

# Technology Comparison Report

## Truck Scale Performance in Your Industry



Over the past 3 years, we have collected data from the nearly 500 Aggregates sites we service in North America. See below results and consider how your truck scale would compare, you might be surprised.

### 1. Application Statistics: Raw Materials Facilities

- 82% report 100 trucks or less per day
- 43% concrete v. 57% steel deck
- 65% report a scale length of 70ft.

### 3. Load Cell Replacement Statistics

On average, owners of analog truck scales will replace **5X's more load cells** than owners of POWERCELL PDX truck scales over the life of the equipment.

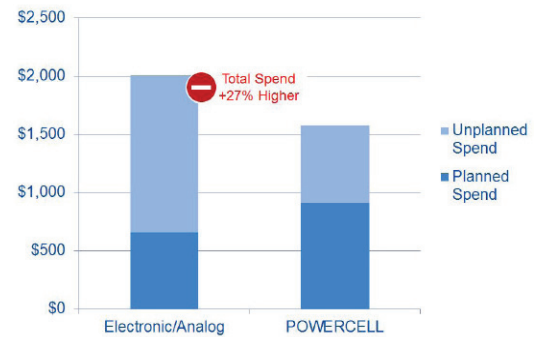
#### POWERCELL PDX for 5X'S Better Performance



### 2. Hidden Scale Costs

Truck scale expenses fall in two major buckets: planned preventative maintenance and unplanned break fixes. For Aggregate operations, choosing analog can mean spending **+27% more** on every scale.

Annual Planned v. Unplanned Spend per Scale (USD)



### 4. Are You Certain About Your Scale Accuracy?

The below accuracy table is based on 1,853 service records from the past 3 years. Have you considered how inaccurate your scale could be? (calculations based on 100 trucks per day, 6 days a week)

Scale Technology	% Outside Legal Tolerance	Accuracy Range (95%)	Shrink Per Day	Lost Profit per Day	Lost Profit per Month	Lost Profit per Day	Lost Profit per Month
		12t test load	40t GVW	Crushed Stone (\$20/ton)	Cement (\$100/ton)		
POWERCELL Load Cell	9%	+/- 100 lb	+/- 17 tons	+/- \$340	+/- \$8,160	+/- \$1,700	+/- \$48,800
Analog Load Cell	26%	+/- 280 lb	+/- 47 tons	+/- \$920	+/- \$22,080	+/- \$4,600	+/- \$110,400
Mechanical Conversion	22%	+/- 662 lb	+/- 109 tons	+/- \$2,180	+/- \$52,320	+/- \$10,900	+/- \$261,600

# Case Study: Aggregates Provider

From Statistically Speaking, to Reality



While group statistics can tell a compelling story about an overall population, it is often a **real customer example** that can be most impactful at demonstrating how our superior products can positively impact your business. For one Aggregates provider with locations all over North America, the numbers tell a clear story.

During a review of several locations, it was determined that the over the 5 years of recorded services this company had **spent 12X's more** on their competitive scales than on their METTLER TOLEDO equipment.

*"It was eye opening to see just how drastically different the numbers were from location-to-location" said the regional operations manager, "the sites run similar amounts of trucks per day, so this was **clearly an equipment issue** rather than an environmental issue. After seeing this, I don't know why we would continue with any other supplier than METTLER TOLEDO."*

	Scale Manufacturer	Load Cell Type	5 Year Repair Spend per Scale	5 Year Total of Load Cells Replaced per Scale
Site 1	Competitor	Analog	\$34,450	10
Site 2	Competitor	Analog	\$22,100	5
Site 3	Competitor	Analog	\$45,100	8
Site 4	Competitor	Analog	\$47,400	9
<b>5 Year Total Repair Spend Competitive Scale</b>			<b>\$149,050</b>	<b>32 Load Cells Replaced</b>
Site 5	METTLER TOLEDO	POWERCELL	\$9,350	0
Site 6	METTLER TOLEDO	POWERCELL	\$1,100	0
Site 7	METTLER TOLEDO	POWERCELL	\$2,100	0
<b>5 Year Total Repair Spend METTLER TOLEDO Scales</b>			<b>\$12,550</b>	<b>No Load Cells Replaced</b>

## Methodology

METTLER TOLEDO's North American service organization provides state Weights & Measures legal-for-trade calibration testing, stamping and sealing services for over 6,000 truck and rail scales. Additionally, we follow both NIST Handbook 44 and Measurement Canada requirements for re-certification and test tolerances of installed scale systems. Over the last 3 years our direct service organization has completed over 35,000 truck and rail scale calibration tests. This calibration data has been collected and analyzed to provide you with the results that are found in this document.

Accuracy tests are made with certified test weights, typically 20,000 to 25,000lb, first checking the scale accuracy "As-Found" in operation. The scale is tested by section, or at each pair of load cells and in the center. As-found accuracy compares the certified test load to Handbook 44 maintenance tolerances, or allowable error.

The large database of certified As-found test results allows MT to compare long-term performance of truck and rail scales by load cell technology, manufacturer, or scale type with statistical certainty.

## METTLER TOLEDO Service

### METTLER TOLEDO

30299295



USA  
1900 Polaris Parkway  
Columbus, Ohio 43240  
Tel. (800) METTLER  
Fax (614) 438-4525



Canada  
2915 Argentia Road, Unit 6  
Mississauga, Ontario L5N 8G6  
Tel. (800) METTLER  
Fax (800) 786-0042

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

For more information