Bulk Bag Filler Brings Head to Operators

An all-new bulk bag filler from Flexicon Corporation features a pivot-down fill head that enables the operator to connect empty bags at floor level and resume filling operations rapidly, eliminating the need to climb steps, strain to reach overhead connection points, or risk injury associated with operation of conventional bulk bag fillers, according to David Gill, president.

The patent-applied-for design, named the SWING-DOWN (TM) bulk bag filler, simultaneously lowers and pivots the fill head, stopping it in a vertically-oriented position that places the bag inlet spout inflatable connection, inflator button, and four bag loop latches within one arm's length of an operator standing on the plant floor.

"Bringing the fill head to the operator in a vertical position at floor level can significantly increase the safety and speed of connecting bulk bags," says Gill, explaining that the connection points of a conventional filler are beyond the reach of most operators, even when short bags are being filled. "Adding the height of a roller conveyor to the height of a bulk bag to the length of its bag loops puts the connection points for bulk bags of only 48 inches (122 cm) in height at approximately 7 feet (213 cm) above the floor," he says.

The new design is said to eliminate the danger of repeatedly stepping onto and over roller conveyors to access rear bag hooks and spout connection collars, and of standing on the conveyor and bending over with head and arms inserted beneath operational fill head components to pull bag spouts upward over inflatable collars while reaching for bag inflator buttons.

A remote console or wall-mounted panel houses controls to raise and pivot the fill head into a locked, horizontal "fill position," automatically inflate the bag to remove creases, open a flow control valve or start a feed device, and stop the flow of material once a preset fill weight has been gained. Optional vibratory decks de-aerate and densify material in the bag at preset set points to create a solid, stable bag, ready for shipment.

Once bags are filled, the controller deflates the spout connection collar, releases the loop latches, and raises the fill head to fully disengage the spout, enabling the bag to exit the filler automatically on the roller conveyor.

An innovative latch mechanism automatically resets the latch after releasing the bag loops, and re-positions it as the fill head pivots into a vertical position, enabling the latch to receive bag loops easily inserted by an operator and to re-latch automatically, securing the bag.

"The SWING-DOWN (TM) filler represents a total re-think of the bulk bag filling process, allowing rapid connection of empty bags, while improving the ergonomics and safety of the task by an order of magnitude," says Gill.

The filler is constructed of carbon steel with durable industrial finish, or stainless steel finished to industrial, food, dairy or pharmaceutical standards, and is offered with material delivery systems integrated with upstream process equipment or other material source.