

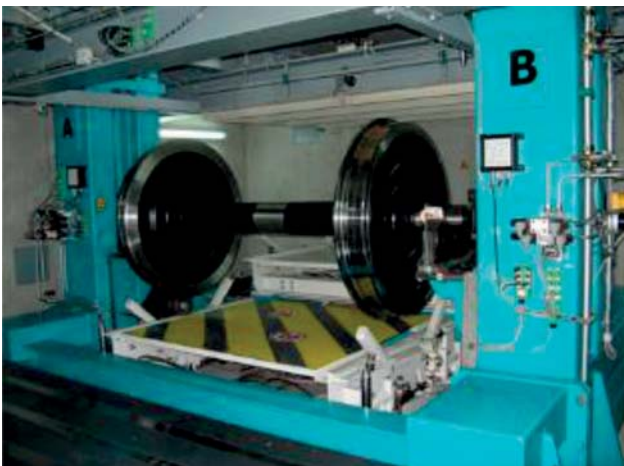
RAILWAY TECHNOLOGY

Optical Wheelset Measurement Plant



The measurement of profiles and surface contours gaining importance in terms of quality assurance, quality control and production control. The aim of the measurement is the dimensional final inspection of each finished wheelset or a pre-measurement of individual wheelsets.

With the wheelset measuring device, which has to be installed in the production line in a fixed position, the wheelset sizes that are relevant for the individual maintenance levels are automatically recorded, evaluated, visualized and stored. The data stored in a database after plausibility checks are prepared for transfer to a higher-level wheelset database or an operational SAP system.



According to the customer requirements, the accuracy is determined. Thanks to this technology, all required tolerances can be reached from high-speed, passenger and freight traffic. Depending on need and design, the measuring system can be used for the measurement of all types of railway wheels. The flexibility of the system results in a wide range of determinable parameters on the shaft, wheel or brake disc.

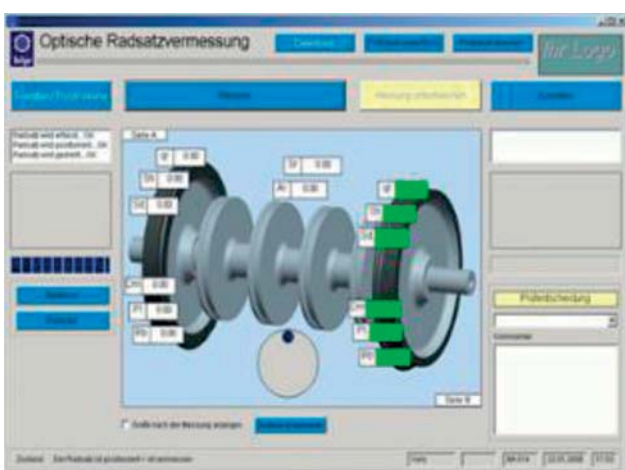


Measuring process

The controlled coordinate measuring axes are equipped with a optical measuring system. Following wheelsets can be measured:

- with / without bearing, without bearing inner rings
- with / without brake discs, with and without gears

For the collection of the measuring points requires a minimum access width of 145 mm. The optical measurement transducer is guided by the measuring axes on a path corresponding to the wheelset contour. The defined measuring points in the measuring program and stored in the software are sequentially recorded and evaluated. It can thus be measured without retooling the most diverse sets of wheels. With the wheelset measuring system functionally relevant wheelset parameters are automatically recorded, evaluated, evaluated, visualized and stored. The determined data is subjected to a plausibility check, stored in an internal database and can be transferred via appropriate interfaces over a superordinate in-plant database.



Technical Data

Measuring circle diameter: 600 - 1.100 mm

Measuring period (in and out) : 6 min
Measuring parameters: customized

Track gauge: customary

Wheelset weight : max. 2.500 kg

Clamping length : 2,000 - 2.600 mm

Wheel profile: diverse

Status as of 09/2022