equipped with monitoring equipments. In this report, we present a measuring method of switching load by strain of a switch adjuster. Moreover, we present a monitoring method for a spring point machine, to which the former method is not able to be applied. Finally, we present results of the field test.