

MULTIRAIL® Wheel Load Station



- Legal-for-trade dynamic and static weighing of rail vehicles for maintenance and repair
- Monitoring of wheel/axle loads and load distributions during transit
- Flexible installation opportunities

Application

With MULTIRAIL, we offer a totally new static /dynamic system for the weighing of rail vehicles.

Wheel load test stations are typically found in workshops dedicated to the construction and repair of rail vehicles.

The precise MULTIRAIL measuring technology permits wheel and axle loads as well as the load distributions of engines and wagons of almost any type to be acquired with a high degree of accuracy. Statically, highly accurate check weighing can be performed.

For dynamic verification, the weighing system is used as a static reference scale.

Equipment

The high-precision strain-gauge weighbeams are mounted on solid concrete foundations, or alternatively on steel constructions. Designed to transmit all forces and moments, these weighbeams measure the vertical force component with a high degree of accuracy.

The MULTIRAIL Wheel Load Test Station can be integrated into the rail with or without rail gaps. The rail cut variant offers a higher degree of accuracy upon static weighing.

Weight values and associated data are acquired and processed with the use of weighing electronics and customized PC systems.

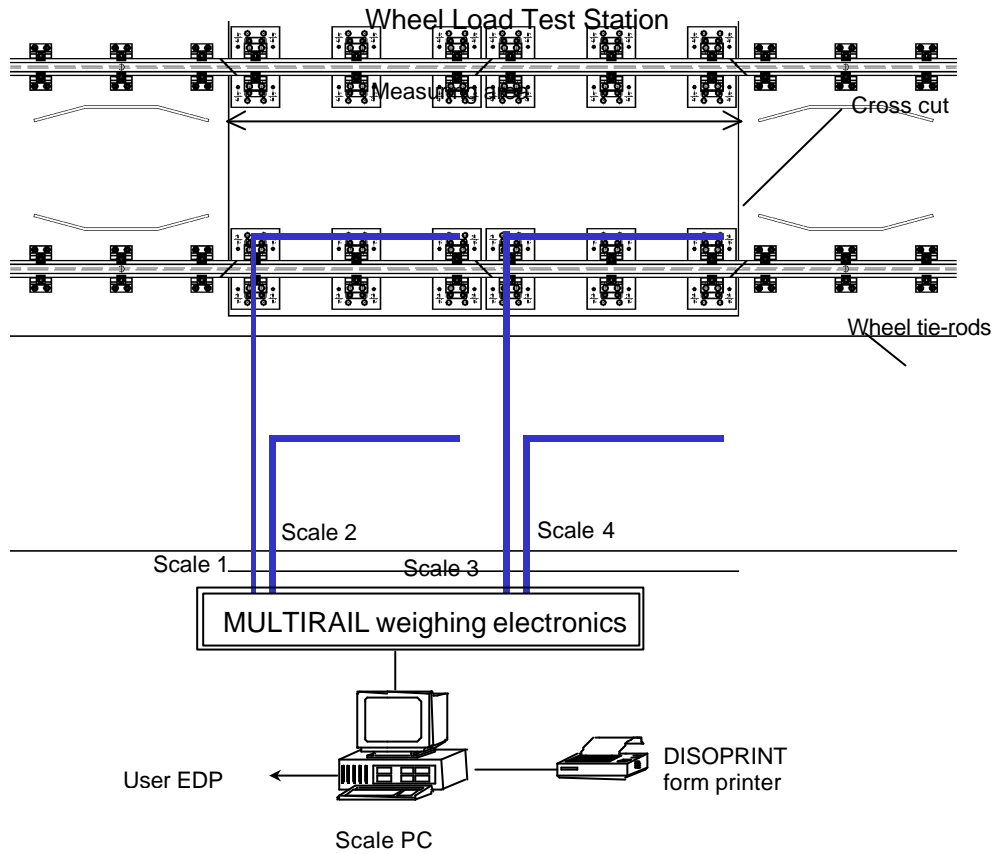
Function

MULTIRAIL offers the following basic functions:

- Monitoring of bogie, wheel and axle loads
- Acquisition and output of wagon weights (first, second, single, and tare weighing)
- Monitoring of wagon weights
Monitoring of wagon centre of gravity
- Printout and storage of weigh data

Optionally, further functions are available:

- Wagon type identification
- Fully automatic weighing
- EDP / BDE system interfacing
- Wireless data transmission
- Hand-held terminal for wagon data acquisition



Technical Data

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| Weighing rail profile, track width and tie spacing | As used in existing track section |
| Wheel load test station length | Typ. approx. 4 m weigh span *) Typ. approx. 45 m measuring area *) |
| Weighing range | Typ. 15 t wheel load |
| Weighing mode | Static and dynamic |
| Weighing accuracy | Static: +/- 0.1% Dynamic (legal-for-trade): In accordance with Verification Act, Verification Ordinance and OIML R 106-1 Class 0.5 for single wagon weight |
| Weighing speed range | Up to 10 km/hr, higher speeds upon request |
| Transit speed | Continuous rails: unlimited With gap: 15 km/hr |
| Temperature range | Scale mechanics: -30 to +70°C |
| Approvals | PTB-R60, DB-AG |
| Track base stabilization | e.g. measuring rail *) |
| *) depending on individual application | |



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Keep in Motion