

Granola Bar Processing Application



Automated continuous process

CUSTOMER INFORMATION

Customer is a granola bar food processor.

SYSTEM REQUIREMENTS

Convert an existing granola bar line from a manual batching process to an automated continuous process and eliminate wasted off-spec product.

SYSTEM RECOMMENDATION

The customer contacted Schenck Process for suggestions on improving their process. After testing the customer's materials in the Schenck Process test lab a system was recommended that included the following equipment:

- SolidsFlow® gravimetric vibratory feeders
- DISOCONT® feeder controls
- Integrated PLC
- Customized cantilevered stand design

APPLICATION

The process begins with the operator entering the proper recipe into an integrated PLC for feeding various fruits, rice, and/or granola from the DISOCONT® controlled SolidsFlow®

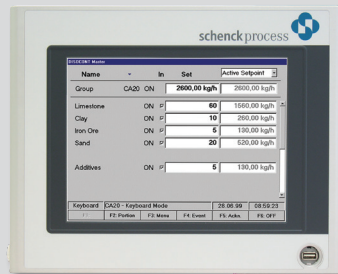
gravimetric vibratory feeders to a common belt conveyer. Each of the SolidsFlow® additive feeders incorporates a cantilevered stand design allowing the feeders to be wheeled away from the process to be cleaned off-line. The DISOCONT® controls are mounted on the feeder stands, making the feeder a stand-alone loss-in-weight system, which can be used off-line for other processes or test feeding of various new additives. After feeding the dry ingredients on to the belt conveyer the materials are dumped into a bucket elevator that feeds into a continuous mixer. At the same time a liquid flow meter ratios a sugar based slurry into the mixer. The mixing process binds all of the materials together, which then exit the mixer to a press line where the mix is formed into a sheet, sliced, and cut into individual granola bars. Lastly, the granola bars are conveyed to a packaging line where they are individually wrapped and packaged into bulk cases.

RESULTS

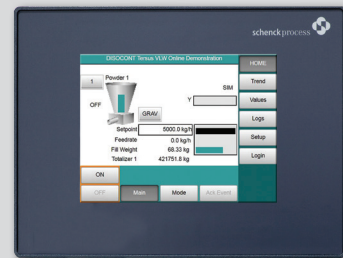
The customer was able to convert a manual batch process into a continuous automated process, which nearly doubled their output of granola bars. With the ability to continuously monitor all of the ingredients by weight, off-spec products were also significantly reduced.



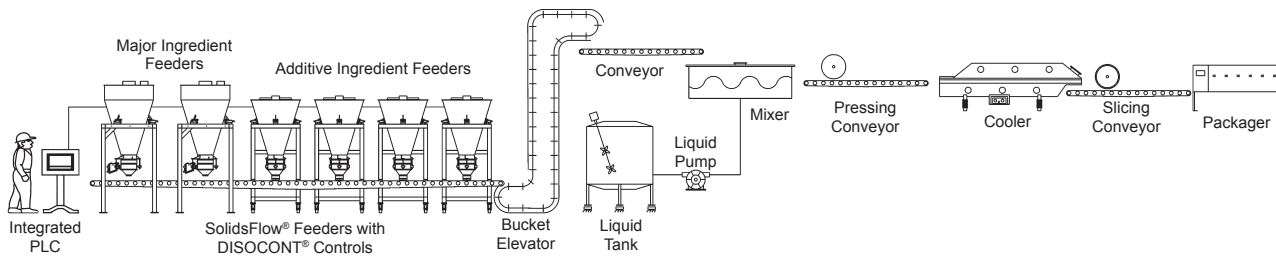
**SolidsFlow® Gravimetric
Vibratory Feeder**



**Integrated
PLC**



**DISOCONT®
Feeder Control**



Schenck Process

7901 NW 107th Terrace
Kansas City, MO 64153
816-891-9300

E-mail: americas@schenckprocess.com

Web site: www.schenckprocess.com/us



All information is given without obligation. All specifications are subject to change. © by Schenck Process, 2020