

## **Jacek Kukulski: Modernisation of the Dynamometer Stand for Testing the Friction Pairs of the Railway Brake at the Railway Research Institute**

The article outlines the modernisation work carried out at the Rolling Stock Testing Laboratory of the Railway Research Institute. The modernisation, conducted in 2023, focused on the dynamometer stand for testing the friction pairs of railway brakes. The stand was built in the 1990s at the then Railway Scientific and Technical Centre. To carry out the modernisation, Terms of Reference (ToR) were prepared and funding was obtained from the RPOWM programme, as well as from the Institute's own resources. One of the reasons for undertaking this modernisation project was the limited capacity of the tests performed at the stand, the wear and tear of the electronic components and the automation, including the stand control. The article discusses the scope of the modernisation and the results of abbreviated verification tests as required by the IRS 50548 standard for UIC-approved stands. The presented test results were obtained before and after the modernisation of the stand.

**Keywords:** braking stand, dynamometer tests, friction pair