

Mobile 'Spiroflow' Flexible Screw Conveyor is ideal solution for international manufacturer of chocolate making new product.



Customer requirements

The customer's production facility was built to produce many thousands of tonnes a year of bulk milk chocolate in liquid form. It operates 24 hours a day, 5 to 7 days a week according to seasonal demand.

Initially, when responding to the demand for a dark chocolate alternative, the customer met this by manually adding cocoa powder into the mixer. However, this meant carrying batches of 25 Kg bags up 2 flights of stairs, from the storage area to the mixer, up to 30 times a day.

The need to eliminate this chore was immediately apparent. Their Operations Manager identified that the cocoa could be introduced into the hopper of the pneumatic conveying system collection that delivers chocolate powder and sugar from the main storage silos to the dosing feeder above the mixer. The collection hopper is located close to the ingredients storage area. This meant that the cocoa powder could be pneumatically conveyed up 2 stories to the mixer in a matter of seconds. Accordingly, the customer required a means to load the cocoa into the collection hopper - the inlet to which is a little over 2 metres above floor level.

Spiroflow solutions

Following trials at their Test Centre, Spiroflow proposed a Flexible Screw Conveyor furnished with their special profile 'Proscrow' spiral. 'Proscrow' spirals give maximum 'push' to the product with minimal contact between the spiral and the conveying tube in which it rotates. They are the ideal solution for products containing fat or which readily smear.

The conveyor was supplied with an integral bag tip station complete with a side mounted sack spigot. This spigot allows emptied bags to be discarded straight into a waste sack. The conveyor and sack tip station are mounted on a mobile frame so that it can be parked out of the way during the days when only milk chocolate is produced. After each dark chocolate production run, the conveyor is purged with sugar to ensure no cocoa residue.

The customer commented, "Our operatives are very happy with the Spiroflow conveyor. It is most definitely fit for purpose. It is easy to clean and has given us no problems since its delivery back in July 2008. We did look at other suppliers but were not impressed by their quality".