

Stora Enso Improves Throughput and Quality, Reduces Wastage and Minimizes Costs Using Emerson's Flow Measurement Technologies

RESULTS

- Improved throughput
- Consistent quality
- Reduced wastage
- Optimized usage of coating ingredients minimizes costs



APPLICATION

Stora Enso's Hagen mill in Germany produces high quality coated paper for full color magazines. The Coating Kitchen at the mill mixes the ingredients that are used to coat the paper in accordance with the particular customer specification. Precise measurement and control of the expensive ingredients is critical as inaccuracies can cause cost and quality issues.

“Emerson's flow measurement products ensure the efficient operation of the Coating Kitchen which is critical to the quality of the final product”

CUSTOMER

Stora Enso is a global paper, packaging and forest products company producing newsprint and book paper, magazine paper, fine paper, consumer board, industrial packaging and wood products. The Group has 29 000 employees and 85 production facilities in more than 35 countries worldwide. Sales in 2008 were EUR 11.0 billion.

CHALLENGE

Flowmeters measure the volume of each of the coating materials as they are fed via one ring circuit to a batching tank. The precise mix of ingredients is dependent on the customer specification which defines the color, thickness, opacity and weight of the finished paper. This means that consistency of the dry ingredients in the coating mix is essential. Due to varying dry solids concentration in the ingredients, coating batches were being produced that were out of specification. This added cost as manual adjustments were required to make corrections to batches of ingredients.



Rosemount 8700 Magnetic flowmeter systems installed at Stora Enso.

ROSEMOUNT[®]

For more information:
www.rosemount.com


EMERSON[™]
Process Management

SOLUTION

Stora Enso recognized the need to optimize the mixing of the paper coating by precisely measuring the amount of dry solids contained in the ingredients (density) being added to the batch of coating material.

Following the successful use of Emerson's flow measurement products at its mills in Finland, Stora Enso installed eight Emerson Micro Motion® F300 Coriolis flowmeters and 18 Rosemount® 8700 Magnetic flowmeters. These are used to precisely measure the ingredients to ensure accurate batching.

Micro Motion F-Series Coriolis meters provide highly accurate mass flow, volume flow, and density measurement. Compact and drainable, they can be used in applications where the fluid being measured is non conductive.

The Rosemount 8700 Magnetic flowmeters are being used to measure the volume flow of the liquids. They are ideally suited to challenging applications such as those found in paper mills as they provide reliable and accurate results, even in noisy industrial processes.



Rosemount 8700 Magnetic flowmeter systems and Micro Motion F-series Coriolis meters precisely measure ingredients in Stora Enso's Coating Kitchen.

RESOURCES

Emerson Process Management Pulp & Paper Industry

<http://www2.emersonprocess.com/en-US/plantweb/customerproven/Pages/PulpPaper.aspx>

Emerson's Smart Wireless

<http://www2.emersonprocess.com/en-US/brands/rosemount/Wireless/Pages/index.aspx>

Rosemount E-Series Magnetic Flowmeter Transmitters

<http://www2.emersonprocess.com/en-US/brands/rosemount/Flow/Magnetic-Flowmeters/E-Series-Transmitters/Pages/index.aspx>

The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, expressed or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which can be found at www.rosemount.com/terms_of_sale. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

The Emerson logo is a trade mark and service mark of Emerson Electric Co. Rosemount and the Rosemount logotype are registered trademarks of Rosemount Inc. PlantWeb is a registered trademark of one of the Emerson Process Management group of companies. All other marks are the property of their respective owners.

Emerson Process Management

Rosemount Incorporated
8200 Market Boulevard
Chanhassen, MN 55317 USA
www.rosemount.com

Micro Motion Incorporated
7070 Winchester Circle,
Boulder, CO 80301
www.micromotion.com

Tel (USA) +1 800 522 6277
Tel (International) +1 (303) 527 5200
Fax +1 (303) 530 8459

Emerson Process Management Asia Pacific Private Limited
1 Pandan Crescent
Singapore 128461
T (65) 6777 8211
F (65) 6777 0947
Enquiries@AP.EmersonProcess.com

Emerson Process Management Flow
Neonstraat 1
6718 WX Ede
The Netherlands
Tel +31 (0) 318 495 555
Fax +31 (0) 318 495 556

Emerson FZE
P.O. Box 17033
Jebel Ali Free Zone
Dubai UAE
Tel +971 4 811 8100
Fax +971 4 886 5465

ROSEMOUNT®

For more information:
www.rosemount.com


EMERSON™
Process Management