

Aero Mechanical Conveyor & Bag Dump Station Distributes Chemicals for Production of Descaling Gel



Aero Mechanical Conveyor



Bag Dump Station

Customer Requirements

Robert McBride Ltd. is a leading UK supplier of private label household and personal care products.

As part of the efficiency improvements at their Middleton UK plant, the company sought to eliminate the manual loading of chemicals used in the manufacture of a descaling gel into a dissolving tank. This previously involved carrying bags up two flights of stairs to a mezzanine floor.

- Forklift trucks lift the material from the ground floor to the mezzanine floor.
- It is then moved to the front of the bulk bag unloader by electric pallet truck.
- They are then hoisted into place by an ultra low-profile electric hoist that runs along a runway beam.
- During a typical two-shift day, three bulk bags are emptied.

Key Requirements

- Reduce manual handling
- Dust-free method to unload 50 lb/ 25kg bags
- Conveyor to deliver materials to the dissolving tank at a uniform rate to prevent clumping
- System capacity of 6,600lb/ 3000kg per hour

Spiroflow Solution

- Bag dump with dust hood and provision to connect to the factory's dust extraction system
- Short Flexible Screw Conveyor below the Bag Dump Station to feed materials to the main conveyor
- 3.3'/ 1m Aero Mechanical Conveyor

Phil Moss, Project Engineer at McBride's confirms, "We contacted Spiroflow because we had worked with them on previous projects and we know the level of service we can expect from them."

The Results

- Delivers all materials in a well dispersed manner - eliminating clumping in the tank
- Reduced manual handling - Operatives are now more productive
- No dust emissions

"Overall I'm extremely happy with the performance of the Spiroflow Aero Mechanical Conveyor and Flexible Screw Conveyor. They do exactly the job we want them to do and have improved the efficiency and safety of the job at hand" said Phil Moss.