

Used Truck Scales Think Twice Before Buying

Some truck scale buyers consider purchasing a used scale as an easy way to save money. However, the problems they often encounter can make a supposed "bargain" turn into a lasting financial liability. Understanding the common challenges of used truck scales can help buyers make a decision that is right for them.

Used truck scales are regularly available through brokers, web sites and auctions specializing in used industrial equipment. Buyers are often looking to save money by finding a good deal on a scale that still appears to be in usable condition. However, many critical components of a truck scale cannot be evaluated without specialized knowledge and technical equipment. After spending the time and money required to make a used scale functional, owners often realize they may not have gotten a bargain after all.

In addition to the time and expense required, a larger concern is the ability for the scale to be certified for use by weights and measures authorities. If the scale does not meet accuracy standards or pass a safety inspection, the scale will likely not be able to be used in commercial applications (depending on local or regional laws).

METTLER TOLEDO service teams are frequently dispatched to troubleshoot used scales that have been problematic for the scale owners, and even other service providers. There are some common issues that buyers who are considering used vehicle scales should be aware of.



It can be challenging to relocate a used truck scale and make it operational in the new location



Heavy lifting equipment is required to move a scale

Common issues with used truck scales:

- **Dead load cell(s)**

Testing a load cell requires specialized equipment. A dead load cell cannot be repaired, and must be replaced.

- **Damaged cable(s)**

A damaged cable can affect the function of a load cell or junction box. On many older scales, a damaged cable also requires replacement of the load cell it is attached to.

- **Faulty or missing terminal (or indicator)**

For example, a scale terminal (indicator) that was not originally designed for the type of load cell system in the scale may function temporarily, but fail in a matter of weeks or days.

- **Excessively worn load cell mating surfaces and/or load cell mounting hardware**

This is often due to a lack of proper lubrication in the past. In some cases, the load cell mounting hardware can be shimmed to compensate for worn surfaces. However, worn surfaces can affect the accuracy and calibration of the scale and will lead to premature failure.



A knowledgeable scale technician should evaluate the condition of scale components



Insufficient maintenance in the past accelerates physical wear to the load cells and shortens their life



Modifications can be necessary, but must be carefully evaluated as to not harm the scale's structural integrity

- **Corroded/fatigued weighbridge structure**

This can present a serious safety issue. Some corrosion is visually apparent but some may not be as obvious. All weighbridges fatigue with repeated loading cycles. If the usage history of the scale is unknown, the scale should be thoroughly evaluated by a knowledgeable technician. Weights and measures agencies will not certify a scale that is structurally unsafe.

- **Missing components**

A scale system can easily be missing a junction box, load cell, cable, access plate, side rail, or other critical component. Without these items, a scale will not function properly—nor can it be certified for use by weights and measures agencies.

- **Problematic checking/suspension system**

The checking system includes the components designed to restrict lateral and longitudinal movement of the weighbridge. These components must be in good repair and adjusted correctly in order for the scale to function properly and safely. However, some components of this system may have been part of the previous foundation. These systems require maintenance, adjustment and possible modification when being used in a new location.

- **Scale does not match an existing foundation**

Buying a used scale with the intention of placing it in an existing scale foundation is a complicated project. It requires extensive measurements to ensure that the weighbridge and necessary components will fit properly and operate as designed. It is not uncommon to see the buyer of a used scale prepare a new foundation, only to have to modify it later when the scale does not fit or operate properly. The scale modules (weighbridge platforms) should not be modified, as this can alter their structural properties. This can prevent the scale from being certified by weights and measures authorities.

Questions that used scale buyers should ask:**Is the scale still installed and operational at its current location?**

If so, it can be wise to hire a professional scale service provider to visit the scale and assess its functionality. A scale that has been removed from its foundation can be very difficult to adequately inspect and nearly impossible to test.

How will you transport the scale to the new location?

The buyer is often responsible for all transportation costs. That includes lifting cranes and rigging to load and unload the scale, as well as adequate transport vehicles and wide/oversized load permits to be filed with transportation authorities. This requirement grows if a concrete deck scale is being considered, as each module can weigh 20,000-30,000 lbs. Depending on the size of the scale, multiple trucks may be required to transport it. These logistics costs can be significant and should be considered before making a purchase.

Are replacement parts available?

Parts availability for older scales may be limited, which can add delays and expense to the initial installation. This can also make any ongoing repairs or replacements more time-consuming and costly.

Are foundation drawings or other support materials available from the original scale manufacturer?

Some scale companies have documentation readily available on their web sites or by request. Others may only provide this to buyers of a new scale. Scale models that are no longer in production may not be fully supported by the original manufacturer.

Can new weighing components be integrated into a pre-owned scale?

Upgrading a scale's weighing components (load cells, cables, terminal/indicator, etc.) is a concept that has increased in popularity. This is due to the fact that some modern systems can offer significant advantages in accuracy and reliability over their predecessors. In an instance in which an acceptable weighbridge and foundation can be utilized, equipping the scale with new weighing components can remove many of the shortcomings and headaches of a used scale.

Is there a warranty?

As should be expected, used equipment is typically sold "as-is," meaning there is no guarantee of its condition or functionality, nor is there a warranty. This means that 100% of the ongoing maintenance, repairs or other issues with the scale are the financial and logistical responsibility of the owner. The only exception to this would be the rare possibility of purchasing a reconditioned scale directly from a scale company.

Summary

Purchasing a used truck scale requires unique testing, significant logistics, and specialized knowledge and labor. Additionally, replacement parts, site modifications and scale configuration can present unexpected challenges. Many buyers of used scales are surprised by the amount of time, effort and expense involved in the project. Those considering a used truck scale should carefully consider all aspects of the project in order to make an informed decision. For a detailed guide to truck scale technology, visit www.mt.com/TruckScaleGuide.

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For more information

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