

CASE HISTORY

CADBURY'S CHOOSE ACRISON

When the UK's leading chocolate manufacturer, Cadbury Trebor Bassett, wanted to upgrade its Bournvita plant at Chirk, the company set very stringent specifications for the equipment to replace its 30-year-old weigh belt system.

The Chirk site processes 50,000 tonnes of cocoa beans a year, and operates 24 hours a day, producing Cadbury products to the highest standards of quality control.



Although the main objectives were to improve housekeeping and system maintenance, the new feeder also had to offer relatively high accuracy of rate of feed. This was because it was adding vital ingredients to be kneaded into a molten glucose mix prior to being baked in a belt vacuum oven. If too little powder was added, the batch would be sticky and burn.

Cadbury was also keenly aware that the bulk density of these raw ingredients was variable – so the mass would not be constant, added to which, the feeder would have to operate below a 10 tonne hopper that would compact the ingredients.

After looking at a range of feeder manufacturers, Cadbury chose Acrison's 105 volumetric feeder with its double concentric auger metering mechanism, which has been shown to minimise bulk density variations by taking conditioned material from the centre of the feed chamber.



‘We were keen to buy a feeder with two dissimilar feed screws, and particularly liked the Acrison version, as it has just one drive mechanism, making installation and maintenance easier,’ said Cadbury senior process engineer at Chirk, Simon Blake. ‘It also met our criteria that the feeder should be easy to strip down and reassemble, so it could be left empty if the line was not running.’

Prior to purchase, Cadbury undertook extensive trials at Acrison's test laboratory to ensure the feeder would meet their requirements for constant mass delivery. It was difficult to reproduce exact process conditions, but the test results demonstrated that whilst the bulk density of the raw ingredient was variable, it was possible to feed within the required accuracy.

Acrison®

Acrison, Inc., 20 Empire Blvd., Moonachie, NJ 07074

Phone: 201-440-8300; Fax: 201-440-4939

Email: informail@acrison.com

Website: <http://www.acrison.com>