



Level



Pressure



Flow



Temperature



Liquid
Analysis



Registration



Systems
Components



Services



Solutions

Meat slurry measurement with Promass I Coriolis mass flow - Food

Food safety is ensured through reliable measurement



Final product ready to enjoy



Promass 831



Food safety is of utmost importance

Value provided:

Food safety is of primary importance. Cost of lives and product recalls can not be measured in dollars. Providing repeatable and accurate measurement in a critical application has contributed to the meat processing company's track record for food safety.

Company profile:

World's largest manufacturer of boneless lean beef products. Their products are found in the majority of all ground beef produced in the United States. The company has received multiple awards for food safety and innovation.

Application description:

A critical component of production is a pH enhancement process that forms ammonium hydroxide. It is a natural constituent of meat and is considered GRAS. The ammonium hydroxide elevates the pH of the meat to eliminate E.Coli and significantly reducing other pathogens such as Salmonella and Listeria monocytogenes. The dosing of ammonia gas is controlled by coriolis mass flow meters. The lack of repeatability and accuracy was a very significant problem for controlling the dosing equipment. If E.Coli or other bacteria were to become established, the cost of a meat recall would cost millions and stop production.

Endress+Hauser solution:

Ammonia gas is a simple application and posed no application challenges. The task was to reliably measure the flow of the meat slurry to ensure safe levels of ammonia gas being added. The Promass I Coriolis mass flow meter was selected since the customer wanted a single tube straight-through meter design for cleaning and sanitary requirements.

Measurement results:

After significant testing, the Promass I has proven to be a reliable and accurate solution. All other Coriolis meters have been removed from the meat slurry applications. The Promass I is now used for controlling all meat slurry processes. The risk of contaminated meat has now been lowered and more accurate ammonia dosing has also saved money in chemical costs.

Endress+Hauser also supplies all plants with the non-glass pH sensor for in-line pH sampling of the meat slurry.

For more information, contact
Endress+Hauser, Inc.
317-535-7138
www.us.endress.com

ISO 9001:2000 Certified

USA

Endress+Hauser, Inc.
2350 Endress Place
Greenwood, IN 46143
Tel. 317-535-7138
Sales 888-ENDRESS
(888-363-7377)
Service 800-642-8737
Fax 317-535-8498
inquiry@us.endress.com
www.us.endress.com

Canada

Endress+Hauser, Canada
1075 Sutton Drive
Burlington, ON L7L 5Z8
Tel. 905-681-9292
800-668-3199
Fax 905-681-9444
info@ca.endress.com
www.ca.endress.com

Mexico

Endress+Hauser México, S.A. de C.V.
Fernando Montes de Oca 21 Edificio A Piso 3
Fracc. Industrial San Nicolás
54030. Tlalnepantla de Baz
Estado de México
México
Tel. +52 55 5321 2080
Fax +52 55 5321 2099
eh.mexico@mx.endress.com
www.mx.endress