

Transport & Logistics

All the Measurements You Need



8 News

Bigger, Faster, Smarter The Rise of the Super Hub

Carrier companies increasingly are moving away from smaller, local hubs toward centralized super hubs. One such hub in Australia can process up to 38 000 parcels every hour.

Australia's transport and logistics industry is worth approximately \$200 billion. It accounts for approximately 10 percent of the country's GDP and employs over 585 000 people. It is currently undergoing significant growth and the movement of freight is expected to double by 2030.

The big shift

With this growth, we see the rise of the super-hub. The scale of those operations is staggering. At an investment of \$40 million, the Toll IPEC Melbourne facility covers 16 295 square meters on a 54 000-square-meter site, which is the equivalent of 7.5 football fields. To put that into context, parcel throughput has increased from between 7 500 and 9 000 parcels an hour in a typical sorting fa-

cility, to between 35 000 and 38 000 parcels an hour.

Data for efficient automation

To process vast volumes, accurate and seamless communication of data is the key. From the moment a truck arrives with a new delivery, data is used to communicate what happens next. Everything is automated, from the unloading of vehicles, to the live parcel-tracking system. Once a parcel enters the facility, METTLER TOLEDO dimensioning, weighing and scanning systems give it a data profile consisting of ID, size and weight data for sorting, invoicing and revenue recovery.

Please find more information about "Toll IPEC Super Hub Melbourne" on page 2–3.

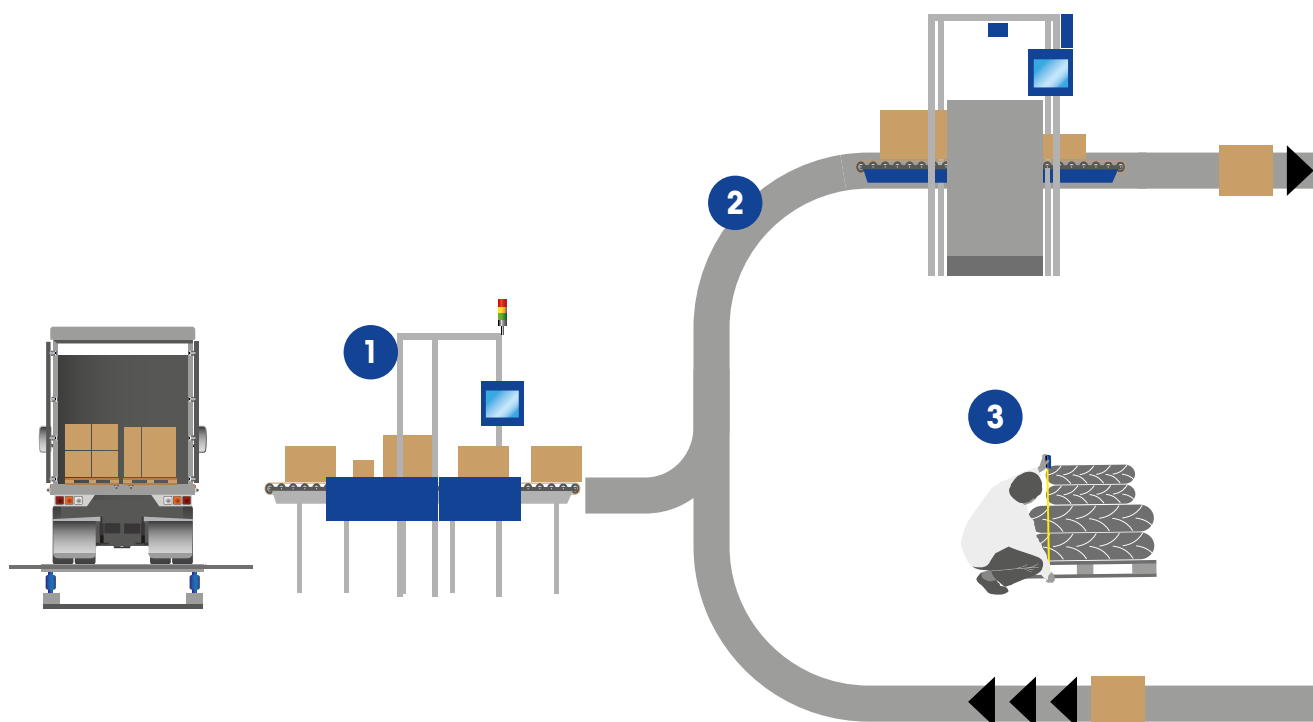


METTLER TOLEDO

Toll IPEC – Super Hub Melbourne

METTLER TOLEDO solutions help our customers to achieve total automation.

Toll IPEC benefits from this at all stages of the logistics chain.



1 Inbound: Dynamic weighing

Each parcel is weighed as it enters the sorter using a dynamic cargo scale before entering the main sorter. Parcels are singulated and spaced for efficient dimensioning and sorting later on.

2 Main sorter: Automatic identification and dimensioning

Barcode data and dimensions are recorded simultaneously as the parcel moves through the main loop. This data is added to the item weight and a full data profile is communicated to the sorter and to host for invoicing and revenue recovery.

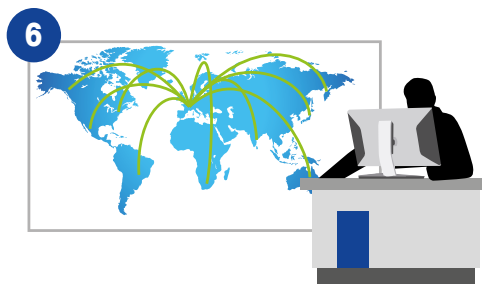
3 Non-conveyables: Mobile dimensioning

Items that are too long for the sorter are sorted separately on arrival and don't make it into the automatic sorter. Dimensions are checked using a mobile dimensioning and scanning device with automatic data transfer.

Publisher/Production

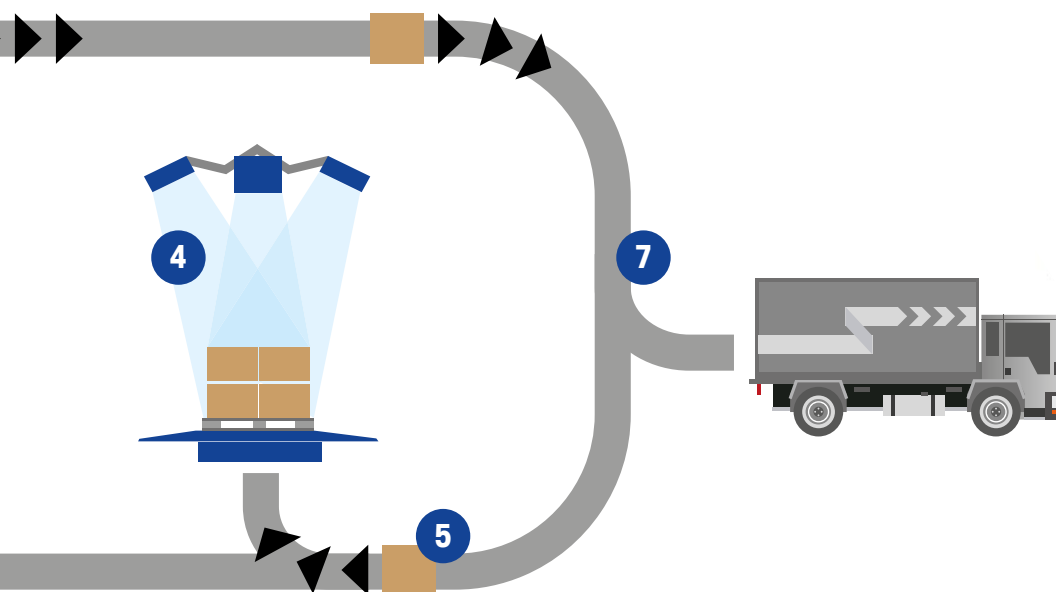
Mettler-Toledo GmbH
Industrial Division
Heuwinkelstrasse
CH-8606 Nänikon
Switzerland

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6 Customer communication: Seamless data transfer

All parcel data is transferred seamlessly to the host and used by invoicing, tracking and other communication programs. Invoices are automatically updated using actual weight and dimension data with a time stamp and legal-for-trade approval.



4 Pallet handling: Static dimensioning, weighing & scanning

Pallets are transported via forklift truck to a pallet-handling station and are dimensioned, weighed and identified for revenue recovery and load planning. All data is recorded simultaneously in 3 to 4 seconds before the pallet is moved on to the reload station.

5 Sorter communication: One data string

Once an item has a full data profile, it can be efficiently sorted. Barcode data provides the destination and dimensional data confirms that an item is not too long to turn down a sorting chute. Small items are transported along the conveyor in totes.

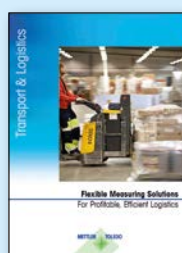
7 Outbound: Sorting and loading

After a parcel has been identified, weighed and dimensioned it is sorted to the correct lane and loaded into a waiting vehicle to take it either onwards or for loading into an aircraft waiting airside at Melbourne airport. Reloading is one of the only parts of the process that is performed manually.

Full Range of Solutions for Transport & Logistics

METTLER TOLEDO has a full range of solutions for transport and logistics, for any application, at any step of the logistics chain.

► www.mt.com/logistics-competency-tl



How to Use Automatic Data Transfer For Productivity Gains

At METTLER TOLEDO, we deliver quality solutions to transport and logistics customers that help them provide better service to their customers. We sat down with Holger Haupt, co-founder and CEO at Logiline, to find out how operations have improved since they started using our mobile dimensioner and scanner.

Logiline's business model is to provide logistics consultancy services, typically to companies who have insufficient quantities of freight to negotiate their own attractive terms with a carrier, and to manage all aspects of shipment, including selection of the best method of transport according to each customer's shipping needs.

"Our facilities receive all kinds of shipments," says Haupt. "We especially do a lot of transport for the automotive industry; this can be anything from nuts and bolts, to larger car parts, to fully assembled engines on a pallet. Everything needs to be weighed, measured and processed."

A more productive process

Until recently, these duties were largely done manually. An operator would receive a parcel or pallet, weigh it, measure it with a tape measure and jot down the information. Those details would then be re-entered into a computer to generate the necessary paperwork. The process was time-consuming and prone to human

error. Logiline knew there was a better way, says Haupt.

The solution presented itself in the form of the CSN110 ScanTape, METTLER TOLEDO's mobile dimensioner and scanner. With ScanTape, operators can quickly scan the barcode and measure the package and with the click of a button, merge and transfer all data. Integration of the ScanTape was made simpler by the fact that Logiline was already using METTLER TOLEDO scales, which made adding dimensioning and barcode reading with the CSN110 ScanTape a snap.

Seamless integration

The Logiline technical team took the ScanTape product one step further and developed their own Android application to communicate the data captured by the CSN110 ScanTape to their own systems, explains Haupt. Once a parcel is weighed and measured, the weight, dimensions and barcode data are stored on the ScanTape and then sent directly to the app on the operator's tablet via Bluetooth. The

app takes the raw data and translates it for input into Logiline's own systems.

Save one hour per shift

Haupt's early estimates suggest that automation of the data-capture process saves at least one hour per branch, per shift. Additionally, each shipment measured is given a time stamp and operator ID, which supports customer and supplier communication if there is a query about the measurements declared.

"The CSN110 ScanTape helps us in a number of ways," says Haupt. "We can check the size to make sure that the integrator we have selected is the right one. Sometimes we'll see that we can get a better rate. We can also either increase our capacity, or reduce the number of operators required for the afternoon shift."

METTLER TOLEDO's solution-oriented products help Haupt stay excited about Logiline's future.

"Over time we will offer more diversified services and we are focused on making



data more accurate and more available to our customers,” says Haupt. “The steps we take toward automation help us to achieve that goal.”

METTLER TOLEDO will be there to support Logiline as it continues to grow in the dimensioning, weighing, and scan-

ning solutions space. “Our experience (with METTLER TOLEDO) has been a good one,” says Haupt. “Professional consultation, proactive follow-up, and a good working relationship.”

► www.mt.com/TLX-11

Key Services offered by Logiline

- Evaluation and booking of best transport method
- Preparation of shipping documentation
- Shipment pick-up and delivery
- Packing and consolidation
- Customs clearance
- Track and trace

CSN110 ScanTape Key Benefits

- Save one hour per shift
- Save money on carrier selection
- Improved data quality
- Improved customer communication
- Low cost investment



► www.mt.com/CSN110-11

Keeps Working When Other Scales Break Down

Forklift trucks operate in tough, fast-paced environments. Your forklift scale should be rugged, robust and built to last. Use a forklift scale that will stand the test of time, providing continued high performance while keeping costs low.

► www.mt.com/VFS120-tl

Holds Calibration for 12 Months

Even if your forklift crashes into something, its patented three-point suspension helps the VFS120 forklift scale to maintain its calibration. Where scales using a four-point suspension can be thrown out of calibration by vibration or knocks and bumps, the VFS120 provides consistent results without the need for frequent readjustment.

Robustness Put to the Test

To test the robustness and reliability of the VFS120 forklift scale, it was subject to a series of durability tests. One of these tests involved driving the forklift truck into a wall at speed. The impact caused the wheel of the forklift mast to break. The scale, on the other hand, survived the crash unharmed.



Example Savings

With each forklift scale you save:



1 minute of weighing time per pallet



300 meters of transport distance per pallet



5 square meters of space



\$ 1 167 in labor per year



\$ 7 875 in energy per year

Designed for Safety

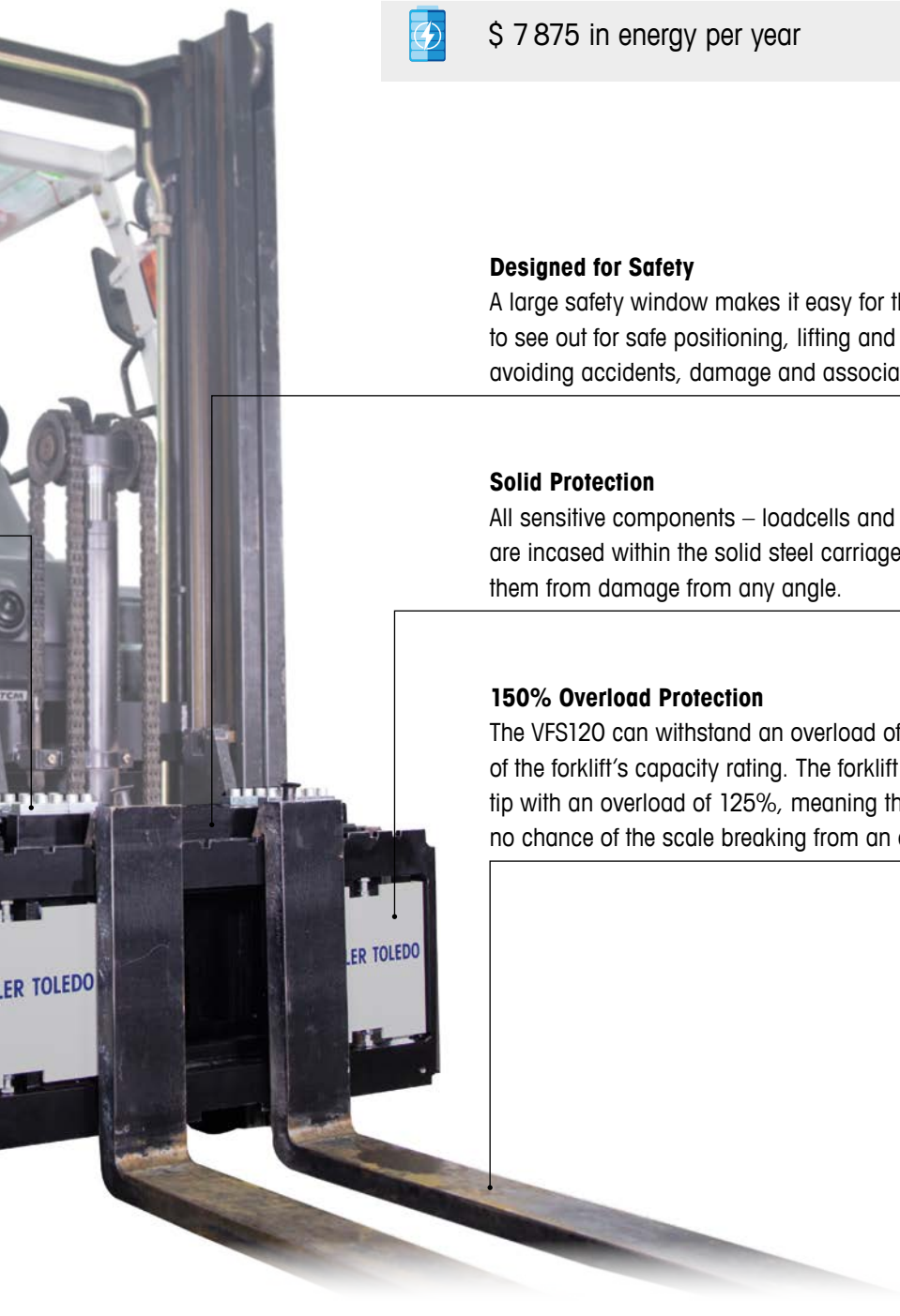
A large safety window makes it easy for the operator to see out for safe positioning, lifting and transport – avoiding accidents, damage and associated costs.

Solid Protection

All sensitive components – loadcells and electronics – are incased within the solid steel carriage, protecting them from damage from any angle.

150% Overload Protection

The VFS120 can withstand an overload of up to 150% of the forklift's capacity rating. The forklift will typically tip with an overload of 125%, meaning there is almost no chance of the scale breaking from an overload.



Four Smart Ways To Increase Uptime

The fast pace of the transport and logistics industry means that the pressure is always on to ensure systems are running optimally. Uptime isn't accidental. Take the right precautions to protect yourself from costly downtime.



Identify issues before they happen

Proactive testing of dimensioning, weighing and barcode reading equipment will pick-up any potential issues before they become a problem. Transport and logistic system specialists thoroughly test your equipment and provide a detailed report including service recommendations for achieving maximum uptime.



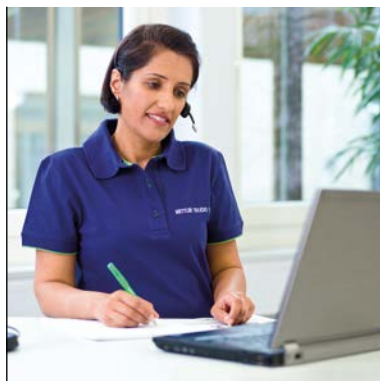
Use service data to maintain performance

Understanding your equipment's maintenance requirements will help to achieve optimal performance over time. The data generated by a system test report puts you in control of performance. Get a clear overview of exactly what is needed to ensure peak performance and uptime before it takes a dip.



Be ready with the right service level agreement in place

Your tailored SLA can be as comprehensive as you need it to be, including availability of spare parts, labour, travel and guaranteed response time for repairs. Global SLAs help global transport providers guarantee the required level of customer service across the globe.



Get advance warning with remote monitoring

The remote monitoring feature of InTouch Remote Services constantly monitors the condition of your equipment. If something needs attention, InTouch monitoring communicates with the secure data center, alerting a contact within your organization and enabling a quick reaction to maintain uptime.

InTouch Remote Services

System data is easily retrieved to understand overall system performance



- **Save Time and Money:**
Make sure each service visit ensures your uptime
- **Rapid Response Times:**
Well prepared intervention when needed
- **Safe, Secure Communication:**
Protected, encrypted data communication
- **Data for Analysis and Reporting:**
Easily retrieve system data to evaluate overall system performance

► www.mt.com/InTouch-tl

Profitably Measure More From Flyers to Freight

Express carriers not only race the clock, but strive to be the cheapest, fastest and smartest in the business. Automation is the key to achieving this. The more objects that can be handled automatically, the more room there is for revenue, margin and efficiency gains.

Today, it is possible to deliver almost any type of goods – from fresh tulips from Holland to handmade Italian furniture or electronics from South Korea. You name it and thanks to our global marketplace, almost anything can be sent to you, no matter where you are in the world.

Parcel express companies have to transport a wider range of objects than ever before. To achieve the level of efficiency required to stay profitable, as many of these goods as possible should be processed au-

tomatically. Checking the weight and dimensions of shipments is crucial for getting paid properly for space. To achieve the throughputs and turn-around times required in a parcel express operation, this has to be part of the automatic process wherever possible.

The new standard

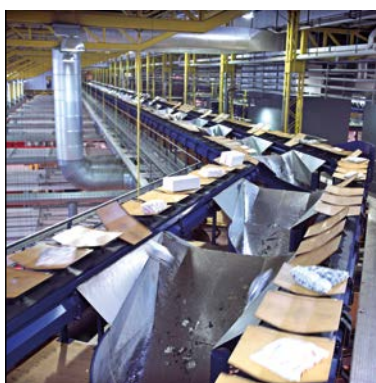
The definition of what is standard when it comes to deliveries is widening. What would previously have fallen under the special delivery category, such as bulky

freight, is now a common commodity. Letters and flyers, considered before to be the domain of the postal service, are increasingly delivered by the same companies that originally built their business model around express parcel delivery. Also on the rise are items that are irregular in shape – from bicycles to tires and small consumable items like cosmetics and fashion – which have seen an increase sales as a result of the boom in ecommerce.



Flyers and Flats

Compact dynamic scales are easily integrated into automatic sorters for flyers and small goods distribution lines. The newest dimensioners can measure down to 2 millimeters in height, legal for trade.



Smalls and Irregulars

New software makes it possible to measure items placed in a tote or tilt tray which makes transportation of small items and irregular shaped goods safe and easy.



Non-Conveyables

For goods that are too large or awkward to be transported by a standard sorting line, mobile dimensioners quickly capture size and forklift scales enable weighing right on a forklift truck.



Across the board, customers expect faster, cheaper delivery on all types of goods. Luckily, technology is advancing at the same time, and today, almost anything can be identified, measured, moved and sorted automatically and there are systems available that keep all types of goods moving and profitable.

The newest dimensioners are approved to measure down to two millimeters in height. With the ability to see and measure most parcel shapes and wrappings, they can be used to recover revenue on almost any object. When coupled with a compact, high-speed dynamic scale, they provide the ideal solution for integration into a sorting line for flyers, flats or smalls.

The rise in orders of small, consumable goods has resulted in a need to detect

and measure items in totes or trays. That is possible using a special software feature available as standard on METTLER TOLEDO dimensioners. There will always be goods that are too bulky or awkwardly shaped to be transported on a sorting line; typically, those are the shipments where there is the greatest potential for revenue recovery. Oversized goods can be quickly and automatically weighed using a forklift scale and measured using a hand-held dimensioner that automatically merges and transfers data.

No matter what you measure, make sure you do it profitably. METTLER TOLEDO offers a full range of weighing, dimensioning and scanning solutions for all types of goods, at any step of the logistics process.

► www.mt.com/logistics-competency-tl

Example of parcel mix in an express facility:

53% Standard parcels

7% Irregular parcels

21% Flats

19% Flyers

Quickly Measure Non-Conveyables

Express carriers not only race the clock, but they strive to be the cheapest, fastest and smartest in the business. For this, automation is key. The more objects that can be handled automatically, the more room there is for revenue, margin and efficiency gain.

- Measure any time, any where
- Transfer data automatically
- Benefit from a quick return on investment
- Ensure legal for trade compliance



The CSN110 ScanTape™ quickly pays for itself. Calculate your return on investment with our online Calculator.

Calculate the Return on Investment of CSN110 ScanTape™

► www.mt.com/CSN110-tl



Mettler-Toledo GmbH
Industrial Division
CH-8606 Nänikon, Switzerland

Local contact: www.mt.com/contacts

MTSI 30313521

www.mt.com/ind-tl

For more information

