

## **Andrzej Aniszewicz: Portable Laser Device for Measuring Geometrical Dimensions of Wheelsets, Wheel Discs and Rails**

The article describes a portable laser measuring device Calipri C40 used at the Metrology Laboratory of the Railway Research Institute. The scope of application is presented, examples of measured objects and measurement results of their geometric parameters are shown. The advantages of using this modern measuring device, which can replace several less accurate hand-held mechanical measuring devices, have been outlined. Attention has been drawn to the high measurement accuracy, mobility and independence from the power supply, as well as the possibility of measuring geometrical parameters, e.g. railway wheelsets, in an efficient and quick manner, also in the customer's repair shop. It has been emphasized that the measuring instrument is particularly dedicated to measuring parameters of wheelsets, rails and brake discs in repair and production conditions.

**Keywords:** measurement, laser measurements, wheelset, bogie, wheel, running gear, wear of wheelsets, rail, rail head, brake disc