

Iwona Wróbel: The Role of the Railway Research Institute's Test Track in Railway Rolling Stock and Infrastructure Research

The monograph contains the characteristics of the Railway Research Institute's test track loop in Żmigród and its use in research of new technical and technological solutions for railway transport. The genesis of the research infrastructure and track parameters, as well as the equipment and potential of the test Track Centre of the Railway Research Institute for the purpose of testing railway infrastructure, rolling stock and electrical and command-control and signalling systems are described. Foreign (worldwide and European) research track infrastructure and planned investments for the implementation of innovative solutions are presented. The research potential of the test track in the field of railway vehicles, elements of railway infrastructure, traction network, systems and signalling devices is presented, as well as the scope and number of tests carried out in a quarter of a century of the Centre's operation. In the final part, plans for development of the research potential of the Żmigród Test Track for the needs of future priority research directions in the railway transport are presented.

Keywords: test track, rolling stock tests, railway infrastructure tests