



Stationary measurement and diagnostic technology: **Instrumented wheelsets**

DB Systemtechnik is a global leader in the development and manufacture of instrumented wheelsets. We will determine how our instrumented wheelset technology can be utilised for your specific application and we will develop the appropriate wheelset, almost entirely irrespective of the constructional and design characteristics of the original wheelsets.

Instrumented wheelsets accurately measure the dynamic contact forces between the wheel and rail. These forces can be measured in three spatial directions (vertical, horizontal and longitudinal), as well as the transverse coordinates of the contact point from the localised expansion.

- Operational approval of rail vehicles in accordance with EN 14363
- Recording of operating loads, proof of strength
- Inspection or approval of tracks in accordance with Ril 821
- Worldwide application for all track gauges
- Maximum mileage per instrumented wheelset of more than 500,000 km (verified in sample testing)
- Maximum speeds of over 400 km/h (verified)
- Wide range of wheel diameters
- Larger diameters can be easily accommodated, e.g. for roller test beds

Technical Details

- Wheelset loads up to 25 t
- Wheel diameter from 360 mm to 1,250 mm and larger
- Measured variables: wheel/rail forces and location of the force application on the wheel profile
- Accuracies: expanded measurement uncertainty of 3%
- Suitable for free wheels, low floor, roller test beds