

# NEW

# Siloweigh II Pro

## A BETTER WAY TO GAUGE YOUR VESSEL CONTENTS

SiloWeigh tells you the contents of any tank or vessel - not as an empty or full signal, or even a percentage full signal based on a level measurement. SiloWeigh measures the actual weight of the vessel and contents to give a true picture of the amount on hand - and it costs little more than a level sensor.



### Never run out of material again

Hardware alarms can sound horns and light warning lamps to give timely reminders to reorder material, eliminating urgent calls that add unnecessary complications to days marked by heavy demand.

### Eliminate the risk of overfilling

Local alarms warn refill operators by lights and horns and can operate pinch-off valves to positively stop the flow of material, eliminating the risk of blown filters and environmental issues.

### Check every fill against delivery slip

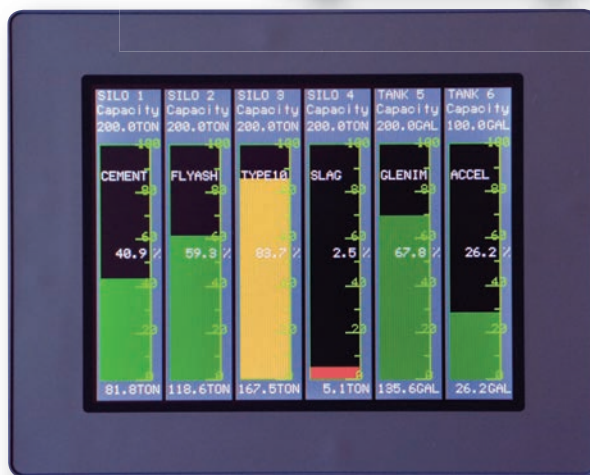
History is saved and graphed; two touches of the screen give amount of each fill, allowing you to check them against the weight tickets to identify and eliminate shortages in deliveries.

### Why weight measurement is better

Level measurements can drop by 20% as the material packs; weight is unchanged. Some sensors have moving parts that can get clogged or wear out, and all level sensors require climbing for service, which has dangers. Silex sensors eliminate all these issues.



Installation of Silex sensors on round silo legs using weld tabs. Through-hole mount is used on H and L-section legs. Almost all leg types are suitable for Silex sensor installation.



- Shows actual weight of contents as a digital display, plus level in percentage, as a lighted bar.
- No need to empty silo or shut down plant for installation.
- Safe and easy - no need to climb silo for installation.
- Reliable, no moving parts, no breakdowns.
- Change in surface profile or packing down of contents does not affect reading; measurement is true weight.
- Not affected by weather or extreme temperatures.
- Display mounts indoors, can be any distance from silos.

## SYSTEM FEATURES

Sensor kits include all parts, cables and hardware.

- Sensors bolt onto all legs of silo to give  $\pm 2\%$  typical accuracy.
- Touch screen requires only a single digital multi-drop cable to all vessels, included in kit  
Eliminates the expense of multiple cables.
- 3.5 and 5.7" touch screens include alarm outputs.
- In-plant hard wired programmable alarms can sound horn, light warning lights or operate pinch-off valves.
- Load cells can replace Silex sensors for higher accuracy.
- Pressure transducers can be used for liquid tanks.
- Intrinsic safety barrier available for hazardous materials.

**Scale-Tron Know-How** guarantees you a painless and successful installation. Using our full color illustrated manual, together with the tools and installation jigs supplied, all you have to add is your electric drill and muscle power – or let us do everything for you; it's your choice.

### Sensor types

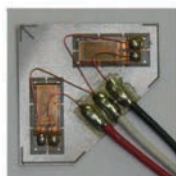
**Silex extensometer** uses metal film strain gauges to accurately measure the compression in the vessel's supports as it is loaded. With no moving parts, it performs reliably for many years. Special temperature compensation matches it perfectly to the structural steel of the supports to give a stable signal with typical accuracy of 2% of full scale, even when large daily swings in temperature are present.



**Load cells** can be used when accuracy of 0.1% is required.



**Weldable strain gauges** are available for special applications. They include weatherproofing. Special welding equipment can be rented for installation.



**Pressure sensors** can be used in liquid tank applications. These measure the head of liquid, which can be displayed in volumetric units for vertically symmetrical tanks.



*Vessel support methods vary immensely. Our engineers are always available to advise on what is possible and what should not be attempted. We welcome your calls until you are confident in your own knowledge.*

## SYSTEM SPECIFICATIONS

<b>Vessel size:</b>	No limit, since measurement depends on stress in vessel supports. Successful applications range from 20 to 4000 ton.
<b>Stress range:</b>	10-100 Mpa (1500 to 15,000 lb/sq. in.). Stress calculator available to evaluate structure and make recommendation.
<b>Support types:</b>	All leg types have been successfully applied. Skirted vessels are possible at slightly reduced accuracy.
<b>3.5" and 5.7" touch-screens:</b>	6 vessel bar-graphs or zoomable trend graph of any chosen vessel.
<b>7" and Nod box version:</b>	16 vessel bar-graphs or zoomable trend graph of any chosen vessel.
<b>Number of sensors:</b>	64 sensors max per indicator cabinet.
<b>Digital vessel transmitter:</b>	8 sensors max per vessel.
<b>Divided and 'common frame' vessels:</b>	Both variations supported.
<b>Alarm outputs:</b>	6 - 24V transistor outputs standard, settable to any alarm as pulsed or continuous.
<b>Alarm cancel and message inputs:</b>	12 - 24V inputs standard, settable as alarm cancel or activation of programmable warning message displays.
<b>Analog I/O:</b>	2 inputs and 2 outputs standard, 4-20 mA, fully programmable.
<b>Units of measure:</b>	Any choice of units. English or metric tons, lb, kg (in 1000s) etc.
<b>Power:</b>	100-250 volt universal power supply.
<b>Cabinet size, weight:</b>	330 x 330 x 185 mm, 4.5 kg, IP65 (13" x 13" x 7.25", 10 lb), NEMA-4

### OPTIONS

<b>Installation kits for Silex sensors:</b>	Through-hole (for H-beam etc.) Tapped hole (large "O" section) Weld tabs (for smaller "O" and square section). All kits contain template, punch, drills and waterproofing spray and are sufficient for 8 sensors.
<b>Relay inputs and outputs:</b>	Convert internal 24VDC I/O to 24, 110 or 220 VAC isolated.
<b>WiFi connection to tablet or phone:</b>	WiFi router allows full display and control capability from remote Android device with software purchased separately on-line.
<b>Connection to SiloWeigh.Net database:</b>	Ethernet or cellular router uploads all data to SiloWeigh.Net database for viewing all company's vessels and history via Internet.
<b>Level and other sensors:</b>	Analog and Modbus sensors can be used in place of the normal sensors and transmitters. Contact us for details.

# SCALE-TRON

Automation, sensors and weighing systems

[www.scaletron.com](http://www.scaletron.com), [scaletron@scaletron.com](mailto:scaletron@scaletron.com)

6428 Trans-Canada Highway, St. Laurent  
QC, H4T 1X4, Canada