

The setup can be connected to the customer's IT systems at any time. Data can be exchanged with SAP, e.g. via the IDOC interface.

A pocket PC, integrated into the system using WLAN, is used to display and operate the measurement device. The current measurements are therefore made available to the respective measurement point right away. The data can also be recorded.



The reliable solution for improved dependability and less wear.

DISOWARE BogieLoad software is the data management system used for the bogie pressure measurement device. This is used to directly communicate with and control the connected measurement device, allows all collected measurement data to be prepared with convenience and links to a wide range of customer IT systems. Using an SQL database makes maximum data security possible both with single-user systems and in a network in a multiple-user environment.

Functions of DISOWARE BogieLoad

Data management:

- ❖ Recording of the bogie's master data. The nominal load, wheelset interval, geometry data etc. for each bogie can be saved permanently. The user is free to define any number of measurement points in any setup.
- ❖ A measurement sheet of the current measurement process is created

Displaying and evaluating:

- ❖ vertical wheel and wheelset forces
- ❖ axis parallelism
- ❖ wheels, back-to-back
- ❖ wheelset interval
- ❖ bogie height
- ❖ any measurement sheet items to be defined by the user as manual input
- ❖ up to 4 pneumatic systems in terms of pressure drop
- ❖ output of data established using Microsoft Excel
- ❖ free print formatting
- ❖ search algorithms

Controlling the measurement device:

- ❖ automatic alignment of measurement device to bogie type
- ❖ automatic alignment of bogie to geometric centre of measurement device
- ❖ shim simulation
- ❖ pressure drop test
- ❖ loading at nominal load with transient effect

Operating and service aids:

Functions for maintaining the database (backup, restore) are integrated. The entire measurement device is configured and calibrated via the PC's operating interface. Remote maintenance (software update, loading Flash, modifying parameters, diagnosis etc.) via modem access is possible up to the S7 control and DISOBOX® evaluation equipment. This allows all the measurement device's parameters to therefore be accessed.



The MULTIRAIL® BogieLoad bogie pressure measurement device.
Fully electro-mechanical, efficient, precise.

MULTIRAIL® BogieLoad – the bogie test rig with spindle technology.

Precision and efficiency for production and the workshop.

Measurements and optimisation – precision on the test rig.

- ❖ Modular structure
- ❖ Schenck Process MULTIRAIL® sensors suited to the application in hand
- ❖ Pre-assembly, pre-testing and pre-calibration of modules possible
- ❖ Links in to calibration
- ❖ Rail and EBA* approval
- ❖ Software/data logging
- ❖ Combined diagnosis systems
- ❖ Already satisfies DIN 25043

*German Federal Railway Office (Eisenbahn-Bundesamt)



Only perfectly coordinated and maintained bogies can deliver dependability and less wear at high speeds. MULTIRAIL® BogieLoad is part of a new generation of bogie test rigs fit for the future. One prominent feature is the fully electro-mechanical design with spindle technology which ensures extremely efficient work practices and high levels of precision.

Benefits of spindle technology:

- ❖ greatly reduced influence of hysteresis
- ❖ minimal temperature influence
- ❖ no hydraulic oil
- ❖ minimal maintenance effort
- ❖ low spare part requirement
- ❖ low noise development
- ❖ different bogie heights can be tested without adjusting the portal
- ❖ reliable and high-precision mechanical application of force

Other special features include very good reproducibility through exact positioning of the bogie in the test rig using accurate wheel locations on the corresponding wheel's measurement points. The use of high-quality mechanical components reduces susceptibility to failure. By using high-speed drives, the fully automatic test process is suited to series and individual testing with extremely short cycle times.

Our scope of supply:

- ❖ produces test loads of up to max. 2x250kN (standard version); additional load points and higher test loads available on request
- ❖ measurement of vertical wheel forces
- ❖ calculation of the shims required
- ❖ three-dimensional bogie measurement: wheelbase, axis parallelism, measuring wheels back-to-back, measuring bogie height at load points
- ❖ remote maintenance

Available as options:

- ❖ track width adjustment
- ❖ height measurement of bogie using a levelling device
- ❖ longitudinal force measurement
- ❖ warping equipment for guiding the bogie into the test rig
- ❖ pneumatic spring test/seal integrity test
- ❖ adapter crossbeams for springs/pneumatic springs
- ❖ force introduced to centre of bogie
- ❖ bogie has special wheelbases
- ❖ bogie with 3 axles
- ❖ wheel turning device to measure axial and radial runout
- ❖ shim simulation