



Product News

Mobile High Capacity Bulk Bag Discharger and Flexible Screw Conveyor

Edited by on 2. Nov. 2023

Whitstable, United Kingdom & Bethlehem (PA), United States –

A new Mobile Frame-Mounted Bulk Bag Discharger with Flexible Screw Conveyor from Flexicon allows rapid, dust-free discharging and conveying of bulk solid materials at multiple plant locations. The BULK-OUT[®] BFF Series discharger allows forklift-loading of bulk bags from 914 to 2134 mm tall. A removable bag-lifting cradle with Z-CLIP[™] strap holders permits bulk bags to be attached securely at floor level from an ergonomic standing height, and then forklifted into cradle cups atop the discharger's upright posts.



Flexicon Mobile Bulk Bag Discharger with Flexible Screw Conveyor allows rapid, dust-free transfer of abrasive and high-density bulk solid materials to process equipment and storage vessels at multiple plant locations.

The bag spout is pulled through a 305 mm diameter iris valve which is then closed around the spout, preventing material flow. The spout can then be untied, the snap-action access door closed, and the valve released slowly, allowing controlled flow into the enclosed hopper through the bulk bag interface chute.

Complete discharge is aided by FLOW-FLEXER™ bag activators that press against opposite bottom sides of the bag at timed intervals to form a steep "V" shape, and top-mounted POP-TOP™ extension devices that raise the uprights as the bulk bag empties, promoting the flow of material from the corners of the bag through the bag spout.

The hopper is vented to a BAG-VAC™ dust collector that creates negative pressure within the sealed system to contain displaced air and dust, and vacuum any particles trapped in bag creases during disconnect. Reverse pulse air jets on a timed cycle dislodge material accumulated on the filters, returning it to the material stream.

The enclosed 156 L hopper measures 762 mm square by 1067 mm high and is equipped with proximity level sensors, and a pneumatic vibrator assembly to promote flow of material to the conveyor.

The outlet of the hopper charges the inlet of a BEV-CON™ Flexible Screw Conveyor that propels free- and non-free-flowing bulk materials at a 45 degree incline in user-specified distances for discharging directly into processing equipment or storage vessels through 254 mm diameter downspouting.

Specialised geometry of the internal screw allows handling of materials that pack, cake, smear, seize or fluidise, with no separation of blends. The screw is the only moving part contacting material, and is driven beyond the point of discharge, preventing material contact with seals or bearings, and allowing rapid cleaning.

Mounted on a mobile base with support mast, the self-contained unit can be rolled to feed various locations or to a cleaning station.

A lower clean-out cap on the conveyor tube can be removed to flush the smooth interior surfaces with steam, water or cleaning solutions, or to fully remove the flexible screw for cleaning and inspection.

The system is available in carbon steel with durable industrial coating, with stainless steel material contact surfaces, or in all-stainless steel finished to industrial, food, dairy or pharmaceutical standards. Its NEMA 4 control panel with PLC allows manual and automatic start/stop and speed adjustment.