

MULTIRAIL® TrainLoadOut



- Dynamic weighing of rail vehicles
- Tare and gross weighing
- Streamlining the loading process
- Integrating into the TrainLoadOut control system
- No-foundation gap-free installation

Application

MULTIRAIL TrainLoadOut is the ideal supplement for train loaders.

Rail cars can be weighed directly before and after loading with the high-precision MULTIRAIL measuring technology. Its calculated net weight makes it possible to adapt the loading process to take optimum advantage of rail car capacity. The gross weights can be used to make sure the rail car weights stay within the acceptable route load.

Equipment

The concrete weighing sleeper developed for MULTIRAIL is equipped with high-precision weighing sensors.

These weighing sensors can transmit all forces and moments and measure the vertical force component at a high degree of precision.

The MULTIRAIL weighing system is integrated into the rail without a gap so that it can be travelled over at any speed. With its modular design, this system is adapted for weighing to the speed range of the load.

This system is especially designed for weighing long trains with the stop-and-go operation typical of loading.

The data is typically transmitted directly to the PLC of the train load-out equipment.

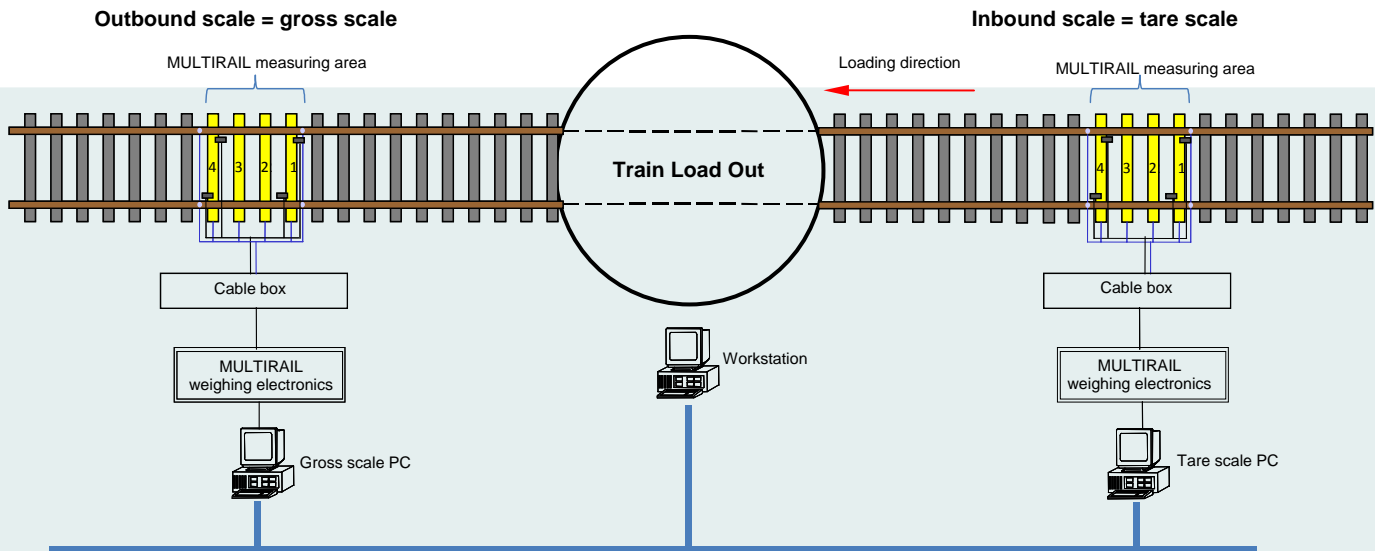
Function

MULTIRAIL includes the following basic functions:

- calculating and showing weights
- printing out and storing data
- stop-and-go operation
- issuing results on-line
- transmitting data to the PLC by OPC server

Other optional functions are available:

- rail car identification with RFID or other equipment
- monitoring the rail car centre of gravity
- EDP / BDE system interfacing



Technical Data

Rail profile, track gauge and sleeper spacing	As used in existing track section
Installation length of the in-motion weighing system	Typically 3 m measuring area *)
Weighing range	Typically 100 – 150 t
Weighing mode	Dynamic
Weighing accuracy	0.5 % wagon weight
Weighing speed range	To 5 km/h (higher speeds upon request)
Transit speed	Unlimited (gap-free)
Operating temperature range	Weighing mechanics: -40 °C to +70 °C Weighing electronics: +5 °C to +30 °C
Approvals	EBA

*) depending upon individual application