FIBC/Big Bag Dischargers

The Rospen FIBC or Big Bag Discharge Stations have now been re-engineered and extended to lead the market in range and features.

Designed for use in food, chemical, pharmaceutical and plastics industries, the range is equally at home in minerals and aggregates handling. All powders and particulates are discharged in a clean, efficient system.

The stations can handle all types of bags and our engineers will be pleased to advise clients of the most appropriate bag design or best mechanical method of handling bespoke bags.

These stations are designed for use in all industries and can be coupled to the Rospen range of metering or transfer feeding systems to provide a regulated discharge of material to the clients plant or process. As well as FIBC Dischargers, Rospen also manufacture a range of Big Bag Filling machines.

Main Features

- New neck/liner clamp allows for open access and fast dust free connection of bags.
- Spring mounted bag supports to transmit vibration into the product not into the client’s floor or steelwork structure. This lessens load and noise imparted to mezzanine floors.
- Open architecture to avoid the use of difficult access chambers. With the use of a bag neck/liner clamp, the operator can access the bag ties outside of an enclosure, making it a safe and easy operation.
- Where enclosures are preferred, these utilise large apertures and are designed to ensure that all materials flow to the process below with no spillage or emissions.
- Single arm side rigging frame supports allow for one operator to easily adjust the height of bag rigging frame supports to cater for different bags.
- Narrower and low profile rigging frames are used for better manoeuvrability and lower installation height.
- All stations are designed to prevent dust emissions or spillage. These provide a cleaner and safer working environment for the operators.
- Simplified design and controls allow for cost effective production and lower costs of ownership for users.
- Flow aid bars can be fitted to break compacting material and deliver discharge assisting vibration deep into the material.
- Single and double vibrator motors to increase agitation on difficult powders.
- Massaging petals to break clumping powders and coerce discharge through the centre of the bag.
FIBC Station Configurations

- Fork lift truck loading of bags with top loaded rigging frames.
- Fork lift truck loading of bags with cassette type rigging frames allows for low level lift and placement of the bags.
- Power hoist loading of the bags via single hoist or dual tandem hoists for high capacity discharge stations.
- Multi trip and single trip bags with discharge spouts are catered for, as well as flat bottomed bags requiring a knife to automatically open and discharge are available in the range.

Options

- Loss-in-Weight stations to dose materials to the client’s process.
- Batch weighing stations to dispense batches to the client's process.
- Big Bag/FIBC filling stations for low or very high capacity plants.
- Other items available include station covers to protect during stand down periods.

Flow Choke

Rospen has developed a 4 strand closure device as an improvement on previous industry bag neck closure valves. This simple and robust choke will close the bag neck of a partially discharged bag to allow the operator to re-tie the neck and remove the bag from the rig. A special displacement insert allows this to be effective even when flow below the valve is not possible.

Liner / Neck Clamp

The Rospen liner clamp allows the operator to quickly and easily strip the discharge neck of the liner around a sealing tube. The tube can be raised and lowered by hand as well as rotated or removed to allow for ease of access.

When lowered the operator inflates the clamp seal which grips and seals the liner on the outside of the liner and prevents contact between the material inside the bag and the seal or any external surface. When the seal is relaxed the liner is free to be pulled back past the seal ensuring that all of the material/dust is deposited inside the system and not on the seal or external surfaces. This radically new and effective seal arrangement is a major advance for suppression of emissions and external contamination and is subject to a patent application.

Liner Tensioner

A new pneumatic liner tensioner device is available for use on the rigging frame carrying the Big Bag. The operator inserts some of the liner into the winding assembly before the Big Bag is lifted into position. After loading and with the rigging frame safely high above the working area, the operator plugs the control line into the station to activate the tensioner. A pneumatic drive rotates the tensioner, which pulls any free liner through the top of the bag and on to a winding assembly. This greatly encourages efficient discharge of material from the Big Bag and avoids trapping of material in liner folds or flat areas.

On demounting the rigging frame the winding assembly is removed by hand and it easily pulls apart to free the liner as a rolled bale for easy and clean disposal.

ROSPEN INDUSTRIES
Oldends Lane Industrial Estate, Oldends Lane, Stonehouse, Gloucestershire GL10 3RQ, UK.
Telephone: +44 (0)1453 825212    Fax: +44 (0)1453 828279
Internet: www.rospen.com    Email: company@rospen.com
Rospen Industries manufacture IBC filling and discharging systems for Food, Chemical and Pharmaceutical Industries in the UK and abroad. High integrity sealed rigid bin systems have been employed on major projects handling difficult powders in weighing and non-weighing applications with the convenience of IBCs and the suppression of dust emissions. Big Bag fillers and dischargers are also manufactured with combination Big Bag and Sack/Drum tip infeed. All such systems are employed to complement the Rospen conveying, metering and weighing control systems.

Combined with Rospen Vacuum systems the IBC filling station can be employed as a dust/waste reclaim/extraction system. Standard IBCs are manufactured and commissioned from 15 litres to 4000 litres plus Rospen can provide a tailored system to suit all IBC handling applications.