

Aero Mechanical Conveyors Keep Packing Lines Busy for World's Largest Producer of Tin Oxide



The Second Spiroflow Aero Mechanical Conveyor



The Third & Fourth Spiroflow Aero Mechanical Conveyors

Customer Requirements

Keeling & Walker Ltd of Stoke-on-Trent, UK is the world's largest producer of Tin Oxide.

In early 2007, when Operations Manager, Martyn Pedley, went to replace a troublesome bucket elevator, he wanted to eliminate fugitive emissions to improve the working environment.

Tin Oxide is a difficult material to handle as it:

- Is abrasive
- Smears
- Doesn't flow well
- Readily bridges

The problems with the bucket elevator were caused by the abrasive product getting into the chains and other mechanical parts. As a result, it had become too costly to maintain. Pedley did some research and concluded that either a flexible screw conveyor or an aero mechanical conveyor would be possible solutions.

Spiroflow Solution

Continuous trials at Spiroflow indicated that an aero mechanical conveyor was the ideal solution. This has been verified by the first Spiroflow Aero Mechanical Conveyor installed in March 2007 which has performed to Keeling & Walker's satisfaction.

- Over recent years, Keeling & Walker have invested heavily in improving the efficiency of their production processes to remain competitive in their global market.
- They set about upgrading the packaging lines to reduce their labor intensive nature and to eliminate dust in the atmosphere.

To accomplish this additional conveyors were required to transfer Tin Oxide from the thermal process to the storage hoppers above the packing machines.

Martyn Pedley confirms:

"Spiroflow Aero Mechanical Conveyors were my automatic choice, I didn't look elsewhere based on the performance of the unit installed in March 2007, the service that I received at that time and the after sales service I have enjoyed since. The fact that the conveyors are totally enclosed has made a massive difference to the cleanliness of our factory."

The Results

Keeling & Walker bought another Spiroflow Aero Mechanical Conveyor in February 2008 and then 2 more recently. The original conveyor is 10ft/ 3m long and operates vertically. The other three are 16.5ft/ 5m long and operate at approximately 50° to the horizontal.

All four Spiroflow Aero Mechanical Conveyors at Keeling & Walker operate continuously 24/7.