



The updated Flexible Screw Conveyor



The Flexible Screw Conveyor provides more accurate results.

Customer Requirements

The management team at candy manufacturer Joseph Dobson began a program to improve and automate selected elements of their operation.

They must not compromise the heart of their traditional hard candy making process. All of their improvement measures were targeted towards three key objectives: **better hygiene, improved health and safety, and labor savings.**

1. For example, sugar for the steam pan was manually weighed into food grade buckets, lifted shoulder high and tipped into the steam pan - an operation they need to eliminate.
2. It is in this steam pan, a pressure vessel mounted on load cells, that the base ingredients of sugar, glucose and water are weighed.
3. They are mixed and preheated and transferred to traditional open pans.
4. Here the resultant mass is boiled to perfection and ready to be mixed with coloring and flavorings.

Spiroflow Solution

A Flexible Screw Conveyor was successfully used to satisfy this application. Together with a new sack tip hopper for use in the boiling room itself, giving incredibly reliable feed rates.

- The load cell mounted steam pan requires a preset quantity of sugar.
- As the sugar, glucose and water are all added to the steam pan simultaneously, the load cells can only check that the total weight is within tolerance.
- The ratio of oil flavorings, essential oils and color elements can't exceed their legal limits and the sugar content must never be less than the preset quantity.
- The conveyor is operating as a reliable, accurate and highly repeatable volumetric feeder; delivering sugar from a sack tip hopper to the steam pan about 10' (3m) away.

The Results

For traceability and recording purposes, the performance of the conveyor is checked and recorded daily. The results show that over a running time of 9.4 minutes it consistently delivers the required set weight. Dobson's make at least 42 'boilings' during an 8 hour shift.

Managing Director, Stephen Walshaw comments, "We are ecstatic about the accuracy. Spiroflow was brilliant to deal with. They gave us all the support we need quickly and efficiently."

How Can Spiroflow Help Your Business?

Contact us today to discuss your specific applications and needs.