

# Transport & Logistics

All the Measurements You Need



# 9 News

## No More Rejects High Read Rates at High Speeds

**How many parcels are rejected by your sorter because the barcode couldn't be read or the parcel couldn't be measured? At high speeds, reducing the number of rejects is crucial to optimizing sorter productivity.**

If only all packages were square, brown boxes with perfectly printed labels, data capture optimization would not be a concern. However, because you deal with objects of different shapes and sizes with a variety of colors and wrappings, it is important to make sure that your dimensioning, weighing and barcode-reading equipment is up to the challenge. The latest data capture equipment has the ability to handle a wider variety of package types and materials at high line speeds than ever before.

Each parcel that has to be redirected due to an unread barcode or unmeasured parcel decreases sorter throughput.

A parcel that is successfully read the first time typically gets sorted out halfway through the sorter. However, an unprocessed parcel sent around again for a second attempt uses four times the sorter capacity, significantly reducing your sorting throughput.

High-speed dimensioning, weighing and scanning (DWS) system with top-line components offer you read rates that others just can't beat. These combination data-capture systems provide between 96 and 100% dimensioning read-rates and 99% barcode read rate for optimum revenue recovery and efficiency.



**METTLER TOLEDO**

Combination DWS systems provide dimensions, weight and barcode information in one data string. Each component captures its data. This is then stored, merged and transferred using data-management software. By combining the right components using the latest and greatest

technology, you can ensure highest possible system performance.

You should look for:

- Dimensioners that can accurately measure any shape and surface type over any conveyor,
- Scales that meet your throughput requirements and that are rugged enough for use in a high-speed environment, and
- Barcode readers or cameras that can read poor quality or damaged codes.



**High-throughput Scales**

Our new high-speed dual scale offers high performance in tough site conditions, even on mezzanines. Robust design and advanced filter technology compensate for environmental disturbances ensuring accurate weighing in the toughest environments.



**All-surface Dimensioners**

When put to the test against other dimensioners, the CSN950 regularly outperforms when it comes to measuring difficult-to-read parcels. Black and blue surfaces are notoriously difficult. The large optics of the CSN950 handle these with ease.



**Fail-safe Camera Reading**

The newest high-speed camera tunnels achieve an up to 100% read rate by performing a 360-degree parcel check. Patented lighting technology provides clear, crisp high-definition images from one to six sides at high line speeds.

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**New Industrial Weighing Catalog**

Find Your Required Solution with Our Full Product Portfolio

► [www.mt.com/ind-catalog-tl](http://www.mt.com/ind-catalog-tl)



## High-speed Dimensioning, Weighing and Scanning

METTLER TOLEDO DWS systems offer:

- High-speed data capture
- Maximum throughput
- Highest possible read rates
- Almost no rejects
- Seamless sorter communication
- Plug-and-play integration
- Low cost of ownership

Combine accurate high-speed barcode readers with best-in-class dimensioners and robust, high-throughput scales. When you do, almost no parcel passes unread. Advanced data-management software merges data from all components for fast, efficient, seamless communication with the sorter and its systems.

► [www.mt.com/DWS-tl](http://www.mt.com/DWS-tl)

## Your Key to Productivity? Selecting the Right Dynamic Scale

**High-speed weighing can be challenging but it needn't slow you down. To maintain throughput, look for technology and design features that keep your high-speed lines running smoothly.**

While read rate is crucial to barcode processing and dimensioning, throughput is key to weighing. Selecting the right scale can ensure you meet your organization's throughput requirements.

### 1. Review your speed requirements

The faster your scale runs, the more parcels you can process. First, determine how fast the scale needs to operate to keep up with your sorter and throughput requirements. The most advanced dynamic scales run at speeds of up to 3 meters per second. Throughput speeds also affect load-cell technology requirements. The higher the throughput, the less time there is to weigh each package, making stabilization times a critical consideration.

### 2. Select the right scale size

The longer the parcels, the faster the conveyor must move to maintain throughput. Using a shorter weighing belt where possible helps to minimize conveyor speed while maintaining optimal throughput.

### 3. Consider a dual-scale solution

Parcels come in all shapes and sizes – and weighing belts must be as long as the longest parcel. However, using a single long weighing belt can negatively affect throughput. A scale with two weighing belts of different lengths offers a solution to this. Small parcels are weighed on the smaller scale and long parcels are directed to the longer one, helping to maintain highest possible throughput.

### Use a flexible weighing point

The flexible weighing point at the outset is how a dual scale determines which belt to use. Software uses parcel length and conveyor speed to calculate each individual parcel's optimal weighing time and belt position to keep scales working swiftly and accurately. The same placement optimization software can also be used on a single scale solution. Used on a single scale, the software has been shown to increase throughput by up to 30%.



### ICS469 Cargo

Cost-effective dynamic weighing with reliable performance



#### Essential Performance

Reliable, cost-effective dynamic weighing

### XE40/100 Cargo

High-speed, high accuracy dynamic weighing



#### High Speed

Speeds up to 180 m/min  
Fast data communication

#### High Accuracy

Accuracy in all conditions

### XS100 DualScale

High performance, high throughput weighing with exceptional robustness



#### High Speed

Speeds up to 180 m/min  
Fast data communication

#### High Throughput

Two weighing belts  
Flexible weighing point

#### Robust Design

Sturdy frame and feet  
Stiff, lightweight conveyor body

<b>Flexible Weighing Point</b>	-	Yes	Yes
<b>Dimension &amp; Barcode Merging</b>	-	Yes	Yes
<b>Advanced Filter Technology</b>	-	Yes	Yes
<b>Multi-Lingual Terminal</b>	Yes	Yes	Yes
<b>Advanced Operation Modes</b>	-		Yes
<b>Delivered with Dimensioning &amp; Barcode Reading</b>	Optional	Optional	Optional
<b>Speed</b>	100 m/min	180 m/min	180 m/m
<b>Throughput</b>	Up to 7 200 pcs/h	Up to 11 000 pcs/h	Up to 18 000 pcs/h
<b>Accuracy</b>	5–20 g	2–5 g	50–150 g*
<b>More Information</b>	<a href="http://www.mt.com/ICS469-Cargo-tl">www.mt.com/ICS469-Cargo-tl</a>	<a href="http://www.mt.com/XE-Cargo-tl">www.mt.com/XE-Cargo-tl</a>	<a href="http://www.mt.com/XS-DualScale-tl">www.mt.com/XS-DualScale-tl</a>

\*Depends on single or dual scale configuration and weight of load

# Save Time, Money and Space

## Switch to Forklift Scales

When time is money and space is a logistics company's most valuable asset, both must be optimized wherever possible. Making the move from floor scales to forklift scales is an easy way to speed up pallet handling and save money and space.

### Save Five Minutes per Pallet



#### Reduce Transport Time

Weighing pallets using a floor scale often means going out of your way. With a scale installed on your forklift, you skip the extra trip. Weight is captured as the pallet is transported to its loading or storage location, significantly reducing transport time.

### Save \$500 in Labor Costs per Day



#### Optimize Labor Resources

Speeding up pallet weighing allows you to increase capacity and revenue. Additional cost savings are realized through optimization of labor resources and a reduction of used energy when forklifts do not need to be driven to a dedicated weighing station.

### Save 50 Meters of Transport per Pallet



#### Win Floor Space

Stationary scales take up permanent floor space and require dedicated paths to and from the weighing station. Forklift scales can be used during regular loading and transport runs, significantly reducing the space needed and distance traveled to weigh pallets.



## **VFS120 Benefits**

### **Low Cost of Ownership**

- Minimal maintenance, built to last-  
Tough and Reliable
- Keeps working when other scales  
break down

### **Designed for Safe Operation**

- High visibility window for safe  
loading & driving

### **Accuracy over Time**

- Holds calibration for one year  
without adjustment

## **Robust and Rugged Unbeatable Forklift Scales**

METTLER TOLEDO forklift scales have raised the bar for on-board weighing in tough industrial environments. Rugged design combined with a three-point suspension helps the scale to keep its calibration for 12 months, withstanding bumps, knocks and even crashes.

A large safety window allows the driver to safely position, load and transport pallets. The scale's simple hang-on design makes it possible to install it on almost any forklift truck.

► [www.mt.com/VFS120-tl](http://www.mt.com/VFS120-tl)

## Recover More Revenue Get All the Data on Pallets

**Most transport companies weigh pallets for transport, while others dimension them or take a picture too. However, combining all these data sources takes your pallet handling to a higher level of measurement accuracy and profitability.**



### 1. Start with weighing basics

There is no reason not to weigh when a scale can be installed on the forklift truck used to transport it. Profitable logistics starts with pallet weight to ensure you get paid properly (and do not overload your vehicles).

### 2. Get paid for space

If you don't dimension, chances are you are not getting paid properly for storage space. Transport providers lose the most money on big, bulky freight. Space cre-

ates huge revenue potential for companies that either charge by weight alone or have a set pallet price. Pallet dimensioning can be used for dimensional weight pricing and revenue recovery or density classification.

### 3. Have the right pricing structure in place

A switch to dimensional weight pricing drives efficiency in packing and handling for environmental gains. Your operations department will benefit as a whole

and quickly learn to identify the pallets that have the best potential for revenue recovery.

### 4. Use cameras for quality

Quality control is achieved by adding cameras to your system. Taking a picture of each pallet helps to track if and when damage occurred. This information can help with customer communication, damage claims or disputes.



Automatic dimensioning for revenue recovery



Mobile dimensioning for ugly freight



Cameras take a picture of every pallet



**5. Use mobile dimensioning for ugly freight**

Mobile dimensioners add flexibility to pallet handling. These hand-held devices can be used at any stage of operation to quickly record pallet dimensions. They can be used to quickly check the dimensions of ugly freight that is not easily transported on a pallet.

**6. Benefit from a fully integrated solution**

The best way to automate pallet data cap-

ture and improve handling efficiency is to have one solution that does it all. A single solution that combines a dimensioner, scale, barcode reader camera and is seamlessly interfaced with an additional hand-held device with the right data-management software offers transport providers all the information they need for profitable, efficient logistics.

► [www.mt.com/CSN870-tl](http://www.mt.com/CSN870-tl)

## Recover \$75 000 More Each Month Accurately Measure Any Pallet

**The importance of read rate on an automatic conveyor line is well documented – but it’s not just parcel operations that benefit from best-in-class dimensioners. No matter what you measure, make sure you capture all your data with ease.**

We regularly talk about read rate on an automatic sorting line, as any object not read first-pass requires additional handling, directly impacting efficiency and operational costs. Although operations in freight terminals are more manual by nature, the ability of your dimensioner to measure all shapes and surfaces still has a clear effect on both productivity and revenue.

### Why dimensioners fail

Dimensioners often struggle with freight that is covered with reflective wrapping or

has a dark, dull surface. Shiny surfaces reflect light and can “blind” the dimensioner. Dark surfaces absorb light and can make it difficult for the dimensioner to “see” enough light to make an accurate measurement. If your dimensioner can’t read a pallet, that pallet may go unmeasured if the operator doesn’t have time to measure it. Each pallet that goes unmeasured represents unrecovered revenue.

### Unread pallets = lost profits

If a freight carrier sends 500 pallets a day and 10 percent of those go unread by the

dimensioner, it can be costly. If the average revenue recovered on each pallet is \$60 dollars, that amounts to \$3,000 per day, which quickly adds up to \$75,000 per month. It is easy to understand the impact this loss would have on a company’s annual profits.

The fewer limitations your dimensioner has, the more revenue you recover. METTLER TOLEDO dimensioners provide best-in-class read rates by using the largest optics and most precise laser technology in the industry. If you handle black, shiny items or pallets wrapped in dark or clear plastic, make sure your dimensioner can, too.

► [www.mt.com/CSN870-tl](http://www.mt.com/CSN870-tl)



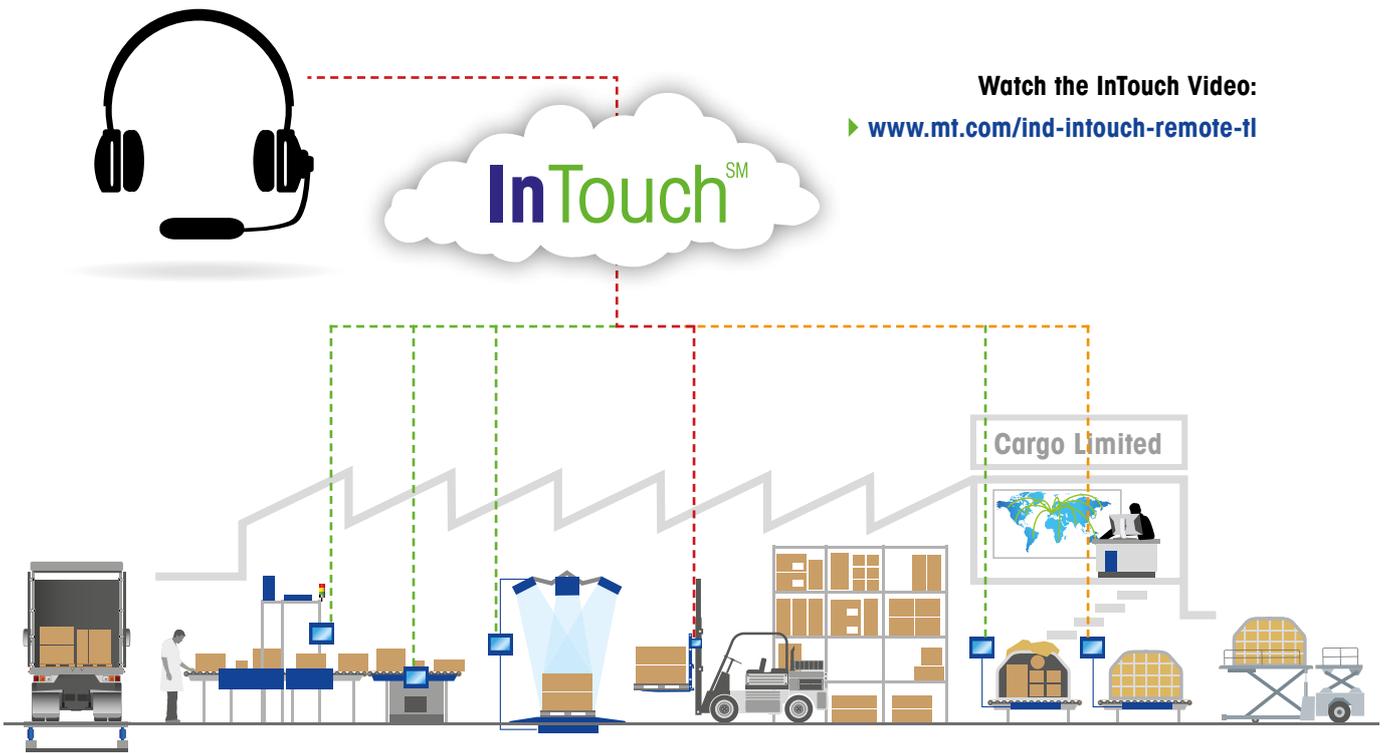
### Overview of recovered revenue

Number of pallets per day:	500
Average revenue recovery per pallet:	\$60
Percentage of pallets covered in black plastic:	10%
Extra revenue recovered per day by accurately measuring black plastic:	\$3 000
<b>Extra revenue recovered per year:</b>	<b>\$75 000</b>

# No Unpleasant Surprises

## Real-time Equipment Monitoring

Don't wait for problems to arise. Monitor the performance of your dimensioning and weighing equipment with InTouch<sup>SM</sup> Remote Services. Connected systems send proactive alerts that enable you to immediately respond to performance issues.



Watch the InTouch Video:  
▶ [www.mt.com/ind-intouch-remote-tl](http://www.mt.com/ind-intouch-remote-tl)

Increase Uptime and Ensure Consistent Measurement Quality

### Efficient Equipment Management

- Real-time equipment status information
- Fact-based timing of preventative maintenance activities

### Improved Performance Control

- Ongoing measurement performance monitoring
- Periodic asset status reports to optimize processes

### Security without Compromise

- ISO27001-2013 certification
- User authentication and access control
- No changes to existing IT or security infrastructure

# Insider Know-How For Transport & Logistics

## New Industrial Weighing Catalog



► [www.mt.com/ind-catalog-tl](http://www.mt.com/ind-catalog-tl)  
Free Download



### Webinars

Short on-demand webinars for up-to-date industry information on topics including:

- Why look for details in LFT approvals
- The benefits of pallet dimensioning



### Guides

Resources for planning, buying and complying with regulations on topics including:

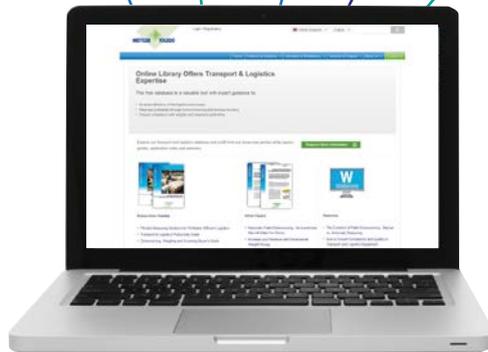
- Dimensioning, weighing and scanning guide
- Terminal productivity guide



### White Papers

Expertise on industry trends and issues, including topics such as:

- Revenue recovery through dimensional weight pricing
- Legal for trade certification



One stop for industry expertise to support your data capture process, buying decisions and project efficiency.

► [www.mt.com/logistics-library-tl](http://www.mt.com/logistics-library-tl)

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