The Avery Weigh-Tronix FLSC Forklift Scale System is a legal-for-trade weighing solution. The system includes a durable, front-mounted digital scale carriage with Weigh Bar® electronic weight sensors and ‘clear-view’ open center area, as well as a choice of two in-cab instruments. The system allows operators to easily and quickly capture legal-for-trade weight data en route, without extra steps.

**Seamless Compatibility**

Simply attach the FLSC 5000 lb scale carriage to an existing Class II cleat-type forklift carriage and mount the FLI 225/425 instrument in a convenient driver location. This system allows seamless integration of weighing and data management into your operations without adding any extra steps or route changes.

**Robust Design**

The forklift scale carriage is comprised of two metal plates coupled together by four high capacity Weigh Bars.

- Front loading safety factor of 29.5:1
- Normal load safety factor of 7.5:1
- Overload with no damage of 300%

The instrumentation is designed exclusively for the forklift vehicle. It incorporates design technologies to withstand the environmental and warehouse jolts common in forklift applications.

**Highly Accurate**

The Avery Weigh-Tronix FLSC system monitors the orientation of the scale and maintains accurate weight readings even if the forklift is on unlevel ground, the mast is tilted, or the pallet load is off-center. The forklift drivers are not required to jockey the mast or the position of the load on the scale.

The accurate weighing performance of the FLSC has been validated by NCWM (National Conference on Weights and Measures) to weigh legal-for-trade even when tilted:

- 3 degrees side to side (5% grade)
- 5 degrees back (8% grade)
- 7 degrees forward (12% grade)

This electronic scale design has no mechanical flexures or springs to influence the weighing performance.

**Data Management**

The FLI 225 instrument provides a simple, no-nonsense solution through classic or enhanced operation for capturing weight and supplying it to a peripheral device.

The FLI 425 instrument simultaneously displays multiple fields of data, assisting the operator with a visual reference. Data can be stored on-board or instantly transmitted wirelessly to a local or global network.
## SCALE CARRIAGE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front and Back Plates Yield Strength</td>
<td>43,500 psi</td>
</tr>
<tr>
<td>Weigh Bar Fasteners Yield Strength</td>
<td>160,000 psi</td>
</tr>
<tr>
<td>Weigh Bar Tensioners Yield Strength</td>
<td>150,000 psi</td>
</tr>
<tr>
<td>Mounting Hooks Yield Strength</td>
<td>43,500 psi</td>
</tr>
<tr>
<td>Scale Spring Loaded Centering Pin Yield Strength</td>
<td>89,000 psi</td>
</tr>
</tbody>
</table>

**Safety Factors**
- 29.5:1 front loading, 7.5:1 normal loading, 100% no damage overloading

**View Port**
- Continuous 6” x 20 3/4” nominal

**Weight Sensors**
- Four Avery Weigh-Tronix 2500 LB Weigh Bars direct coupled, no flexures

**Weight Summing**
- Digital assembly encapsulated

**Cover Plates**
- Weigh Bar cabling protection

**Wired Interface**
- Coiled cable extending to 20'

**Wireless Cable Interface**
- Optional

**Finish**
- High grade powder paint

### WEIGH BAR

**Type**
- LIT 2.5k weight sensors (4) NTEP CC# 95-093

**Metal Properties**
- AISI 4340 steel yield strength 140,000 psi

**Zero Balance**
- ± 0.10 mv/v

**Non-Linearity Maximum**
- 0.3% of rated output

**Hysteresis Maximum**
- 0.03% of rated output

**Temperature Effect on Output**
- ± 0.0025%°C of rated output (-10 to +40°C)

**Temperature Effect on Zero Balance**
- ± 1.70 x 10^-7 volts per volt °C (-10 to +40°C)

**Safe Overload Rating**
- 150% of capacity

### DIGITAL WEIGHT SUMMING AND ANGLE DETECTION ASSEMBLY

**Type**
- FLI 100 digital junction box NTEP CC# 06-096

**Enclosure**
- Metal enclosure, circuitry encapsulated

**Environment**
- Legal 14° to 104°F (-10° to +40°C), industrial -34° to +65°C

**Angle Sensors**
- 0.1 degree accuracy from 0-10 degrees

**Angle Sensor Temperature Coefficient**
- 0.0087°F/C

**Option**
- FLW 100 wireless communications with scale carriage and instrument receiver, (battery life: continuously active 168 hours, active 8 hours/day 21 days before recharging, only eight hours for total recharge, external battery charger), legal 14° to 104°F (-10° to +40°C), industrial -20° to +65°C

### SYSTEM

**Lifting Capacity**
- Reduced 12-14%

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