

COUNTING SCALES

BENCH SCALES

FORKLIFT SCALES

CHECKWEIGHERS

CONVEYOR SCALES

RAILROAD SCALES

FLOOR SCALES

TRUCK SCALES

INDICATORS

SOFTWARE

JUNCTION BOXES

SIGNAL PROCESSING

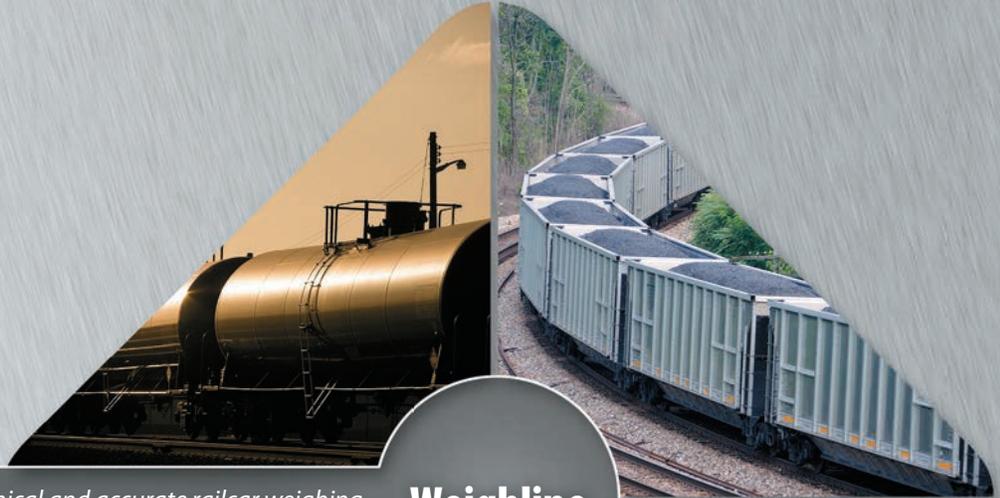
MONORAIL SCALES

PRINTERS

REMOTE DISPLAYS

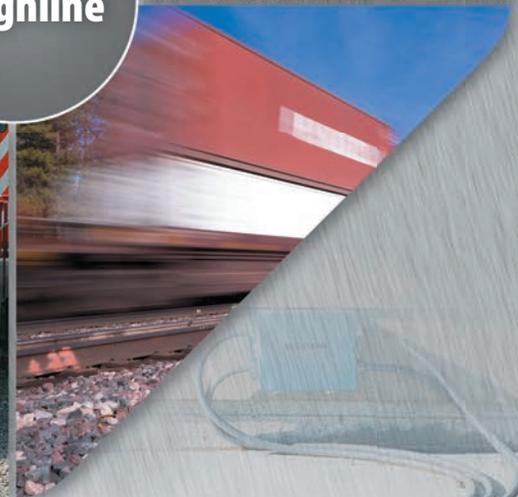
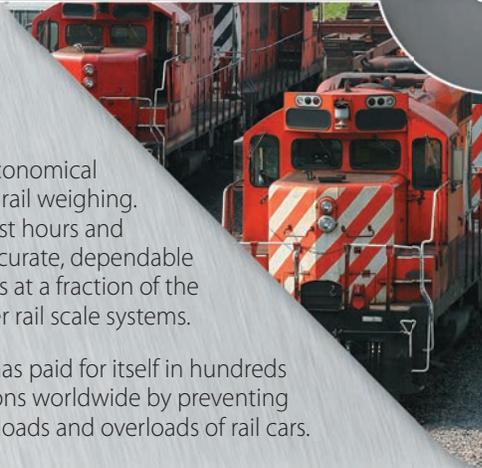
Avery Weigh-Tronix

Avery Weigh-Tronix
Railroad Scales



Simple, economical and accurate railcar weighing

Weighline



A simple, economical solution for rail weighing. Installs in just hours and provides accurate, dependable weighments at a fraction of the cost of other rail scale systems.

Weighline has paid for itself in hundreds of installations worldwide by preventing both underloads and overloads of rail cars.



Avery Weigh-Tronix

Avery Weigh-Tronix

Installs in hours. Weighs, full or two draft. Accepts a variety of indicators, controllers and printers. Expect fast return on investment with Weighline.

The revolutionary, low-cost track scale that ensures proper rail car weights

THE PROBLEM: RAIL CAR CAPACITY

Running balanced rail cars at or near capacity is essential: Underloaded cars mean lost dollars from underutilization and incorrect billing. Overloaded cars can result in rejection or fines by the servicing railroad — or worse, overloading could cause an accident.

THE SOLUTION: WEIGHLINE RAIL SCALE

The Weighline Rail Scale is designed to ensure proper rail car weights; quickly, safely and affordably. It eliminates uncertainties associated with volumetric control methods and variable tare weights.

A New Breed of Track Scale

Weighline is a rugged and reliable railroad track scale that consists of a series of 5'10" rail sections specially prepared and instrumented with strain gauges. Each section of rail is designed to be a weighbridge for a single wheel. Most static applications use multiple Weighline sections so that there is a short weighbridge under each wheel of the car being weighed. Weighline is the only rail scale that can provide total car weights plus weight readings for individual trucks, axles and even wheels.

Accurate Weighing

Weighline is not currently certified as legal-for-trade, but provides more than adequate accuracy for check weighing, process monitoring, record keeping and general safety concerns. In the full draft, static weighing arrangement, accuracies of $\pm 0.25\%$ or better are easily obtained. Two draft accuracy is typically $\pm 0.4\%$ or better. A straight, stable track for one car length will produce the best results.

Standard Weighline scale capacity is 320,000 lbs (full draft) and 160,000 lbs (two draft). Custom Weighline scales with capacities of 20,000 lbs to 1,000,000 lbs are available.

Quick, Low-Cost Installation

Unlike conventional track scales, Weighline installs in a few hours by replacing sections of existing rail and ties. There is no concrete to pour or pits to excavate as in traditional track scales — the scale is mounted on existing ballast and ties. This results in a surprisingly low installed cost and only one day of track downtime.

Weighline sections are welded or bolted into existing track to form a stable weighbridge eliminating the impact associated with conventional scales. Trains not being weighed can move across the scale at normal line speed without damage to the scale.

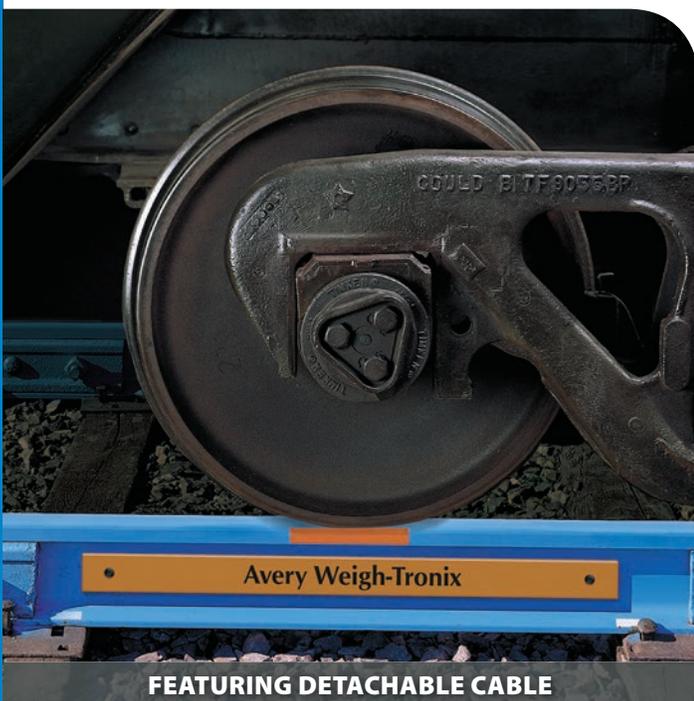
Weighline installs in almost any location that has straight and level track for one car length. Weighline is customarily built on 115 lb/yd rail. It may be connected to other sizes of existing rail by using standard four-hole compromise rail joint bars.

Fits Any Application

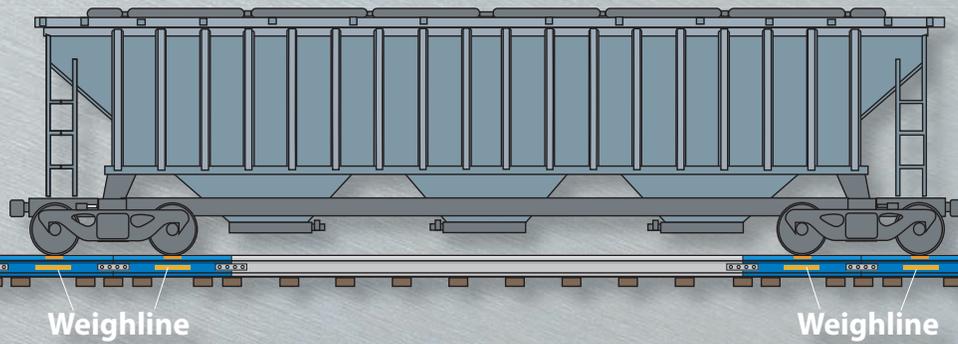
Weighline's inherent versatility makes it a popular choice in virtually any business environment where rail systems are frequently used: recycling/scrap yards, chemical plants, grain elevators, transfer yards, cement plants, hazardous waste facilities, coal mines, sugar processors, refineries, utilities, etc.

Reliability & Craftsmanship

Weighline is built by Avery Weigh-Tronix, well known in the scale industry for remarkably reliable and rugged products. The Weighline rail scale is no exception to this reputation.



Avery Weigh-Tronix Railroad Scales



FULL DRAFT OR TWO DRAFT WEIGHING

Full Draft

The full draft system pictured above uses eight Weighline rail sections. Each rail section supports one wheel of the car. However, only cars with essentially the same car truck spacing can be weighed full draft. This arrangement is generally recommended where most of the cars have the same or very similar truck centers because it is the quickest and most accurate method. Other sized cars must be weighed two draft.

Two Draft

The two draft system uses four Weighline sections. This system weighs the truck on one end of the car and then the other. The indicator adds the two weights together to a total car weight. The two draft system does not allow monitoring of car loading. This is the lowest cost method and can be used as a check scale for all cars with standard trucks.

VERSATILE INSTRUMENTATION

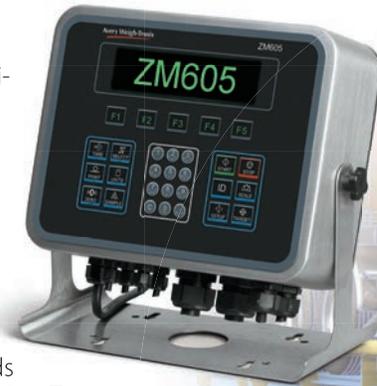
Weighline is available with a variety of instrumentation to suit any application.

ZM605 Weight Indicator

This high performance, multi-function indicator is ideal for us in either static or dynamic weighing applications. Suitable for dusty, wet or high pressure environments, these indicators are ideal for use outdoors and can display, analyze, store, and transmit data across a range of technology methods to meet your specific installation. The 320 by 80 pixel dot-graphic weight display is easy to read in all lighting conditions and can be used to display personalized messages such as user prompts, images and status annunciators.

XR Series Remote Display

Allows clear accurate viewing of scale information from considerable distances via its super-bright LED display technology. Designed for indoor or outdoor use.



Model TM-U590 Printer

The TM-U590 is able to print a wide range of slips and documents. This highly versatile printer can handle slip printing up to 88 columns (using 7 x 9 fonts/half dots), print original slips and up to four copies - and do it all smoothly. The TM-U590 also comes standard with an extended table, so larger slips are inserted flat and fed straight into the printer.





SPECIFICATIONS

Standard Static Configuration

Rail type: 115 lb AREMA (consult factory for other sizes)

Rail length: 70" (1.78 m)

Active weighing length per section: 8" (20 cm)

Mounting*: Direct to existing ties and ballast

Type of weighing: Two draft or full draft

Number of Weighline sections:

Two draft - four, Full draft - eight

Maximum axle load: 80,000 lb (40,000 kg)

Maximum car weight: 320,000 lb (160,000 kg)

Scale division size:

100 lb (50 kg), switchable to 20 lb (10 kg) for calibration

Static accuracy:**

Full draft: $\pm 0.25\%$ or ± 200 lb (100 kg), whichever is greater

Two draft: $\pm 0.4\%$ or ± 300 lb (150 kg), whichever is greater

Operating temperature range:

-20° F to 120° F (-28° C to 49° C)

Temperature compensation: Span and zero

Weight: 230 lb (105 kg) per rail assembly

Options

Non-standard rail sizes: 20 lb/yd - 175 lb/yd

Weighline section capacities: 5,000 lb to 125,000 lb

Scale capacities: 20,000 lb to 1,000,000 lb

Multiple Weighline sections:

Consult factory for specifications for different size and specialized rail cars

* NOTE: Avery Weigh-Tronix recommends track stability to main line standards (maximum deflection 1/4").

** NOTE: Weighline is not currently approved for certified weighing and cannot be used for custody transfer. A straight, stable track for one car length in both directions from the scale will product best results.

Avery Weigh-Tronix

www.averyweigh-tronix.com

Avery Weigh-Tronix is an ITW company



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