

**Performance Evaluation for Traction Motor
by Collaborating of Train Run Curve Preparation System and General Simulator**

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In development of traction motors for rolling stocks, it is important to evaluate power consumption and temperature rise of traction motors during operations because they are important performance metrics. In particular, when a traction motor is to be used in an operation, it is common to evaluate power consumption and temperature rise for a line and a run curve by a running simulation in advance. This study aims to adapt SPEEDY, a train run curve preparation system with long years of experience, to running simulations, linking a general-purpose simulator that creates models of traction motors. In this report, running simulations are conducted assuming a commuter train with high-efficiency induction motors. As a result, the amount of energy consumption is reduced by up to 17% by using a high-efficiency induction motor. In addition, the temperature rise is kept within the appropriate range.