CASE STUDY

PROCESS

Automatic Salt Dosing

APPLICATION

Salt is blown from a silo, via a sieve and rotary valve, into the process. The salt flow is determined by a recipe setting and the speed of the rotary valve is linked to the depth of the product on a conveyor belt. Samples are taken and minor adjustments are made during the process. By installing an ENVEA SolidFlow in-line sensor, a trend of the salt flow has been determined and this is linked to the process control system to give an instantaneous reading. Process parameters have been set within the control system to alarm if the salt flow is either above or below tolerance. This enables the operator to react to changes within the process quicker, to maintain product consistency and quality.

PROCESS DATA

Industry:	Food Manufacture
Material/Qty:	Salt flow up to 200 kg/hr
Installation:	(In-line) transfer line
Function:	Flow Measurement of ingredient addition

OVERVIEW

What were the problems that drove you to look for a solution?

- *The original method was slow to get a result*

How did you manage the process before?

- *A sample of product was taken, this needed to be chilled and fragmented before testing. It took 1 hour before a result was given meaning any deviation within the process was not detected straight away*

How did ENVEA solve your problems?

- *They installed an in-line SolidFlow sensor which was integrated into our process control system to measure the instantaneous flow of salt to the process. This was linked to our recipe system and product flow data to provide a virtual process result. Any deviation outside of a given tolerance produced an alarm which could be reacted upon quickly reducing any quality impacts to the process*

Why did you choose ENVEA?

- *The ability to measure particle flow within a blown system has always been a challenge with no economical solution without expensive mass flow or weight measurement systems.*

SOLUTION

- Product supplied - Solidflow continuous mass flow sensor, connection box and evaluation unit

SolidFlow 2.0

CUSTOMER BENEFITS

- Visibility of product addition
- Operator able to make adjustments quicker to maintain product consistency
- Cost savings in reducing ingredient usage
- More consistent finished product

03/2021

ENVEA UK Ltd.
ENVEA House, Rose and Crown Road,
Swavesey, Cambridge CB24 4RB (UK)

Tel. +44 (0) 1480 468200
Fax +44 (0) 1480 463400

contact.gb@envea.global
www.envea.global