

MULTIRAIL® SpeedWeight



- Precise weight calculation at railway line speeds
- Fast check of all track loads
- Installation without foundation / no rail gaps required
- Side to side check and front/rear check

Application

MULTIRAIL® SpeedWeight is the reliable solution for recording wheel, axle and wagon weights at all speeds.

It identifies vehicles that might damage the railway line due to overloading or unbalanced loads.

A wide range of evaluations allow a variety of statements on the railway line load.

Equipment

Specially developed for MULTIRAIL, the concrete weighing sleeper is equipped with high-precision strain-gauge weighing sensors. Designed to transmit all forces and moments (caused by track guidance), these weighing sensors measure the vertical force component with a high degree of accuracy.

The MULTIRAIL system is built for this application into the track without a gap which means that it can function in a speed range of 10-240 km/h.

A PC is used to record and process the weights including supplementary data.

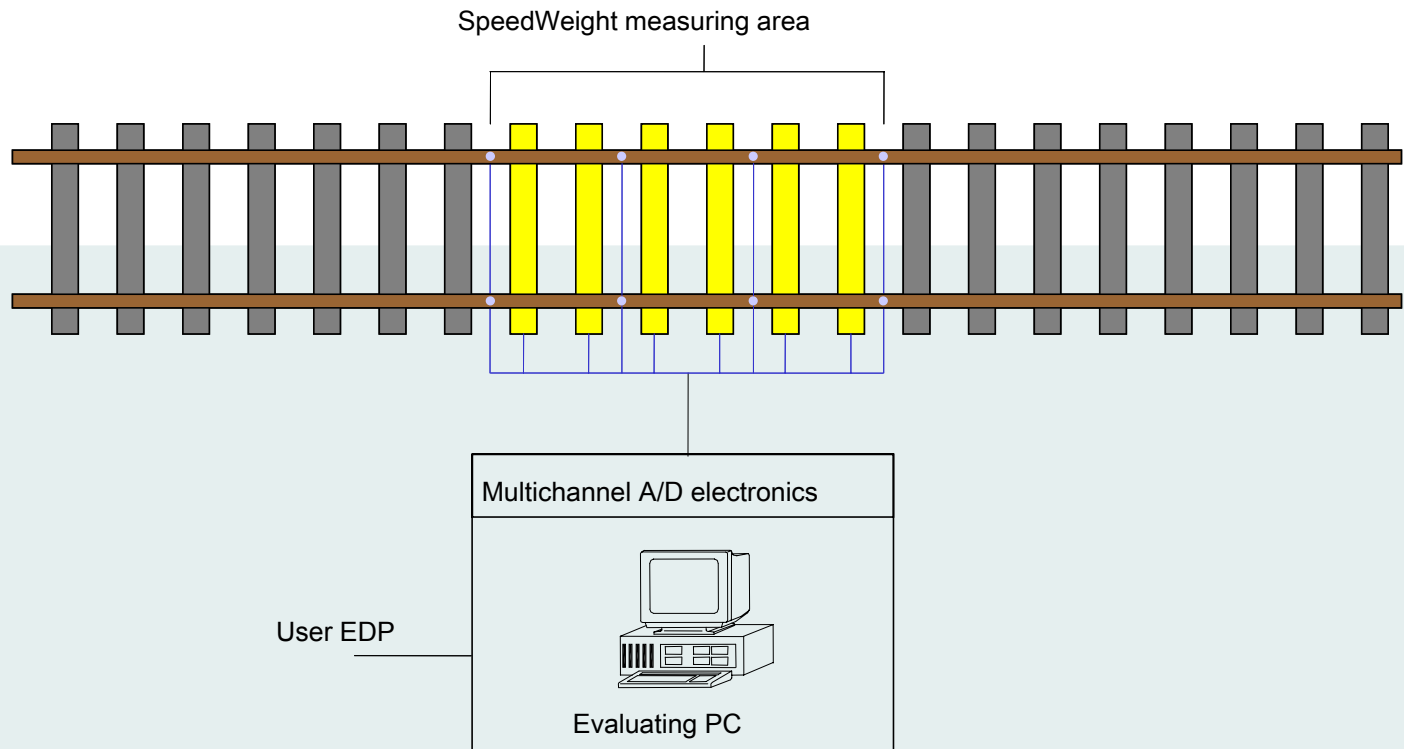
Function

MULTIRAIL comprises the following basic functions:

- Calculating and monitoring wheel, axle and wagon loads
- Assignment of results to individual wheels or wagons
- Recognition of wagon type
- Side to side check and front/rear check
- Storage and printout of diagnostic data
- Display

Optionally, further functions are available:

- EDP/BDE system interfacing
- Integration of external systems for wagon identification



Technical Data

Rail profile, track width and sleeper spacing	As used in the existing track section
Weighing system length	Typ. approximately 5 m measuring span ^{*)}
Admissible load	Typ. 100–150 t
Weighing accuracy ^{**)}	Wagon weight: 2% at 10-60 km/h Train total: 1% at 10-80 km/h
Weighing speed range	10 km/h to 240 km/h ^{*)}
Transit speed	Unlimited
Temperature range	Scale mechanics: -40°C to +70°C Weighing electronics: +5°C to +30°C
Approvals	EBA

^{*)} depending on individual application
^{**)} Higher accuracy is available at consultation at limited speed operation (accuracy relates to a minimum load of 35% of the maximum scale load).