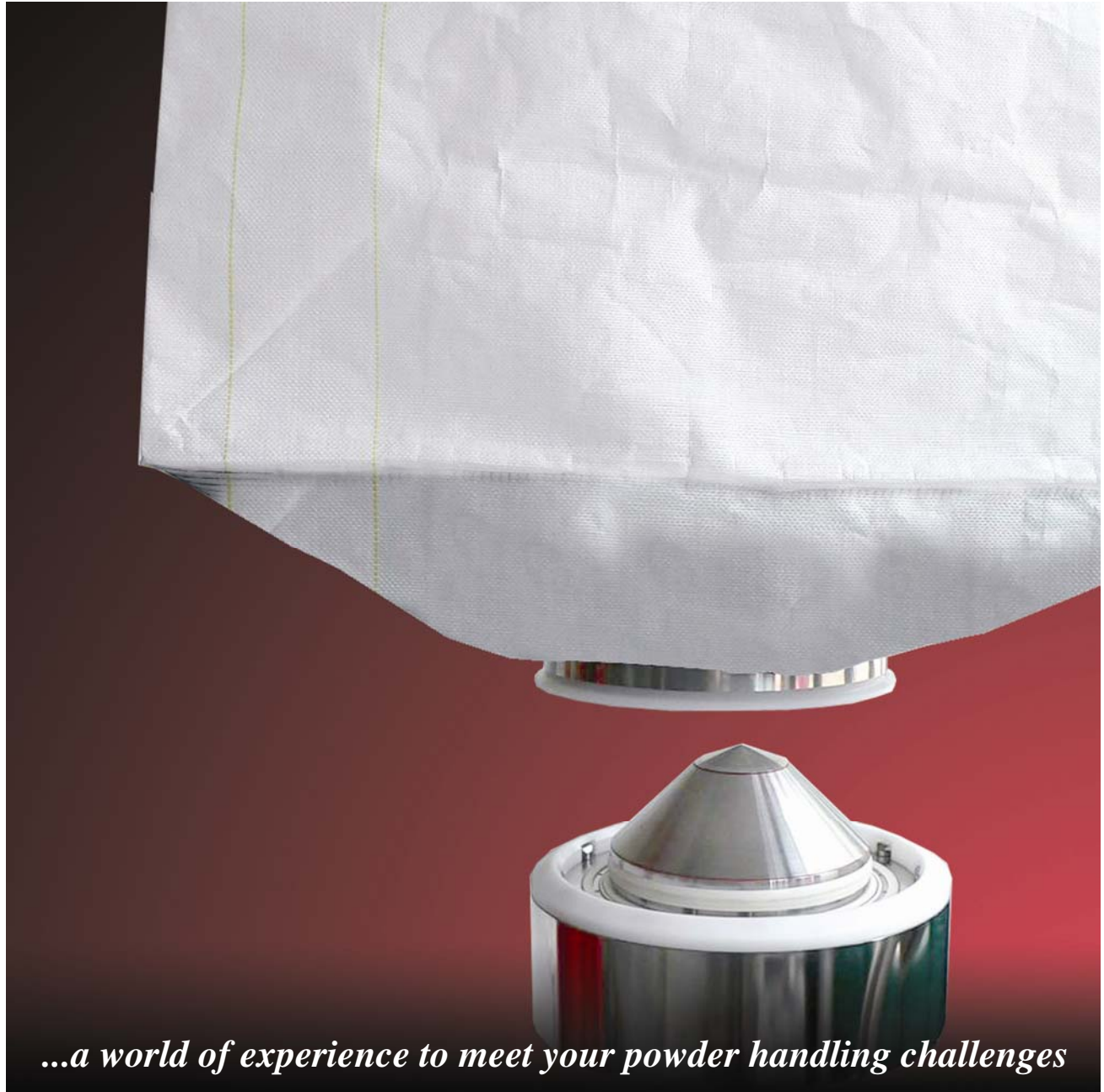


Visval's SoliValve® technology



Industrial Equipment & Design Company

Visval Technology

IEDCO is the exclusive North American Integrator and Distributor for **Visval**, a Swiss company that has developed a revolutionary method for the automatic and contained discharging of bulk materials from FIBC's (bulk bags, super sacs, etc).

By combining the containment of cone-valve technology and the disposability of the FIBC, Visval's **SoliValve**[®] system operates on a "closed transfer" process that is nearly equal to a split butterfly valve in terms of containment. This system eliminates the typical operator interaction with the bulk bag spout during all phases of discharging, while providing a very high level of containment.

SoliValve[®] Technology

Working off established cone valve technology, Visval has improved upon the design and taken the technology to a whole new level of reliability, containment, and usability.

Features never before associated with bulk bags have been integrated into the SoliValve[®] (i.e.– fluidization of the bagged product **INSIDE** the bag during discharge).

Constructed of mostly stainless steel, the SoliValve has eliminated any hygiene and maintenance issues that are present with other cone valves and their elastomer bladders, liners and interiors.

Containment

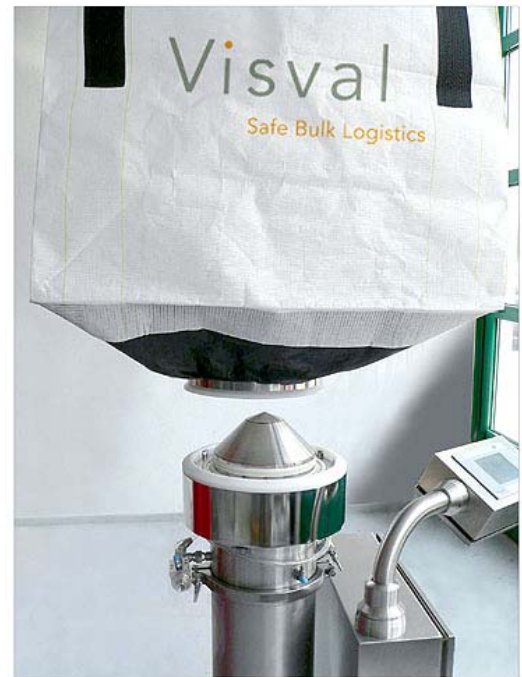
The cone valve has always been known for it's contained discharging ability, but, until now, has only been available for rigid IBC's.

Unlike conventional means of bulk bag discharging involving high operator interface with the bag, spout and ultimately the product, the SoliValve[®] virtually eliminates all operator involvement.

There are no spouts to untie (or cut), no tie boxes filled with product or manual valves to activate. Both the unsealing and sealing of the bulk bag with the SoliValve[®] System is achieved with full containment at the push of a button.

Virtually any powder handling container (Bulk Bags, Drums and even IBC's) can be converted to the SoliValve[®] system.

For the first time, the automatic and contained handling of all common bulk containers can be achieved via a universal active docking system.





Batching and Dosing

Accurate batching/dosing is now achievable directly from an FIBC without the need for the addition of expensive and cumbersome equipment and hardware. The SoliValve® can be “pulsed” during discharge, enabling it to transfer small amounts of product and achieve a high level of accuracy.

Partial Bag Removal

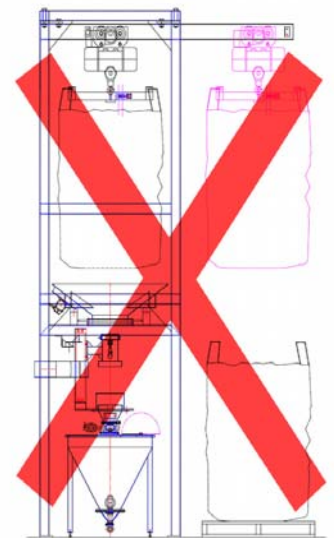
Unlike conventional bulk bag discharging systems that require a large amount of operator interaction to remove a partially filled bag from a discharge station (if even possible), the SoliValve allows partially filled bags to be removed from the discharge station with a push of a button, complete containment and NO operator contact.

Space Restrictions

Current bulk bag dischargers are bulky and normally require a lot of headroom to accommodate the bags, the operator and the receiving vessel. The SoliValve system eliminates the need for a large bulk bag unloading frame due to the fact that there is no operator interaction, allowing the discharge station to be lower than what has been industry standard.

Fluidization

Visval has integrated into the SoliValve the only existing fluidization system for bulk bags. Fluidization with either air or nitrogen can aid in the discharging of some of the most difficult of products.



Multi-Tasking

Until now, discharging from several different bulk containers required multiple stations and equipment.

The SoliValve is designed to be used as a universal discharge stations for not only bulk bags, but for drums and rigid IBC's as well.

Drums need to have an inner lining for complete discharging. The space between the lining and drum is filled with air, creating a cone-like shape of the lining during discharge.

Like the bulk bags, the drums and IBC's need to be fit with the passive side of the SoliValve.



...a world of experience to meet your powder handling challenges

Advantages of the SoliValve[®] System vs. Conventional Bulk Bag Discharging

Conventional Bulk Bag Discharging	Using the SoliValve [®] System
Requires a large amount of operator interaction with the bag, spout and product.	Requires no operator interaction with the bulk bag spout and product is discharged with full containment.
Often involves the operator to be put in harm's way (climbing steps, positioning himself under the bag, etc.)	The operator never interfaces with the bulk bag after the bag is placed on the bag lift.
Entails having the operator manually open the bag spout.	The operator merely pushes a button to prepare the bulk bag for discharging.
Partially filled bulk bags are difficult, if not impossible, to remove and result in product spillage.	Partially filled bulk bags are easily sealed and removed with the push of a button.
Must use a container specific discharge station.	Can use a universal SoliValve[®] Discharge Station to empty bulk bags, drums and rigid IBC's.
Fluidization of bagged product is not practical.	Fluidization is easily achieved with the SoliValve[®] System using either compressed air or nitrogen.
Calls for manual operating of valves, tie boxes, etc.	All discharging is achieved at a central control panel with a PLC.
Accurate batching or dosing requires the integration of additional hardware and equipment.	Accurate batching is easily accomplished using the SoliValve's[®] ability to "pulse" and discharge small amounts of product.