Jarosław Moczarski: Test Stand for Simulating Rolling Stock and Cargo Movements on the Railway Network

The test stand built in the laboratory of the Railway Research Institute enables non-contact measurement of distance, displacement and spatial position of moving objects. The new test track ensures continuous movement of the objects under examination and their repeated passage through the vision zone. The stand is a model of a railway track divided into sections, on which independent bogies (or sets of bogies) carrying loads of different shapes and dimensions move. It makes it possible to model and simulate the movement of real objects (carriages, trains) and to control this process. It permits the testing of new methods of identifying rolling stock and loads and controlling the movement of vehicles.

Keywords: research stand, modelling and simulation, rolling stock location, identification of objects, active vision systems, rolling stock and cargo recognition