

# Kistler-Morse

## Case History



Microcell® (left); Weigh II™ (above)

**An innovative and economical solution from Kistler-Morse enables a ready-mix concrete producer to accurately monitor and manage raw material inventories in split silos.**

A ready-mix concrete producer faced the challenge of continuously monitoring cement and fly ash inventories in a 2-section split silo. Typically, this might be addressed by using level measurement devices in each silo compartment and converting the level readings to weight. However, level measurement as a proxy for physical inventory can be compromised by several sources of inaccuracy: angle of repose, compaction, aeration, and fill and discharge locations. Weight measurement provides the most accurate inventory reading, but obtaining accurate weight on split silos is typically considered impossible or impractical.

Kistler-Morse's unique solution was enabled by a combination of two key components of its weighing solutions platform: Microcell® Bolt-on Strain Gages and the Weigh II™ controller. First, Microcells® were installed directly onto the silo's steel support structure. The sensor signals were then integrated into the Weigh II™, which is capable of dynamically determining the weight in either silo compartment.

This integrated solution achieved accuracies within 3 percent in either compartment even when weight in the other compartment changed significantly – a dramatic improvement over an error of 33 percent when using sensors and a standard weight indicator. This solution has provided the customer with an economical and accurate inventory management capability.

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