

#### **Concrete Deck Truck Scales**

**Exceptional Strength** 

Proven Performance

**Unequalled Reliability** 

# **Performance through Innovation**

Keeps Your Business Running



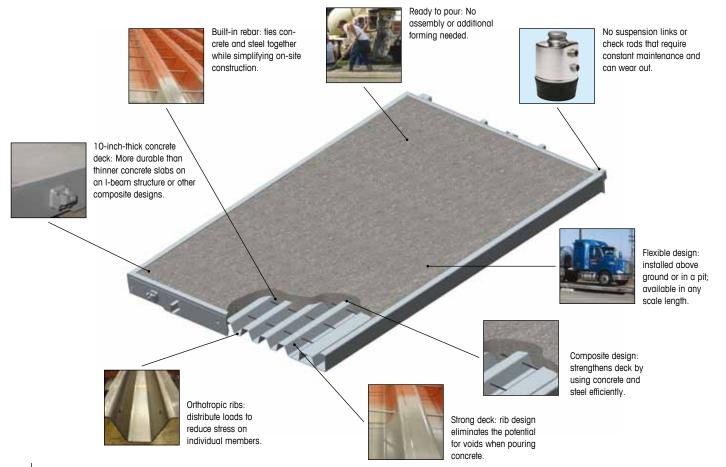
# **Durable Orthotropic Design**Outperforms Other Weighbridges

- Orthotropic design provides exceptional strength and reliability
- Extensive testing ensures proven weighing performance
- Advanced construction techniques deliver the highest-quality products

The METTLER TOLEDO family of concrete deck truck scales offers the benefits of a concrete driving surface reinforced by an orthotropic steel framework. This design combines the superior compressive strength of concrete with the high tensile

strength of steel to provide an exceptionally durable weighbridge that delivers years of reliable service. No other concrete deck weighbridge is so effective at distributing the concentrated loads that can cause conventional I-beam weighbridges to

fail. We supply concrete deck scales with concentrated load capacities (CLC) up to 100,000 lb and in any length you require. This flexibility allows us to custom fit a scale to your application.



#### **Orthotropic Design**

When a highway bridge fails, the results can be catastrophic. Many bridge designers are now turning to orthotropic ribs as a better alternative to older support structures because of the proven strength, reliability, and longevity. Give your weighbridge the same durable orthotropic design that is being used for today's highway bridges. Don't let a failed weighbridge be catastrophic for your business.



Our scales have the same orthotropic design used for many high-traffic roadway bridges.



Modules are robotically welded to meet the highest quality standards.

#### **Quality Construction**

Our world-class manufacturing facility fabricates the highest quality components at every stage of the operation:

- Precision cutting and forming equipment produces highstrength steel components.
- Robotic welding creates strong, consistent welds.
- Precise tolerances ensure accurate and repeatable operations.
  The result is the same high quality for every scale, every time.

#### **Durable Scale Finish**

Three-step finishing process for the steel framework:

- Abrasive blast clean all surfaces to prepare them for painting.
- Coat surfaces with a custom, two-part epoxy finish designed specifically for vehicle scale applications.
- Force cure the finish to create a consistent, protective coating.
   The end result is a durable finish that protects against the corrosion and contaminants that can shorten the life of a scale.



Metal surfaces are coated with a two-part epoxy finish to protect against corrosion.

Our six-step product development process is the most comprehensive design, analysis, and testing program in the industry. It delivers scales with the proven ability to meet the demands of your weighing application. No other manufacturer designs and tests truck scales this thoroughly.

#### Design

We use a three-dimensional computer-aided design (CAD) system to ensure that our truck scales meet the most rigorous design standards. Throughout more than 20 years of CAD modeling, we have refined our designs to offer

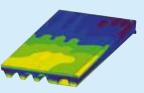
you the best truck scales available. Our engineers continue to use innovative ideas to build on the success of our proven designs.



#### **Analysis**

We use finite-element analysis (FEA) on each design to identify areas of high and low stress. This virtual testing shows how a truck scale design should perform under various loading conditions. By analyzing all areas of the weighbridge, we get

immediate feedback that allows us to make improvements before building a full-size prototype.



#### **Testing**

METTLER TOLEDO is the only manufacturer that goes beyond theoretical design and analysis to test actual scale modules. Our unique Module Masher test stand applies 20 years of truck traffic in 6 to 8 weeks, simulating millions of

weighing cycles at full design load. It gives us valuable performance data that other manufacturers must wait years to obtain.



## 100% Protection

### for Your Truck Scale

Your truck scale is one of the most important investments at your facility. It can function as your cash register, your measure for inventory control, or for verification that you comply with local regulations. Regardless of how you use it, your truck scale should be accurate and reliable while offering you the lowest total cost of ownership. That is why METTLER TOLEDO truck scales are designed to protect you from unforeseen problems and unexpected downtime that can contribute to large, unplanned expenses from service calls.

Let METTLER TOLEDO help you eliminate unplanned expenses. A properly maintained POWERCELL® load cell system is built for 100% protection from the forces that are the leading causes of scale failure. POWERCELL® load cells have stood up to the most extreme forces of nature in truck and rail scales for more than 20 years. Ask about how METTLER TOLEDO POWERCELL® technology and weighbridge designs can help with:

- Scale Accuracy
- Lightning Protection
- EMI/RFI
- Load Cell Failures
- Cable and Junction Box Failures
- Corrosion
- Extreme Temperatures
- Improved Service



POWERCELL® PDX® Load Cell

As the global leader in weighing, we offer a full line of truck scales and accessories to meet your weighing needs. Only one line of truck scales is accurate enough, reliable enough, and durable enough to carry the METTLER TOLEDO name.

#### www.mt.com/vehicle

For more information

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