

## **Automatic Pallet Dimensioning**

# An Investment that will Make You Money

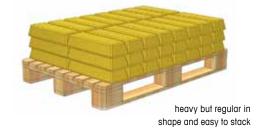
The slow-down in the world's economy has had a large effect on the import and export market. This in turn has resulted in adverse impacts on the express business. 2009 saw the lowest level of transported freight since 2002. In such times companies either sink or they take action in order to stay on top. A natural first thought is 'where can we cut back?' However, in a downturn the way to beat the competition may lie not in cutting back, but in making key investments.

## **Charging for Space**

A truck will either reach its limitation in volume or its limitation in weight and when it does it can hold no more. Dimensional (or Volumetric) Weight Pricing compares actual weight with dimensional weight and uses whichever is greater as billable weight. This pricing structure allows the freight transporter to get the most out of the space available. Investment in an automatic weighing and dimensioning solution allows transport companies to efficiently manage transport costs and capitalize on their most valuable asset – space. The system will accurately measure any item, determine the billable weight and update an invoicing system within seconds.

### Worth its Weight in Gold

Carriers lose the most money on big, bulky freight and so there is huge revenue potential for companies that either charge by weight alone or have a set price for pallets. A pallet loaded with gold bars will have a higher actual weight than dimensional weight and should therefore be charged for based on actual weight. A pallet loaded with something lightweight and bulky will be charged for based on dimensional weight. Although one pallet weighs significantly more, the lighter pallet takes up more space in a truck and is difficult to stack. The only way to fully maximize revenue potential on the space you provide is through automatically weighing and dimensioning your pallets and invoicing according to the *volumetric* size of an object.



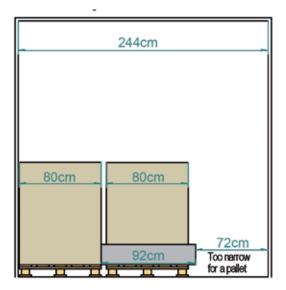


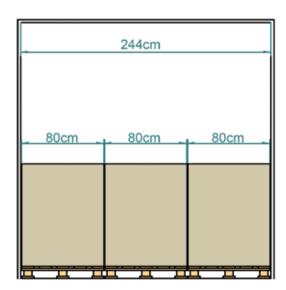


## The Irregularities that can Cost Millions

Bulges, protrusions, straps and uneven surfaces are all irregularities that can result in incorrect measurements and incorrect invoices. Is is nearly impossible to capture such elements when calculating dimensions manually. An automatic dimensioning solution will determine the smallest rectangular box that can enclose the pallet and its contents. If the dimensional weight of that box is greater than the actual weight, it will be used as billable weight.

The cargo room of a truck is typically 244 cm wide in order to accommodate three pallets. If one pallet is overloaded, there won't be room for a third pallet in the truck. The overloaded pallet should therefore be invoiced for as if it were two pallets because it uses the same amount of space as two. If the transport company doesn't charge for the extra space this pallet needs, the revenue that would have been generated by a third pallet in the truck will be lost.





#### **Improved Productivity**

Companies are sometimes concerned that they just don't have the time to record dimensions of their pallets. However, while it takes between 15 and 30 seconds to manually measure a pallet, some automatic measuring solutions can record dimensions, weight and ID in around 3 seconds. It will pay off to start gradually and ease into including dimensioning into your process. It is not necessary to capture the dimensions of every pallet you ship.

#### The Benefits in Numbers

One company recently conducted a test where forklift drivers automatically measured between 450 pallets a day without taking size or irregularities into consideration. After a month of data collection the company compared measurements with the actual bill of ladings to determine how much revenue the automatic dimensioner had recovered. Take a look at the results:

Average number of pallets measured per day	450
Average number of pallets re-classified per day based on density	11
Average revenue recovered per re-classified pallet	\$130
Revenue recovery after one month	\$28,600

Even by only automatically measuring a small percentage of your pallets, you will generate extra revenue and your system will quickly pay for itself. A switch to dimensional weight pricing promotes efficiency, driving efficient packing and handling. Your operations department will benefit as a whole. If you choose an expert supplier with extensive knowledge of the industry, they will be able to help to train your employees to identify the pallets that have the best potential for revenue recovery.

#### What to Look for in a Pallet Dimensioner

There are a number of different pallet dimensioners on the market and the technology used can make a big difference to the read rate and revenue recovered. Here you see an overview of some of the advantages and disadvantages of the different variations available.

Fixed, three headed scanner	Three heads can see all sides of object under- neath giving accurate measurements on all shapes and sizes. No moving parts.	
Moving dual head scanner	Captures irregularities and can potentially dimension more than one pallet in one sweep. Moving parts are vulnerable to damage.	
Fixed, single head scanner	Works well for measuring cuboidal objects but will not see any bulges, protrusions or irregularities on the sides of the objects. Anything that is in the shaddow of the box will be missed.	
Single scanner, mounted on a forklift	No need to off-load the pallet before measuring. Suitable for regular shaped objects but will not provide accurate measurements on any type of irregular object. High risk of wear and tear.	

## **Total Cost of Ownership**

Don't just look at the initial investment cost, think long-term about the total cost of ownership. Your dimensioner needs to be robust and suitable for tough terminal environments. Any external moving parts will potentially wear down quickly. This can result in impaired accuracy and money wasted on maintenance and down time. Look for a supplier with a reliable service network and remote service capabilities to ensure that your system is always in working order.

#### Accuracy

Millimetres can mean millions when it comes to invoicing. Look for a dimensioner with the highest accuracy possible to ensure that you get paid for every millimetre of space you provide.

#### **Software Options**

Depending on how you use your dimensioning system, you may want to look into the various software features available. Some dimensioners will offer a taring functionality in order to remove pallet weight and dimensions from those of the load. You may also want to consider the option to link cameras to your system to take pictures of the pallets you measure.

## **Legal for Trade Considerations**

If you use the dimensions generated by the system for invoicing, your system may need to have Weights and Measures approvals. The approval stamp guarantees the quality of your system and more and more counties require that systems are legal for trade. Even if dimensioning isn't currently regulated in your country this can change overnight. Therefore it makes sense to invest in a system that is weights and measures approved from the beginning to make sure you don't run into difficulties further down the line if the situation in your country suddenly changes.

## Stay on Top with Automatic Dimensioining

Space to the transport provider is like information to the consultant. Without it there is no service. And like a consultant charges for every idea, the transport company should charge for every millimeter. Investment in an automatic weighing and dimensioning solution allows freight transporters to maximize revenue potential. By efficiently managing transport costs and capitalizing on space, the carrier company can stay on top, even in challenging times. Investment in an automatic measuring solution will give a quick ROI and ensure that you are paid properly for your services.

### **About METTLER TOLEDO**

METTLER TOLEDO is the leading global supplier of precision instruments and the world's largest manufacturer of weighing equipment. Their award winning CSN840 Pallet ™ is one of the best pallet measuring solutions on the market.

For advice on improving pallet handling, contact METTLER TOLEDO for a free consultation.

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