

# Vehicle Scales



## Load cell system conversions for vehicle scales

Solve performance problems

Reduce maintenance costs

Extend the life of your scale



## Transform Your Vehicle Scale

Convert to Advanced Load Cells

**METTLER** **TOLEDO**

# Experiencing Scale Problems?

## Discover the Permanent Solution

### **Downtime**

Trucks are lined up waiting to use a scale that has malfunctioned again, creating costly delays.



### **Maintenance and repair costs**

As your scale has aged the cost of ownership has risen sharply, requiring a larger budget for repairs each year.



### **Hidden profit losses**

Your legal-for-trade scale gave away an entire truckload of goods last month due to its limited accuracy.



### **Lightning strikes**

A lightning strike caused costly damage to your scale, requiring replacement of load cells and junction boxes, along with recalibration.



### **Load cell failures**

How many load cells have you replaced? Other manufacturers admit that the average life of their conventional load cells is just 3-5 years.

### **Outdated technology**

Your truck scale likely still uses technology developed in the 1980s, making it difficult to calibrate and diagnose problems.

### **Inconsistent weighing**

Chances are, your scale measures the same load differently from day to day, due to the environmental changes and loading variability.

### **Rain, snow and flooding**

Water leaks into junction boxes and other components, requiring yet another service call.

A **POWERCELL® PDX®** system solves these problems and more. Visit [www.mt.com/ConvertToPDX](http://www.mt.com/ConvertToPDX) to see how.

# Converting Your Load Cell System

## How it Works

**Specially designed hardware simplifies conversions for scales from many manufacturers. The installation can be completed quickly, allowing convenient scheduling with limited disruption.**



### 1. Evaluate the scale

Scale technicians thoroughly inspect the scale, including the foundation and weighbridge, to ensure it is structurally sound.



### 2. Remove the old load cell system

Technicians remove old load cells, receivers, cables, junction boxes and other hardware that will be replaced.



### 3. Sandblast and repaint the weighbridge

Removing corrosion from the scale and applying fresh paint is an optional step that protects and prolongs the life of the scale deck to accompany the long life of the new load-cell system.



### 4. Install the POWERCELL® PDX® system

The system includes all new load cells, receivers, premium cabling, StrikeShield™ lightning protection and a powerful scale terminal matched to your application.



### 5. Calibrate for the highest accuracy

Precision adjustments ensure superior weighing accuracy for every load.

## VKR211 Load Cell Conversion Kit

Outdated weighing technologies simply do not perform at the same level as POWERCELL® PDX® load cells. Compare the drawbacks of your existing vehicle scale with the benefits that you get with a POWERCELL® PDX® conversion.

Existing Scale	POWERCELL® PDX® Conversion
Leak-prone junction boxes	Reliable, watertight network with no junction boxes
Hard to adjust to a high level of accuracy	Easy to adjust to the highest level of accuracy
Accuracy varies as environmental conditions change	Digital compensation maintains accuracy
Vulnerable to lightning damage	Proven lightning protection

Load Cell Specifications	
Capacities	50t (110K)
Suspension	Rocker column, compression
Material	Canister: 304 stainless steel Load element: 17-4 PH stainless steel
Environmental Protection	IP68 submersion, IP69K high-pressure spray
NTEP Approval	NIST H44 IIIL-M 10,000d (CC# 08-090)
OIML Approval	R60/2000-NL1-09.08
Lightning Protection	IEC 62305-1; passed laboratory testing at over 80,000 amps



### Powerful Terminals

Improve your weighing operation's profitability with a powerful new vehicle scale terminal. METTLER TOLEDO terminals combine advanced capabilities with simple operation, enabling you to do more with your scale and get it done more quickly.



IND780 scale terminal  
(other terminals available)

### Options

- DataBridge™ Vehicle Scale Software
- Unattended Driver Terminal
- Remote Display
- Printer
- Traffic Control



### VKR211 Conversion Kit

A conversion kit contains everything needed to upgrade a weighbridge to POWERCELL® PDX® technology:

- POWERCELL® PDX® load cells
- Debris shields
- Heavy-duty cables
- Upper and lower receivers
- Mounting plates and pins
- Shims
- Receiver grease
- Connector cleaner



facility that is  
Produced in a





### **A cost-effective improvement**

To extend scale life

Don't feel forced to buy an entirely new scale. Instead, METTLER TOLEDO can modernize the critical components of the scale you already own. This provides a sensible, cost-effective way to ensure you have the performance your business needs, without the large one-time expenditure of an entirely new scale.



### **Comprehensive 10-year warranty**

Protects new components

New load cells are covered by a comprehensive warranty that includes travel, parts and labor. Our extensive service organization provides you with added confidence and an expert partner you can rely on. Ask your local representative for additional details on conversion component warranties.



### **Weighbridge upgrade program**

With your new load-cell system

Replace your scale's weighbridge within 5 years of a POWERCELL® PDX® load-cell conversion, and you won't need new load cells. A new weighbridge can be installed using the load-cell system from your conversion. Enjoy the benefits of advanced load cells now and purchase a new weighbridge only when necessary.

#### **Learn more about vehicle scale conversions**

- Videos: Lightning protection and junction box elimination
- Free white papers: Calibration Accuracy and Proactive Maintenance
- Frequently asked questions
- Return-On-Investment (ROI) calculators

**Visit [www.mt.com/ConvertToPDX](http://www.mt.com/ConvertToPDX)**

**Our VKR211 kits are backed  
by the industry's finest service  
network and most powerful**

**10 Year Warranty**

**[www.mt.com](http://www.mt.com)**

For more information

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