Handling Titanium Dioxide in Bulk Bags

Industry Requirements

- Widely Adopted for handling TiO2 in Paint, Pigment, Plastics, Paper & Chemical Industries
- Ideal Solution for Poor Flowing, Cohesive & Smearing Powders
- Full Testing Facilities Available

Spiroflow Solution

Spiroflow has developed a bulk bag discharge system which provides a proven solution for handling titanium dioxide and other poor flowing, cohesive products, which tend to bridge in hoppers, cause smearing of conveyor tubes and generally create production nightmares for process engineers.

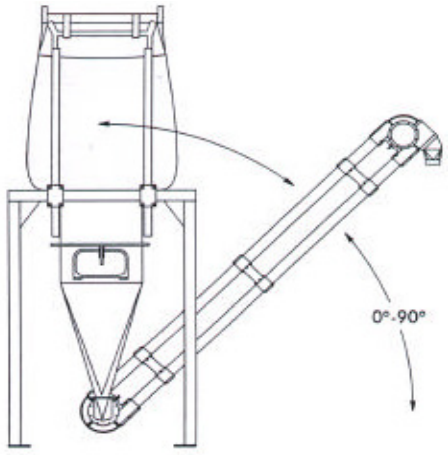
The system includes a bag support dish, with tensioned side arms to retain the bag in a taut position, ensuring total discharge of bag contents. A number of dust control features are included in the system. When the bulk bag has been lifted into the discharger, closure bars clamp the base of the spout preventing release of the product while the bag is being untied, insuring dust-free operation. These closure bars are enclosed in a chute under the discharge dish where the bag sits, the chute having an access door allowing untying or re-tying of the FIBC. Further dust extraction is available in the chute to eliminate dust emission during discharge. Pneumatically activated "massagers" push against the sides and base of the bag to provide smooth and consistent product flow. Quieter in operation than vibratory discharge aids, they do not compact the product or create dust.

The discharge chute also houses a blade type agitator which assists flow of product into a specially designed screw conveyor, where the speed can be varied according to product flow properties and process requirements.

From the rigid screw, the product feeds into an aero mechanical, or "rope & disc" conveyor, which is a proven method of handling titanium dioxide, talc, oxides and other poor flowing products. The rigid screw under the bag discharger serves to regularize the flow rate into the aero mechanical conveyor.

The discharger can also be supplied with an integral hoist and runway beam for loading bags into the emptying frame. FIBCs may be stored ready for lifting by hoist without the need for fork lift truck assistance when discharge is required.

Spiroflow's combined expertise in bulk bag handling and powder conveying is highlighted in its ability to attune equipment to the special needs of customers who have experienced long term problems handling products with difficult or unusual flow characteristics, such as, toxic chemicals or powders of extremely low bulk density requiring innovative handling methods.



Aero Mechanical Conveyor can be installed vertically or at any angle to suit layout requirements

See Our Brochure "A Definitive Guide to Dust-free, Safe & Controllable Bulk Bag Discharging"

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