Orthotropic Steel Weighbridge

Designed, Tested, and Built to Last

POWERCELL Load Cells

POWERCELL PDX load cells deliver the ultimate in vehicle weighing with unequalled accuracy and reliability. They eliminate 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 VTS231 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 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-life-cycle test stand, actual scale modules are tested for 2 million cycles with a minimum 80,000-lb dual-tandem-axle live load tire pattern (equal to 20 years of truck traffic). This is one way we go beyond the competition to ensure that you get the most reliable scale in the industry.

VTS231 Truck Scale

Model VTS231 sets the industry standard for steel deck truck scales and is the ideal choice for a wide variety of vehicle weighing applications. The steel deck is supported by orthotropic ribs that are completely sealed from the elements by automated, continuous welds. By pressure testing every rib, we ensure an airtight seal that eliminates the potential for rusting from the inside, unlike scale designs that sandwich beams between top and bottom plates using intermittent welds. The ribs are shaped to distribute concentrated loads better than I-beam designs, leading to a longer life for your scale. By combining the strength of an orthotropic weighbridge with the reliability of POWERCELL® PDX® load cells, this truck scale ensures that you will get years of trouble-free weighing even in the harshest environments and toughest applications.

OUR TRUCK SCALES ARE BACKED BY THE INDUSTRY’S FINEST SERVICE NETWORK AND MOST POWERFUL 5 YEAR WARRANTY

METTLER TOLEDO
### Technical data

**VTS231 Truck Scale**

**Modular Steel Deck Weighbridge**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Benefits</th>
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</thead>
<tbody>
<tr>
<td><strong>Deck Plate Thickness</strong></td>
<td>5/16 in (8 mm)</td>
</tr>
<tr>
<td><strong>Scale Widths</strong></td>
<td>9 ft-10 in, 10 ft, 11 ft, 11 ft-10 in (3.3, 3.3, 3.6 m)</td>
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<tr>
<td><strong>Scale Lengths</strong></td>
<td>10 to 140 ft (3 to 42.7 m)</td>
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<tr>
<td><strong>Profile</strong></td>
<td>14.5 in (368 mm), 1/4-inch shims nominal</td>
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<tr>
<td><strong>Module Lengths</strong></td>
<td>10 ft, 15 ft, 17 ft-6 in, 20 ft, 23 ft-4 in (3.0, 4.6, 5.3, 6.1, 7.1 m)</td>
</tr>
<tr>
<td><strong>Steel Type</strong></td>
<td>ASTM A-36</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>150,000 lb (scale lengths ≤ 23 ft-4 in), 200,000 lb (scale lengths &gt; 23 ft-4 in)</td>
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<tr>
<td><strong>Foundation Types</strong></td>
<td>Variable Footer, Beam Slab, Shallow Pit, Deep Pit, or Temporary Frame</td>
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<tr>
<td><strong>eMin</strong></td>
<td>20 lb (10 kg)</td>
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<tr>
<td><strong>nMax</strong></td>
<td>10,000 divisions</td>
</tr>
<tr>
<td><strong>Concentrated Load Capacity</strong></td>
<td>100,000 lb (45,350 kg)</td>
</tr>
<tr>
<td><strong>NTEP Certificate</strong></td>
<td>93-108A8</td>
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*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.*

#### Features

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™ Lightning Protection
- Protects your system from lightning damage.

International Intergard® Finish
- Protects steel against corrosion even in the harshest environments.

Top Access to Load Cells
- Makes it easy to perform inspections and maintenance.

Orthotropic Ribs
- Safe, robust, and reliable design provides a long service life.

Steel Deck
- Enables you to start weighing immediately after scale installation.

#### Applications

For weighing over-the-road vehicles in a variety of above-ground, shallow-pit, and deep-pit applications, including:
- **Solid Waste**
- **Mining**
- **Ports**
- **Forest Products**
- **Bulk Foods**
- **Agriculture**
- **Aggregates**
- **Scrap Metals**
- **Utilities**
- **Chemicals**
- **Truck Stops**
- **Dairy**

The orthotropic-rib design ensures that the VTS231 truck scale has no welds in high-stress areas. This greatly reduces fatigue at the welds, a common cause of premature failure in other scale designs.

### Options:

- Multi-Axle Configurations
- High-Clearance Risers
- Manholes
- Side Rails
- Grain Dump
- Dolly Landing Pads/Deck Runners
- Debris Seals
- OverDrive® Vehicle Scale Software
- Unattended Driver Terminals
- Remote Displays
- Temporary Frame
- Portable Option

**www.mt.com/vehicle**

For more information

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