



## Turn your vessel into a scale. For new or retrofitting Bolt-On weighing cells Microcell® / L-Cell®

Microcell® and L-Cell® are extremely long-lasting, reliable, and compact sensors for cost-efficient inventory measurement in all types of vessels with a leg support structure and in skirted silos. Measurement inaccuracies due to material characteristics like the angle of repose, rat-holing, bridging, moisture content or compaction are avoided reliably.

Depending on the vessel type, the bolt-on sensors are mounted directly on the structural support members, shear beams support or structural skirt.

Integrated strain gauges detect stress changes in the metal caused by any fluctuations in the container contents and transmit them as a measuring signal to the control system. Various available control and junction devices allow for the connection of up to 120 vessels.



### Simple inventory control for all vessels

- **Durable, reliable measurement:** Kistler-Morse pioneered bolt-on technology for storage vessels and silos. This method is still the standard way of measuring load-induced strain for precise quantity measurement in bulk vessels in many markets.
- **Extremely robust:** With a fatigue life of >20 million measuring cycles, high shock resistance, and weather insensitivity, Microcell® and L-Cell® are virtually "indestructible" for almost all applications.
- **Simple installation, even for retrofitting:** Using the installation set and drilling template, the sensors are simply bolted to the structural supports or skirts and connected to the controller via a junction box. There is no need to empty, lift or modify the vessel.
- **Easy calibration:** An empty vessel is not required. Precise calibration can take place at any fill level.
- **Easy to replace:** If damaged due to, e.g., mechanical impact, sensors can be easily replaced on-site.

### Technical specifications at a glance

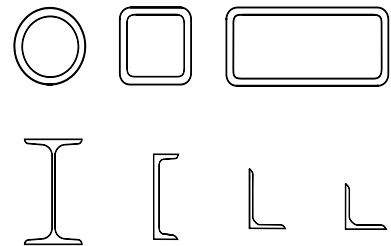
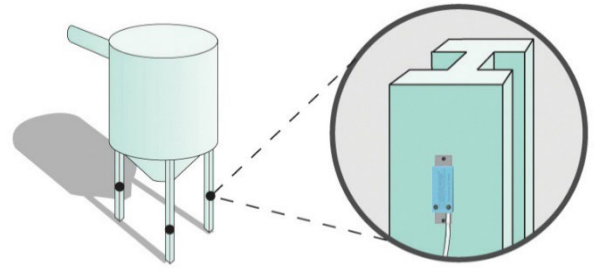
#### Temperature-compensated bolt-on semiconductor strain gauge sensors

- **Applications:**
  - Precise inventory measuring systems for all types of single or multiple containers
  - For metal substructures or skirted silos
  - For outdoor and indoor applications
  - From 35 t total load (vessel plus contents)
  - Mounting on structural profiles or skirts
  - Retrofitting and calibration possible at any filling level
- **Measuring accuracy 3-5%**
- **Service life:** Fatigue life >20 million cycles
- **Operating temperature:** -34...66°C / -30...150° F
- **Easy installation** with mounting tool kit, materials, and junction box

## Microcell® Strain gauge sensor



- Ideal for all substructures with vertical supports
- For almost all profile types and cross-sections
- For carbon steel, aluminum and stainless-steel profiles
- Measurement accuracy 3-5 %, depending on PSI value (load by profile cross section - calculation tool for exact determination of PSI value is available)
- **Extremely compact:** 2" (5 cm) or 3" (7.5 cm), approx. 90 g, cable length 5 to 500 ft (1.5 to 150 m)
- **Junction box:** plastic or stainless steel, for up to 4 sensors each (use in pairs recommended)
- For consultation on sensor selection, PSI calculation, installation and commissioning, simply contact [info@anderson-negele.com](mailto:info@anderson-negele.com).



## L-Cell® Dual axis strain gauge sensor



- Ideal for multiple vessel constructions with horizontal beams
- Ideal for skirted silos
- Measurement accuracy 3-5 %, depending on PSI value (load by profile cross section - calculation tool for exact determination of PSI value is available)
- **Extremely compact:** approx. 2" (5 cm), approx. 40 g, cable length 5 to 500 ft (1.5 to 150 m)
- **Junction box:** plastic or stainless steel, for up to 4 sensors each (use in pairs recommended)
- For consultation on sensor selection, PSI calculation, installation and commissioning, simply contact [info@anderson-negele.com](mailto:info@anderson-negele.com).

