

# WEIGH-TRONIX

Weighing does not always have to be an added step. It can be an unobtrusive part of your standard process. Add the Weigh-Tronix QTLTSC (QuickTach Lift Truck Scale, Certified) to your lift trucks, and remove the extra time and traffic involved in making trips to and from the floor scale.



**QTLTSC – QuickTach  
Lift Truck Scale, Certified**

## Why a legal for trade lift truck scale?

For centuries, weight has been the standard of value in the majority of commercial endeavors. Grain, minerals, livestock, gems, produce, building materials, manufacturing components—all are, measured, controlled, dispensed, bought and sold by weight.

In almost every operation there is someone who figures out that weighing is an extra process. It takes too much time. It's easier to guess than to make an extra trip to a scale. Such guessing costs manufacturers, shippers and other businesses millions of dollars every year. Receiving goods without double checking documented weights is an easy way to mismanage inventories of raw materials. If shipping is your business, do you take it for granted that your customer furnished you with correct weight documentation. If your freight handlers make that mistake by skipping the weighing process, they'll cost you a lot in lost revenues.



Weighing does not always have to be an added step. It can be an unobtrusive part of your standard process. Add the Weigh-Tronix QTLTSC (QuickTach Lift Truck Scale, Certified) to your lift trucks, and remove the extra time and traffic involved in

making trips to and from the floor scale. As your driver picks up a pallet, the Weigh-Tronix Lift Truck Scale automatically weighs product giving you critical cost controls with no extra steps.

### The Weigh-Tronix QTLTSC pays back fast.

**Unloading trucks**—Confirm that the quantities you ordered are the quantities you receive as you unload. No extra steps.

**Loading trucks**—Use the instant weight data to load evenly and legally. Avoid overload fines and unsafe operation.

**Shipping**—Verify the accuracy of your customers' estimated shipping weights. Correct the transfer charges when you find a different weight.

**Manufacturing**—Help track inventories and save steps as product flows between departments. Your forklift



*Many LTL carriers have incorporated lift truck scales into their regular operations.*

equipped with a QTLTSC will instantly document material weights as it is picked up for transport. No costly guess work; no extra trips to a remote floor scale.

### Field serviceability

One of the high priorities in the design of the Weigh-Tronix Lift Truck Scale was that the scale should be field serviceable. An idled lift truck scale sitting in a repair shop six hundred miles away is not making you any money. It's a drain on your resources.

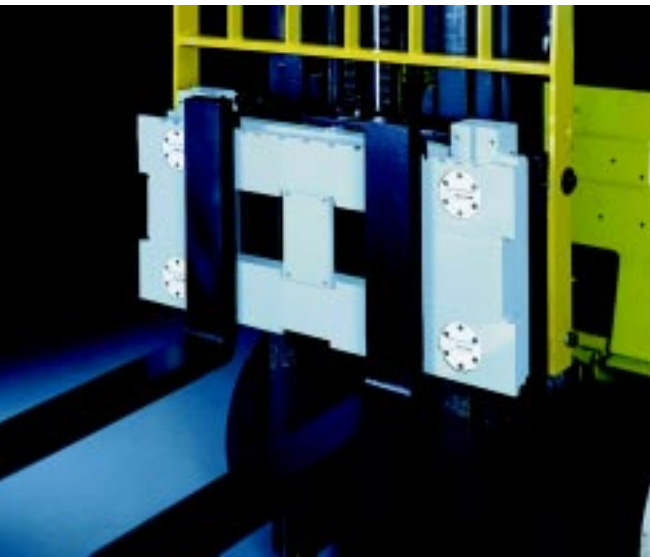
To accomplish their goal, designers chose not to use the traditional welded flexures to secure the scale to the forklift. Instead, the Weigh Bars® fasten the front and back plates of the carriage assembly. Scale technicians can quickly repair or replace Weigh Bars on site without the complications of breaking welds and total disassembly of the scale for service.

The interface cable for the QTLTSC has quick disconnects; cables can be replaced in seconds. Or they can be easily replaced or repaired in the field with cutting and splicing.



*A combination of carriage assembly design, patent pending angle detection and a new Weigh Bar summing assembly allows the QTLTSC to weigh accurately with wide, normal or narrow forks.*

Many of the components, such as the angle detection and Weigh Bar summing assembly and indicator, can be field diagnosed and repaired or swapped out.



*Weigh Bars link the front and back plates of the carriage assembly eliminating the need for welded flexures.*

### **QTLTSC is not just another lift truck scale**

Part of the secret to the success of the QTLTSC is in its new, patent pending components. Its Weigh Bars have been specifically developed for the lift truck scale. They serve dual purposes. They tie together the front and back elements of the carriage assembly, eliminating the need for welded flexures, and they capture weight readings on every load your lift truck picks up.

The carriage assembly of the QTLTSC features a centering pin which assures proper scale positioning and eliminates shifting of the assembly on the lift truck carriage.

A traditional problem with fork lift scales has been that any change in fork position affects accuracy of the readings. QTLTSC designers have met this challenge. A combination of carriage assembly design, angle detection and a new Weigh Bar summing assembly allows the QTLTSC to weigh accurately with wide, normal or narrow fork positions.

### **WI-125, the indicator that knows its place**

Operator head room is limited in most forklifts. The wrong cab-mounted weight indicator can easily become a hazard to the operator. The WI-125, however, is only 3.75 inches deep. The smoothly rounded corners of its impact-resistant Lexan enclosure virtually eliminate possible injuries from accidental bumps to operators' heads.

Weigh-Tronix has angle detection software in the WI-125. The WI-125's angle detection function automatically compensates for pitch or roll and allows the lift truck scale to weigh accurately even on surfaces that are not perfectly level.

Linking the WI-125 Indicator with a convenient WP-233 Dot Matrix Printer is another way to save steps and cost. This combination can provide you with automatic hard copy documentation of weight data.

Finally, any instrument that works as hard as lift a truck indicator does, has to be uncluttered, free of unnecessary buttons, bells and accessories. WI-125 is an all-business instrument. It has an eight-digit, seven-segment LCD which is .6 inch high. Five keys accomplish all its functions: Tare, Gross/Net, Zero, Print and Units. The operation of the WI-125 can be made even simpler if you choose to disable unneeded functions.



*The WI-125 indicator linked with a WP-233 printer can provide an automatic hard copy of weight data.*

## Specifications—WI-125 Indicator

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### Approvals:

Legal for Trade: Certificate of Conformance #92-167A2

### Dimensions:

9.37"W x 6.75"H x 3.75" D (23.8 cm x 17.1 cm x 9.5 cm)

**Power:** 10 to 90 VDC, 300 mA maximum

### Display:

8 digits, 7-segment LCD, 0.6 inch high with annunciators and backlighting

**Display rate:** One, two or five times per second

**Communication:** RS-232 serial port

### Accuracy:

Span— $\pm 5.0$  ppm/C      Zero— $\pm 0.12$   $\mu$ V/C (-10 to 40°C)  
Span— $\pm 10$  ppm/C      Zero— $\pm 0.024$   $\mu$ V/C (-30 to 60°C)

**Linearity:**  $\pm 0.005\%$  of capacity, maximum

**Repeatability:**  $\pm 0.005\%$  of capacity, maximum

### Environment:

14 to 104°F (-10 to 40°C) for HB-44 specs  
10 to 90% relative humidity

**Internal resolution:** 0.25 mV/V = 67,500 counts

**A to D conversion rate:** 30 times per second

### Push-button zero range:

0 to  $\pm 100\%$  of capacity programmable

### Tare:

The unit may be configured to have push-button tare which can function as a scroll tare register.

### Motion detection window:

Programmable from 0 to 999,999 divisions, decimal entries are accepted.

### Auto zero tracking:

Programmable from 0 to 999,999 divisions

Net Mode – Tracking: May be enabled or disabled  
Rate: 0.2 division per second  
Starting delay: 2 second

### Angle compensation:

Compensates for pitch and/or roll out of level weighing

### Vibration compensation

Analog low pass filter: Two section with .06 second time constant

Software low pass filter: One section with .05 second time constant

## Specifications—Weigh-Tronix Weigh Bar®

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### Approvals:

Legal for Trade: Certificate of Conformance #95-093

**Zero balance:**  $\pm 0.10$  mv/v

**Non-linearity maximum:** 0.03% of rated output

**Hysteresis maximum:** 0.03% of rated output

### Temperature effect on output:

$\pm 0.0025\%$  °C of rated output (-10 to +40°C)

### Temperature effect on zero balance:

$\pm 1.70 \times 10^{-7}$  volts per volt 5°C (-10 to +40°C)

**Safe overload rating:** 150% of capacity

## Specifications —Weight summing and angle detection assembly

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### Enclosure:

Metal enclosure. Dust and water resistant.  
Electronic components surrounded by low modulus potting compound.

**Environment:** -40°C to 65°C

**Angle sensors:** .1 degree accuracy from 0-10 degrees

**Angle sensor temperature coefficient:** 0.008°/°C

## Specifications—System

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### Approvals:

Legal for Trade: Certificate of Conformance #95-126  
NTEP Class III at 1,000 divisions

**System compatibility:** ITA Class II carriages up to 5,000 lb

### Overload protection:

Withstands up to 200% of full capacity anywhere up to 24" from frame and side loads up to 100% of full capacity.

**System warranty:** Two year limited warranty

### Weigh-Tronix Inc

1000 Armstrong Dr  
Fairmont, MN 56031-1000, USA  
Telephone +1 507-238-4461  
Facsimile +1 507-238-4195  
e-mail: industrial@weigh-tronix.com  
www.weigh-tronix.com

### Staveley Weighing & Systems Canada Inc

217 Brunswick Blvd  
Pointe Claire, Quebec, Canada H9R 4R7  
Telephone +1 514-695-0380  
Facsimile +1 514-695-6820

