WEIGH-TRONIX

Bin, tank and hopper scales

For bins, tanks and hopper—straight weighing or batching. An accurate, easily set up scale system.

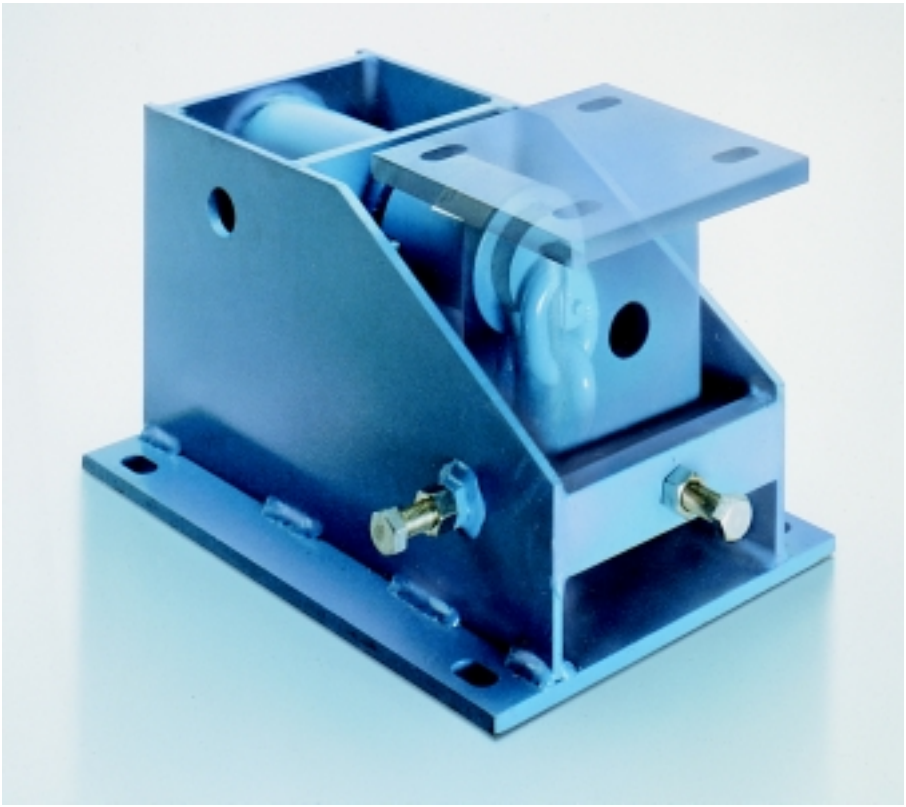
Turn your bins, tanks, hoppers and conveyors into scales.

Are you tired of paying for excess handling of materials, of watching loads hauled from storage bins to distant scales, of inaccurate inventories due to questionable measurement by volume? Is an automated batching system part of your future plans?

Save steps, time and money by converting your existing bins, tanks or hoppers into accurate, dependable weighing systems with Weigh-Tronix Weigh Bars and instrumentation.

Wide selection of Weigh Bars®
Weigh-Tronix weighing systems come in sealable (Class III, 5,000d) and non-sealable (0.25% accuracy) versions with capacities from 125 to 200,000 pounds. Weigh-Tronix offers Weigh Bars for both base-mounted and suspended installations.

Although epoxy paint offers corrosion protection and long life to the Weigh Bars, Weigh-Tronix offers stainless steel versions[1] for specialized food and chemical applications.



Fast, inexpensive installation
The Weigh-Tronix bulk weighing systems can be installed quickly and easily, with minimum disruption of your normal business. There are no stay rods to install, no moving parts to adjust or balance.

Remote weight indication
The digital weight indicator can be installed anywhere you want it, at the weighing site or at a supervisory station up to 400 feet away. In addition, accessory remote displays with large, 4-inch or 6-inch high digits are available.

Minimal servicing costs
Because the system is all electronic, with no shock-sensitive check rods or delicate moving parts to keep adjusted, maintenance is kept to a minimum. This saves you money, not only in service charges, but also in system downtime.

Multiple bin weighing
Optional selector boxes make it possible to monitor several bins, one at a time, with a single indicator.

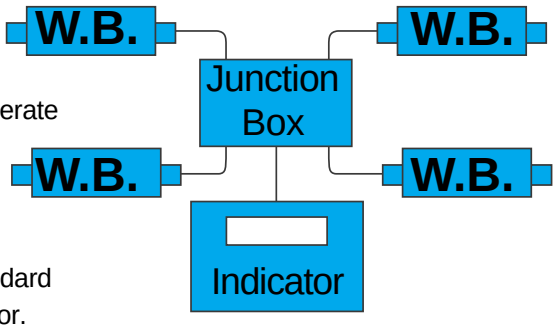
Relays operate gates or valves, automatically
The Weigh-Tronix bulk weighing system can be expanded with optional setpoints. These enable the basic system to control loading or unloading of containers with relays that are activated whenever preset weight readings are reached.

A simple system

A Weigh Bar weight sensor is placed under each leg of the container (or at each suspension point for a hanging installation). As weight is placed on the Weigh Bar, the electrical current running through the bar is changed. The altered current from each Weigh Bar is brought to and combined at a junction box. From here it is carried by an interface cable to the indicator which converts the current to a digital weight display.

In addition to display weight, the indicator can also send signals that operate a variety of accessories.

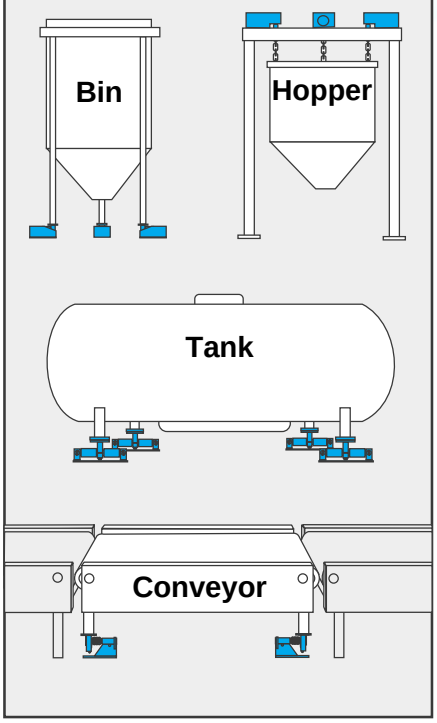
As many as l2 Weigh Bars can be used in a system with the standard Wl-l27 or Wl-130 indicator.



Two-year warranty

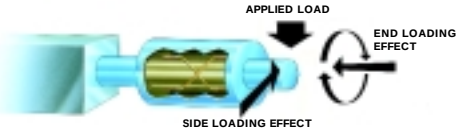
The Weigh-Tronix Automated Bulk Weighing System and all optional and accessory equipment are warranted to be free from defects in material and factory workmanship for 24 months. (Other manufacturers offer only a 3- to l 2-month warranty.) A warranty certificate accompanies each product.

Weigh-Tronix bulk weighing systems install quickly with minimum disruption to your normal business.



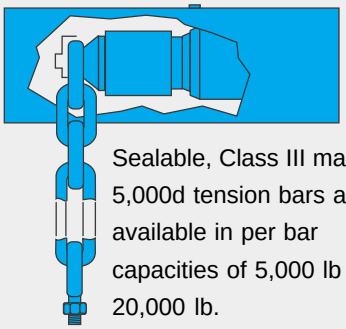
The Weigh Bar Principle

Heart of the system

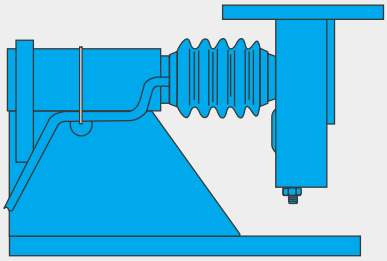


The Weigh Bar is a fully electronic method of weighing loads. A steel bar, fixed at one end, bends while electrical current is run through strain gauges fixed on the top and bottom of the bar. The change in current is translated by the indicator into a weight reading.

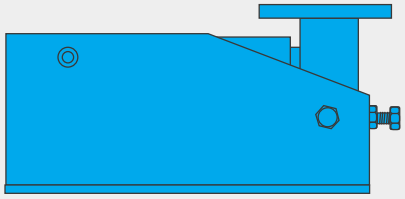
Another important characteristic of the Weigh Bar is that it is designed so that it cancels out the effects of side, end and torsion loads. And, because it is a solid steel bar and the strain gauges are protected by potting compound and a steel “can," the Weigh Bar is tough and reliable as well as extremely accurate.



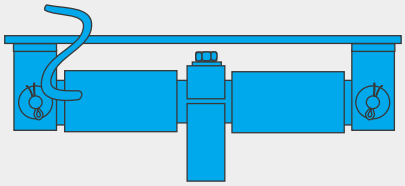
Sealable, Class III max. 5,000d tension bars are available in per bar capacities of 5,000 lb to 20,000 lb.



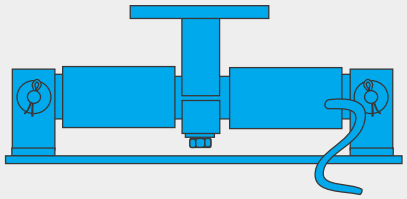
Sealable, Class III max. 5,000d compression bars are available in per bar capacities of 500 lb to 5,000 lb, stainless steel.



Sealable, Class III max. 5,000d compression bars are available in per bar capacities of 125 lb to 50,000 lb.



Non-sealable, .25% tension bars are available in per bar capacities of 250 lb to 25,000 lb.



Non-sealable, .25% compression bars are available in per bar capacities of 250 lb to 200,000 lb.

Options

Remote displays—Provide highly visible, 4" or 6" high numerals of digital readout at any location.

Printers—Pair a ticket or tape printer with Weigh-Tronix Indicators (Gross, Tare, Net version) and use the multiple memory channels to store weight information, and print out totals, subtotals, I.D. numbers, time, and date.

Junction boxes— Sum weight readings from more than one Weigh Bar and transfer this to a weight indicator.

Environmental protection—In the case of harsh environments, stainless steel covers or neoprene boots to protect the Weigh Bars are available for some models.

Specifications

The Weigh-Tronix Automated Bulk Weighing System is a modular system that can be adapted to your specific requirements. Your Weigh-Tronix dealer will prepare a system proposal based on what you expect from the system. Your order will then be turned over to Weigh-Tronix engineers who will use your equipment's dimensional drawings to prepare installation instructions for the dealer. The system you purchase will consist of components with the technical specifications listed below.

Environment:
The Automated Bulk Weighing System is designed to operate without modification in the vast majority of industrial and agricultural environments. Where caustic chemicals are present, batching bar components should be sealed in epoxy or otherwise protected by appropriate measures recommended by your Weigh-Tronix dealer. In addition, Weigh-Tronix offers stainless steel Weigh Bars[1] for food and caustic chemical applications.

Optional enclosures:
The Automated Bulk Weighing System's weight indicator may be ordered with a NEMA 4 watertight stainless steel enclosure. Alternatively, an explosion-proof enclosure may be specified for use in the presence of flammable gases or vapors.

Accuracy and compliance:
When Accuracy Class III Weigh Bars are properly installed according to manufacturer's instructions, the Automated Bulk Weighing System meets the requirements of NIST Handbook No. 44, as applicable to digital weighing systems. Cert. Numbers for sealable Weigh Bars:

87-095 — 125- to 250-lb Weigh Bars
87-090.A3 — 500- to 50,000-lb Weigh Bars

Cable lengths:
Standard length for both Weigh Bar and interface cables is 25 feet. Optional lengths may be specified.

(1) *Chain link assemblies and U-bolt assemblies are nickel plated steel.*

Batching system Weigh Bars (Sealable only):

Recommended excitation voltage: 15V AC or DC

Maximum excitation voltage: 20V AC or DC

Input resistance: 350 Ohms +5%/ -1%

Output resistance: 350 Ohms ±1%

Zero balance: ±1% of rated output

Output at rated capacity:
1.0I5 mV/V or 2.03 ±1%, depending on capacity

Non-linearity (maximum): .02% of rated output

Repeatability: .02% of rated output

Hysteresis (maximum): .03% of rated output

Creep (maximum): .05% of rated output in I hr

Temperature effect on output:
(-10°C to +40°C): ±.04% of rated output at 20°C

Temperature effect on zero balance:
(-10°C to +40°C) 0.7 Vmin/5°C

Safe overloading rating: I50%

Maximum overload rating: 200%

Insulation resistance: $I0^{10}$ ohms

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WEIGH-TRONIX
Weighing Products & Systems

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