

Application Note

Improving Plastic Pellet & Powder Inventory
Information On Existing Vessels

Problem:

Pellet and powder storage bin inventory information is sporadic. It presently requires sending someone to the top of the tank, opening up the vessel and dropping in a tape. If frequent readings are required, someone is pulled off other jobs to tape the vessels. Often times, especially during bad weather, the current level is guessed at based on estimated usage since the last delivery ticket. If usage is greater than expected or the wrong readings used, shortages occur shutting down the line. Material then needs to be expedited in, not only increasing costs for handling, but many people are involved in walking paperwork through, calling, rescheduling operators and receiving materials to keep the plant in production. Retrofit of load cells is not considered practical because of the costs.

Solution:

Continuous weight information using KM Bolt-On Microcell™ or L-Cell™ strain gauges and KM Weigh-II/SVS 2000 Indicators on the storage vessels. Information can be displayed locally, transmitted to PLC/PC control systems using KM digital interfaces or accessed via the Internet using a KM ORB-enabled system.

Benefits:

- Repeatable, continuous weight readings to base current inventory and material demands. Uses
 the same units (weight) that is used for re-order and tracking. Track material to determine room
 for a load or if there is enough material on-hand for production.
- Non-contact eliminates material contamination risks.
- Workers not climbing tall vessels, decreasing workers comp and accident claims.
- Material not exposed to weather because the tank does not need to be opened to measure inventory and eliminates risk of dropping something into the tank.
- Easy to retrofit on existing vessels saving installation costs compared to the retrofit costs for installing load cells on existing vessels. No need to empty vessel to install or re-work vessel top structure to support contact cable systems.