

WEIGHLINE

Weighline offers all of the advantages of traditional train weighing methods, but with faster results and lower operational costs.

Many of the world's leading rail operators are utilising Railweight's Weighline system to monitor their assets and ensure safety.

Weighline installations can be found in a wide range of applications and locations, such as freight, aggregates, coal, steel, cement, extraction, petrochemicals, recycling and port authorities.

BENEFITS



The implementation of advanced weighing technology and automation on railway tracks has numerous benefits, including improved track safety, reduced track wear, improved turnaround time, and optimised traffic management. Through the recording, storing, transmitting, and allowing access to weighing and traffic data in real time, fleet management is improved, and revenue generation is increased by providing reliable and certified weighing service to rail operators.

Weighline's affordable initial investment, reduced installation time, and low maintenance demands make it an economically viable and sensible choice, with a cost of ownership far lower than many other options on the market, making Weighline a great investment for businesses looking for long-term value.



FUNCTIONALITY



Railweight's Force Measurement Transducers have been developed specifically for rail weighing applications, using standard rail sections of the same type as those used on the installation site. These transducers are designed to optimise performance and incorporate techniques that mitigate the impact of lateral loading and temperature on accuracy and repeatability.

Weighline is also ideal for use with load control systems, as its accurate weighing capabilities guarantee that vehicles are loaded to the desired capacity without overloading.

APPLICATIONS



- The gross weighing of trains on mainline tracks running at speeds of up to 110km/h (depending on application and desired accuracy requirements)
- Determining gross, tare and net weights at speeds allowed in shunting yards and sidings
- Recognising mixed types of rolling stock with various numbers of axles – without operator intervention
- Automatically differentiating between wagons and locomotives based solely on the weight of the wagons
- Monitoring train circulation and weights in remote, totally unattended areas, combined with radio frequency AVI for identifying wagons by their number and matching relevant weight data
- Detecting damaging overloaded wagons, axles and wheels
- Detecting imbalanced loads (end-to-end and side-to-side) for safety purposes
- Calculating toll and penalty fees to generate revenue
- Invoicing commercial transactions (OIML Metrology approved)
- Enhancing the transfer of train weight information to a central computer for further processing and analysis

Weighline is part of the industry leading range of products and services offered world-wide by Railweight.

KEY FEATURES



Integrate with any Automatic Vehicle Identification (AVI) system to monitor your entire stock automatically from a head office, terminal, or network hub



Fast and efficient installation process, eliminating the need for expensive civil and rail costs



Improve safety by identifying imbalances and overloading



Reliable and durable, with no moving parts and low maintenance costs



Meets OIML R60 and R106 conformity requirements for trade weighing applications and meet international environmental standards

Technical specification

ACCURACY CLASS (OIML R60)		C
Capacities (E _{max})	kg	1500, 5000, 7500, 12500, 15000
Max no. of divisions		
Minimum load E _{min}	% E _{max}	10
Typical maximum safe overload	% E _{max}	200
Combined error	% R _o	< ± 0.07
Nominal rated output (R _o)	mV/V	0.5
Zero balance	% R _o	≤ ± 1.5
Temperature effect on zero	% R _o /° C	≤ ± 0.01
Temperature effect on sensitivity	% R _o /° C	≤ ± 0.01
Recommended excitation voltage	V	20
Maximum excitation voltage	V	30
Input resistance	Ω	750 ± 10
Output resistance	Ω	700 ± 5
Insulation resistance	MΩ	≥2000
Certified temperature range	°C	-10 to +40
Operating temperature range	°C	-40 to +70
Storage temperature range	°C	-40 to +80
Environmental protection rating		IP 67

For more information or to request a demo, please contact Railweight at:

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