



Bulk Bag Discharger with Flexible Screw Conveyor

Customer Requirements

Metaref, a division of Walther Trowal, reviewed the material handling aspects of their ceramic chip manufacturing process. These chips are available in various shapes and sizes, used in the deburring, fettling and polishing of metal and ceramic castings.

For 75 years, Walther Trowal has specialized in all aspects of the materials finishing and polishing industry. This includes manufacturing ceramic and plastic finishing media, the fettling and polishing equipment itself and also the associated waste water treatment for wet finishing processes.

- Bulk bags of aluminum oxide were raised by forklift over a rigid intermediate bulk container (IBC).
- The bulk bag was cut open by hand allowing the powder to flow into the IBC.
- Aluminum oxide was loaded into a mixer by raising and tipping the IBC.
- This was time consuming & dusty so contaminating the air and creating waste.

Spiroflow Solution

After witnessing successful tests at Spiroflow, the only company to offer product testing, it was clear that a T2 Mobile Bulk Bag Discharger with an integral Flexible Screw Conveyor was the right solution.

- The Spiroflow T2 Mobile Bulk Bag Discharger features full dust control by utilizing a dust containment cabinet where the bag is opened.
- The dust cabinet contains a neck clamp which eliminates any leaks between the bag and the discharger.
- Spiroflow's patented spout closure bars allow the automatic opening and closing of the bag with the doors of the dust containment cabinet closed.
- Bag massagers and bag tensioners ensure that the bulk bag is completely emptied into the integral flexible spiral conveyor which feeds aluminum oxide directly into a mixer.
- The equipment supplied by Spiroflow provides a fully automatic powder unloading, proportioning and transfer system.
- It is mounted on a robust mobile frame to facilitate the loading of a stand-by mixer that provides additional capacity when required.

The Result

Adrian Martin, Managing Director of Metaref, confirms, "Our main requirements were dust control, simplifying our handling issues through material management and efficiency improvements. The Spiroflow unit has addressed all my concerns and although not the cheapest solution, it was by far the best. Spiroflow also backed it up with successful tests on our product."

"After the commissioning we started production first thing the following morning and we haven't looked back since. I am 100% pleased we made the correct decision."