# Orthotropic Concrete Weighbridge with POWERCELL PDX Technology









## POWERCELL Load Cells

POWERCELL PDX load cells deliver the ultimate in vehicle weighing with unequalled accuracy and reliability. They eliminate all junction boxes and are hermetically sealed for use in the toughest environments. The predictive diagnostics system monitors performance and reports on network health.

## **Orthotropic Design**

Model VTC101 easily handles the forces generated by normal truck traffic, distributing concentrated loads more effectively than standard I-beam deck structures. The robust orthotropic design is similar to those used on the Golden Gate Bridge and many other heavily travelled highway bridges around the world.

## **Lightning Protection**

The specially designed StrikeShield™ lightning protection system helps prevent costly downtime by using multiple levels of protection to safeguard your entire scale system: load cells, cables, and terminal. It is the only system that has been tested by third-party laboratories and withstood multiple lightning strikes.

#### **Proven Performance**

Using the "Module Masher" accelerated-lifecycle test stand, actual scale modules are tested for 1 million cycles with a minimum 60,000-lb dual-tandem-axle live load tire pattern. This is one way we go beyond the competition to ensure that you get the most reliable scale in the industry.



# VTC101 Truck Scale

Model VTC101 is a concrete-deck truck scale with POWERCELL® PDX® technology added as a standard feature. It combines a concrete driving surface with a robust orthotropic understructure similar to those used in our steel-deck truck scales. The composite design draws upon the strengths of both concrete and steel to produce an exceptionally durable structure. It eliminates a common cause of premature deck failure: voids in the deck that occur when pouring concrete around I-beam flanges and sharp corners. As a result, you get a weighbridge capable of handling legal over-the-road traffic throughout a long service life. By combining the strength of an orthotropic weighbridge with the reliability of POWERCELL load cells, this truck scale ensures that you will get years of trouble-free weighing even in the harshest environments.



#### Technical data VTC101 Truck Scale Modular Concrete Deck Weighbridge

#### **Specifications**

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Concrete Thickness	10 in (254 mm)
Scale Widths	9 ff-10 in, 11 ff, 12 ft (3, 3.3, 3.7 m)
Scale Lengths	10 to 140 ft (3 to 42.7 m)
Profile	20 in (508 mm)
Module Lengths	10 ft, 15 ft, 17 ft-6 in, 20 ft, 23 ft-4 in (3, 4.6, 5.3, 6.1, 7.1 m)
Usage	50,000 trucks per year (average 200 trucks per day)
Capacity*	120,000 lb (scale lengths $\leq$ 23 ft-4 in) 200,000 lb (scale lengths > 23 ft-4 in)
Foundation Types	Variable Footer, Beam Slab, or Deep Pit
eMin	20 lb (10 kg)
nMax	10,000 divisions
NTEP Handbook 44 Tested: Concentrated Load Capacity	80,000 lb (36,287 kg)
NTEP Certificate	10-029

\*Note: 200,000 lb is the maximum gross capacity that any truck scale can have

and still maintain 20-lb increments in legal-for-trade applications.



Each scale module is ready to fill with concrete when it arrives at the site. This reduces installation time and the expense of installing rebar or performing other deck preparation on site.

#### Applications

For weighing over-the-road vehicles in a wide variety of above-ground and deep-pit applications, including: Aggregates

- Solid Waste
- Ports
- Forest Products
- Bulk Foods
- Agriculture
- Utilities • Chemicals

Scrap Metals

• Dairy

Features	Benefits
50t POWERCELL® PDX® Load Cells	Stainless steel load cells provide highest accuracy and reliability (IP68/IP69K).
POWERCELL PDX Network	Eliminates junction boxes and monitors network health.
StrikeShield <sup>™</sup> Lightning Protection	Protects your system from lightning damage.
International Intergard® Finish	Protects steel against corrosion even in the harshest environments.
Orthotropic Structure	Exceptionally strong weighbridge meets highest performance requirements.
Concrete Deck	Provides good traction when wet and improved resistance to certain corrosives.

#### **Options:**

- High-Clearance Risers
- Manholes
- Side Rails
- Dolly Landing Pads/Deck Runners
- Blowdown Plates
- DataBridge<sup>™</sup> Vehicle Scale Software
- Unattended Driver Terminals
- Remote Displays





Produced in a

facility that is

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For more information