Unattended Weighing
Saves Time and Money

As operating costs rise, power generators are looking for innovative ways to increase efficiency. By supplying a complete unattended weighing system, METTLER TOLEDO helped a Canadian power generation company save both time and money.

With a regional network of power plants, the company supplies electricity to more than 360,000 customers in Canada and to utilities in the northeastern United States. To comply with the latest environmental regulations, the company recently refurbished a 1,000-megawatt generating station in eastern Canada. The changes will extend that plant's operating life by 25 years.

The upgrade at the generating station included adding a flue gas desulphurization (scrubber) system and electrostatic precipitators that capture fine particles. The scrubber system requires about 200,000 tons of limestone per year as a reagent and produces gypsum as a by-product.

The new environmental systems significantly increased the amount of truck traffic at the generating station. Trucks deliver limestone to the facility and ship gypsum to customers or disposal sites. Instead of routing the trucks to another location for weighing, the company wanted a more efficient on-site weighing operation. The solution was a METTLER TOLEDO steel-deck truck

METTLER TOLEDO

scale with unattended terminals and OverDrive™ vehicle scale software.

Weighing Process

Each truck driver uses an RFID proximity card to gain access to the facility and to identify the truck and the material it is hauling. Because the vehicle information includes a tare weight, the trucks do not need to be weighed twice. The trucks are weighed when full, and the tare weight is used to calculate the net weight of the material. A driver is able to complete a single-pass weighing transaction at the unattended terminal without leaving the truck's cab.

When the transaction is completed, the terminal prints a receipt ticket automatically and a traffic light signals the driver to exit the scale. The unattended terminals are designed to withstand the rugged environment and to meet Canadian Weights & Measures regulations.

OverDrive software provides a reliable and powerful weighing management system for the generating station. Information about trucking companies and materials can be preprogrammed so that it is entered automatically when a truck is weighed. The software uses that information to create a complete transaction record for each truck that is weighed and stores the records in a secure database. It also allows custom formatting of driver tickets and compiles reports that are used to verify billing and conduct operational analysis.

Customer Benefits

Before installing the new scale, the generating station used a scale that was owned by another company and located off-site. The on-site scale with unattended weighing capabilities benefits the facility in several ways:

• Weighing on-site saves time and money compared with driving several miles to a remote scale.

• Unattended terminals enable weighing 24 hours per day, 7 days per week, without a scale operator. The system easily handles peak loads of weighing 60 to 70 trucks per day.

• RFID proximity cards with pre-programmed information improve data reliability.

• The OverDrive database provides improved data security and accountability.

By using an unattended vehicle weighing system, the company has simplified the transport of materials needed for the environmental upgrade at its generating station. As companies look for cost savings and flexibility in their weighing processes, they are turning to unattended systems combined with vehicle weighing software. OverDrive software is flexible enough to meet the needs of a variety of industries.

Unattended terminals allow drivers to weigh materials 24 hours per day, 7 days per week.

Weighing Vehicles
without a Scale Operator

Truck drivers can complete their own weighing transactions in seconds with an unattended scale terminal. Equipping a scale with one of these terminals makes it possible to weigh trucks at any time without having a scale operator on duty.

Unattended driver terminals keep traffic moving over scales by allowing drivers to process their own transactions in seconds.

The terminals are ideal for scales in remote locations, scales that operate 24/7, and facilities with multiple scales. They can be set up to work in conjunction with traffic lights, gates, and other peripheral equipment to manage traffic flow.

Increased Efficiency
Unattended weighing can make an operation more efficient:

• It eliminates the need for a scale house and operator.
• It weighs trucks quickly to keep traffic moving.
• It allows efficient 24/7 operation.
• It lets drivers get tickets without leaving their trucks.
• It can control gates to restrict access to a facility.

Rugged Design
METTLER TOLEDO unattended scale terminals have rugged enclosures that are designed for use in the harshest environments. They provide protection against rain, snow, dust, and tampering. An optional heater can be installed to keep printers and other internal components working in freezing temperatures. An optional fan provides active cooling in hot environments.

Completing a weighing transaction can be as easy as using a magnetic or proximity card to identify a truck. You can program scale software to link the card to all the information that is needed for a transaction. In other cases, you might want to require drivers to enter additional information.

Software Options
The software used to run the terminal can be customized to meet your facility's needs. For basic applications, terminals can be preloaded with inbound/outbound vehicle weighing software. For more advanced applications, we offer OverDrive™ vehicle scale software. This fully configurable software provides complete control of weighing operations with extensive data management capabilities.

Communication
Unattended scale terminals can be equipped with a variety of systems for entering data and communicating:

• Card or badge reader
• QWERTY keyboard
• Voice intercom
• Ticket printer
• SmartPass® truck tag ID system
• Wireless communication with nearby building

Unattended scale terminal

OverDrive Software
Now Offers Invoicing

Simplify billing procedures for your weighing transactions by using our vehicle scale software to handle your invoicing needs.
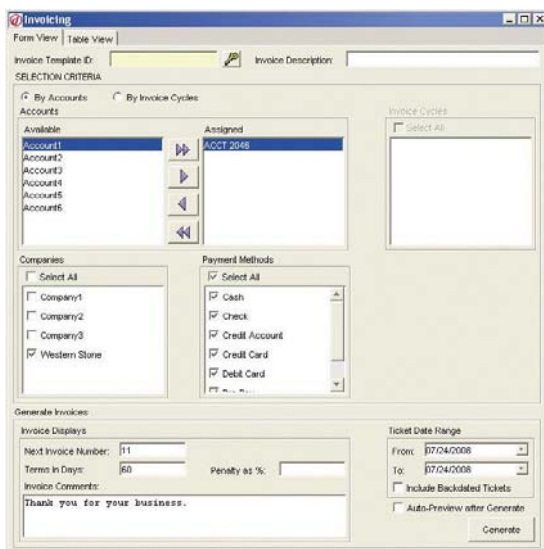
OverDrive™ software is now available with an optional invoicing module. It simplifies billing by enabling you to generate invoices directly from the OverDrive database. There is no need to export data for use in a separate invoicing software package. OverDrive software streamlines your operation by handling everything from recording vehicle weights to generating invoices and compiling reports.

An easy-to-use invoicing screen lets you choose how the invoices will be generated: for all accounts, for individual accounts, or for invoice cycles. Invoice cycles are groups of accounts that are billed weekly, monthly, or on any basis you specify. After choosing the accounts to be billed, select a date range and click the Generate button. OverDrive software does the rest, automatically generating invoices for the desired transactions.

In addition to generating invoices, the software gives you extensive capabilities for managing them:

• Print - You can view invoices, print paper copies, or create electronic files.
• Lock - You can lock the final version of an invoice so that it cannot be changed.
• Remove - If changes are needed, you can delete unlocked invoices and generate new copies.
• Purge - You can delete older invoices from the database.

With its built-in invoicing capabilities, OverDrive software makes business operations more efficient. There are no software compatibility problems to worry about because data does not need to be exported to other packages. By letting one software package do it all, you can handle your billing quickly and reliably.

The OverDrive invoicing screen makes it easy to generate invoices.

Invoice

BILL TO: ACCT 2046
Global Construction
5664 First Street
Columbus, OH 43285

Invoice #: 10
Invoice Date: July 24, 2008

Ticket #	Date	Carrier	Vehicle	Company	Net Weight	Unit Price	Net Price	Tax/Fees	Total Price
Product:	144	Medium Stone Fill							
12	July 24, 2008	Carrier 4	215	West Stone	18460 lb	$11.85 / t	$109.38	$5.47	$114.85
17	July 24, 2008	Carrier 4	926	West Stone	46980 lb	$11.85 / t	$278.36	$13.92	$292.28
				Sub Total:	65,440.00 lb		$387.74	$19.39	$407.13
Product:	279	Heavy Stone Fill							
11	July 24, 2008	Carrier 4	114	West Stone	24280 lb	$15.00 / t	$182.10	$9.10	$191.20
20	July 24, 2008	Carrier 4	868	West Stone	26880 lb	$15.00 / t	$201.60	$10.08	$211.68
21	July 24, 2008	Carrier 4	926	West Stone	55660 lb	$15.00 / t	$417.45	$20.87	$438.32
				Sub Total:	106,820.00 lb		$801.15	$40.05	$841.20
Product:	427	#2 Crushed Stone							
13	July 24, 2008	Carrier 4	345	West Stone	31820 lb	$8.50 / t	$135.24	$6.76	$142.00
22	July 24, 2008	Carrier 4	345	West Stone	62340 lb	$8.50 / t	$264.95	$13.25	$278.20
				Sub Total:	94,160.00 lb		$400.19	$20.01	$420.20
Product:	513	#1A Crushed Stone							
14	July 24, 2008	Carrier 4	631	West Stone	7440 lb	$12.75 / t	$47.43	$2.37	$49.80
18	July 24, 2008	Carrier 4	215	West Stone	38900 lb	$12.75 / t	$247.99	$12.40	$260.39
23	July 24, 2008	Carrier 4	957	West Stone	39240 lb	$12.75 / t	$250.16	$12.51	$262.67
				Sub Total:	85,580.00 lb		$545.58	$27.28	$572.86
Product:	681	#3 Crushed Stone							
15	July 24, 2008	Carrier 4	957	West Stone	19560 lb	$11.00 / t	$107.58	$5.38	$112.96
16	July 24, 2008	Carrier 4	868	West Stone	15980 lb	$11.00 / t	$87.89	$4.39	$92.28
19	July 24, 2008	Carrier 4	631	West Stone	32340 lb	$11.00 / t	$177.87	$8.89	$186.76
				Sub Total:	67,880.00 lb		$373.34	$18.66	$392.00
				Invoice Total:	419,880.00 lb		$2,508.00	$125.39	$2,633.39

Thank you for your business.

Sample invoice

MTX Load Cells
for Reliable Vehicle Weighing

With more than 600,000 in service worldwide, POWERCELL MTX load cells have a proven history of accurate and reliable performance in the toughest environments.

MTX load cells are designed to operate reliably in all climates, from the tropics to Antarctica (McMurdo Station, Antarctica, shown).

The MTX® load cell uses proven POWERCELL® technology that provides the ultimate in weighing for trucks and rail cars. In addition to weighing accurately in all types of climates, it operates reliably over a long service life. The result is a heavy-capacity load cell that delivers the best value for your money by meeting the real-world demands of vehicle weighing.

Reliability

Every minute that a scale is not able to operate means lost revenue. MTX load cells are designed to keep your scale running by preventing problems and by helping to solve them if they do occur:

• Solid Construction – The durable stainless steel load cell performs in the toughest environments. It is hermetically sealed to protect the internal electronic components from damage in wet or corrosive conditions. The water-tight enclosure is rated IP68/69K to withstand continuous immersion and power washing.

• Debris Protection – A pliable boot keeps dust and debris from collecting around the load pin. That allows the load pin to move freely, helping to maintain the scale's weighing accuracy.

• Lightning Protection – The load cell has built-in transient voltage suppressors that protect against costly damage due to lightning strikes and power surges. It is a key part of our four-stage lightning protection system, which also includes double-shielded cables, current-blocking junction boxes, and a single-point grounding kit. The system was tested by an independent laboratory to simulate a 10,000-amp lightning strike.

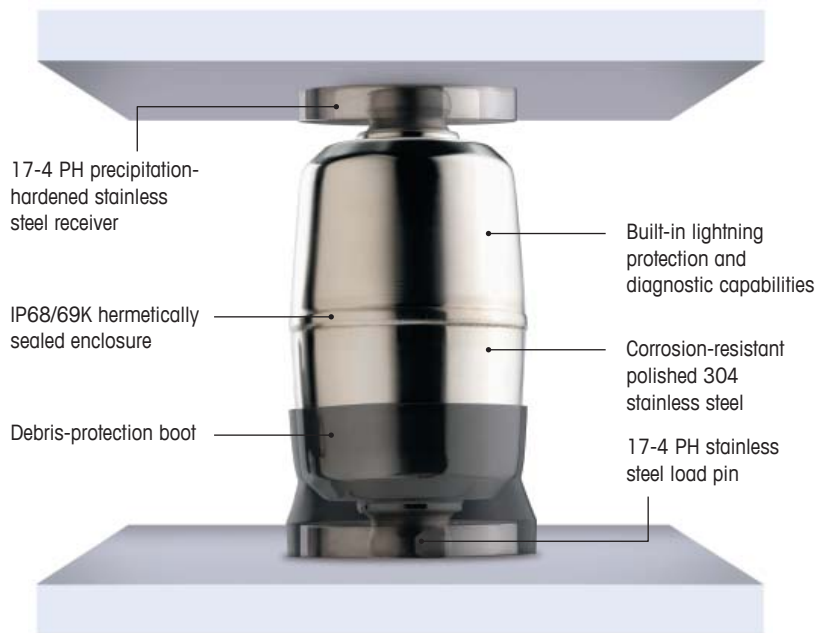• Self-Diagnostics – Each load cell calculates and transmits a weight 15 times per second. If there is a weighing error, the load cell notifies the scale operator instantly, allowing maintenance personnel to pinpoint the problem and get the scale back in service quickly.

Exceptional Value

When selecting a load cell, consider its total cost of ownership. In addition to the initial purchase price, factor in the cost of downtime, maintenance, service, and lost inventory. Any initial savings from buying economy load cells are eaten up by the increased cost of upkeep. By providing the most reliable heavy-capacity weighing in the industry, MTX load cells give you the best value over your scale's life.

17-4 PH precipitation-hardened stainless steel receiver

IP68/69K hermetically sealed enclosure

Debris-protection boot

Built-in lightning protection and diagnostic capabilities

Corrosion-resistant polished 304 stainless steel

17-4 PH stainless steel load pin

MTX POWERCELL Load Cell

Tailored Service
to Protect Your Investment

METTLER TOLEDO vehicle scales are designed for years of dependable operation. But constant use and exposure to harsh environments can affect any scale's performance. To get the most out of your investment, make sure that your scale is installed, calibrated, and maintained by experts.

Installation and Configuration

Our project managers coordinate all the work, equipment, and contractors needed to install your vehicle scale cost-effectively. We make sure that your scale is installed properly, ready on time, and meets specifications.

Calibration Certification

We help you maintain weighing accuracy by testing your scale periodically to ensure that it meets manufacturer's specifications and all industry and legal standards. Our calibration certificates document regulatory compliance.

Proactive Maintenance

A vehicle scale is a significant investment, and its dependability is critical to your facility's productivity. We can provide the factory-specified maintenance needed to keep your scale weighing accurately and safely.

Our ServiceXXL program includes an extensive range of services to help you preserve the value of your investment. Let us tailor a service agreement that meets the needs of your business.

Service**XXL**
Tailored Services

Our service technicians provide scheduled maintenance and emergency repairs to keep your scale operating.

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www.mt.com/ind-utilities

For more information