

## Continuous Loss-of-Weight Bulk Bag Unloader

A new, automated Bulk Bag Unloader from Flexicon Corporation is equipped with an activated surge bin and flexible screw conveyor that allow continuous loss-of-weight (gravimetric) discharging directly from bulk bags, it was announced by David Gill, president.

Cubic volume of the activated surge bin exceeds that of one full bulk bag, providing ample time for bag changes during which system software switches to volumetric mode for uninterrupted operation.

The bag-to-surge-bin interface consists of a SPOUT-LOCK® clamp ring positioned atop a pneumatically actuated TELE-TUBE® telescoping tube, allowing dust-tight connections and unrestricted flow between the bag spout and activated surge bin, as well as automatic tensioning of the bag as it empties to promote flow and evacuation. The telescoping tube raises the clamp ring assembly that seals the clean side of the bag spout to the clean side of the telescoping tube, and then lowers until the bag spout is pulled taut. Once the spout is untied, the telescoping assembly exerts continual downward tension on the spout, elongating the bag as it empties.

The high-integrity, dust-tight seal between bag spout and clamp ring allows full-open discharge from bag spouts of all popular diameters, eliminating the need for iris valves commonly employed to lessen dust escape inherent with bag spouts hanging loosely in hopper intake chutes.

The discharger is also equipped with FLOW-FLEXERTM bag activators that raise and lower opposite bottom edges of the bag at timed intervals, loosening compacted, non-free-flowing materials and promoting material flow into the bag discharge spout. As the bag lightens, the stroke of the bag activators increases, raising the bag into a steep "V" shape, eliminating dead spots for total evacuation of material with no manual intervention.

The activated surge bin is isolated on rubber mounts and vibrated with an imbalanced weight gyratory motor, promoting uninterrupted flow into the small surge hopper of the flexible screw conveyor whose screw rotation speed is continually varied to maintain a pre-selected gravimetric discharge rate.

The conveyor handles both free- and non-free-flowing bulk materials including products that pack, cake, plug, seize, smear or fluidize, with no separation of blended products.

The "BFC" Series discharger is equipped with an optional raised operator platform (not shown), and a cantilevered I-beam with electric hoist and trolley for positioning bulk bags. Also offered is a "BFF" Series discharger with bag lifting frame for forklift loading of bags.

The Continuous Loss-of-Weight Unloading System is available in carbon steel with durable industrial finish, or stainless

steel designed and constructed to industrial food, dairy or pharmaceutical standards.