

## Powder Loading Systems

### Manual Bag Loader.

A bag of powdered product is placed on the open bag loader door and secured in place by the retaining spear. The bag is then slit manually with a knife before closing and securing the door. The powder falls into the day hopper.

As an option a front pull knife can be fitted, especially for powders like fluoride. This pulls a knife blade across the bottom of the bag after the door is closed.



### Vacuum Transfer

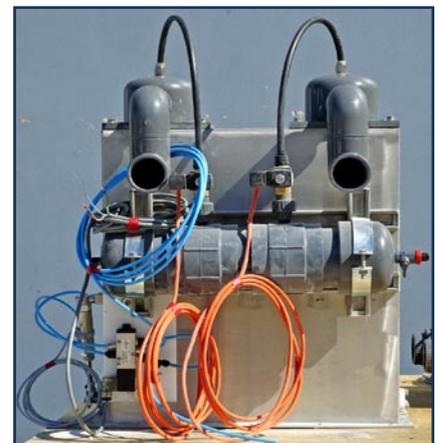
The ProMinent vacuum transfer system has two vacuum motors, a filtration unit and a wand. The filtration unit is mounted on the top of the day hopper, the vacuum motors mounted remotely. The vacuum wand has two stainless tubes. The larger tube connects to the filtration unit, via the vacuum hose, the smaller of the two tubes is used as a vacuum relief, ensuring that the air required to carry the powder to the filtration unit is always available at the wand end.

Air is drawn down the relief tube and into the suction wand. As the air enters the wand it collects powder, carrying it into the filtration unit in a continuous stream.



As the powder enters the larger volume of the filtration unit velocity drops and the powder falls to the bottom of the unit. The air is then drawn past the 2 filters, to remove any airborne powder.

During normal operation, compressed air is used continually to prevent the filters from becoming clogged. Compressed air jets are directed at the reverse side of the filters on a pre-set time cycle to dislodge powder collected on the filters. This dislodged powder falls into the bottom of the unit. The compressed air supply is from an accumulator mounted on the back of the filtration unit.



The standard model has a capacity of 200 kg per hour.



## Bulky Bag

ProMinent offer a Bulk Bag Discharge System designed to allow for the easy unloading of Flexible Intermediate Bulk Containers, (FIBC's). It is designed for operation by a single operator, and uses an electric hoist to lift the bag into position above the bag discharger.

The operator locates the bulk bag below the hoist. The lifting frame is lowered so the lifting loops of the bag can be positioned on the frame. The bag is then lifted and positioned above the intermediate hopper using the electric hoist and traverse.

The access door of the intermediate hopper is opened and the trunk of the bag drawn through the membrane seal. The trunk is untied, the access door shut and the material allowed to drop into this intermediate hopper.

When the day hopper low level switch calls for more powder, the screw conveyor will start, transferring powder from the bottom of the intermediate hopper into the top of the day hopper.

Should a low level switch be activated in the intermediate hopper the massage plates on the sides of the support dish will active to gently massage the Bulk Bag to shift any material.

If the level switch detects material again, the massage plates will be deactivated. This massage process will continue on and off until a constant low level is detected, at which time the conveyor will stop running and an alarm will be raised. A check should be made that all the material in the Bulk Bag has been removed and if not, the massage plates can be manually activated by pressing the pushbutton on the control panel.



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