



What makes a truck scale, a truck scale?

Foundation

Today, most scales are installed with aboveground or concrete pit foundations. Depending on state or regional requirements, scales can also be installed in a shallow pit, as opposed to the deep pit required by older mechanical scales. A pit installation requires less space than an aboveground scale since longer approaches are generally required for aboveground configurations. However, pit-styles require sump pumps and drains, and are generally more vulnerable to corrosion due to potential standing water.

Weighbridge

The truck scale's body and driving surface is called the weighbridge. Weighbridges are composed of steel or concrete decks, and are typically manufactured in modular designs that are placed together during installation.

Indicator

The indicator, also called a controller or terminal, can display basic weight functions, as well as serve as the command center for a weighing system with advanced programming like truck in/out ID capabilities, and control for the entire truck scale system, including remote displays and printers.

Load Cells

High-quality load cells are vital to truck scale performance. There are various types of load cells, but they all have the same function—to accurately measure weight on the scale. All load cells take an analog measurement, and then that signal is converted to a digital output either at the load cell, junction box or in the scale indicator. Load cells are typically constructed of steel and are integrated within the weighbridge, usually at the corners of each module.

Junction Boxes

A junction box properly manages multiple load cells and weighing systems. By matching the signal of each load cell and summing them into a signal sent to the indicator, junction boxes equalize the system for accurate and reliable weight readouts.

Accessories

Handwriting a ticket for each weighment is time consuming and tedious, and also leaves room for human error. Ticketing kiosks, scale data management software and printers eliminate both problems. Most states require ticket printers, and remote displays, gates, intercoms and other accessories increase truck scale efficiency and safety.

