

MoistScan® technology proves beneficial in process control

07 April 2009

Online moisture analysis specialist Callidan Instruments has been approached by a confectionery company from Dunedin, New Zealand expressing interest in trialling its latest product, the MoistScan® MA-700 in-pipe analyser.

The company prides itself on high quality products and to improve its process control, a MoistScan® MA-700 was installed upon a 3 inch pipe inline which transports sweetened condensed milk.

MoistScan® online moisture analyser works by transmitting a microwave signal through the material and then using its patented technology to measure the changes in a number of microwave properties caused by the presence of solids in this case. An Ethernet input has been connected into the MoistScan® to enable Callidan Engineers to remotely access the analyser, view and refine the performance.

Typically, the Moistscan MA-700 analyser is used to measure percentage moisture. Callidan Instruments in this instance recalibrated the analyser to report percent solids as this is the normal practice on-site due to the use of its existing density gauge.

To calibrate the analyser it was necessary to take a suite of samples consisting of 100ml containers as close as practical to the analyser which were then delivered to the laboratory for analysis of percentage solids. The MoistScan's raw data is recorded at the same time the sample is taken. The correlation with the MoistScan's microwave variables was then compared to the laboratory and a subsequent calibration was determined.

Once the calibration was complete, samples were collected by the customer's staff from the MoistScan® sample point over a period of approximately three weeks to verify the calibration. The MoistScan® results were recorded at the same time of the sampling from the local display (HMI).

The MoistScan® has achieved exceptional recordings, and will provide operators and process engineers a much more accurate tool for process control over the existing density measurement technique.

Two references for the MoistScan® MA-700 are:

Karl Morgan
karl.morgan@ap.csplc.com

Andy Keogh
andy.kprocess@gmail.com
Mobile - +61 401990997

For further information contact Garry France of Callidan Instruments.

Phone: +61 7 4955 5966

Email: [garryf\(AT\)callidan.com](mailto:garryf(AT)callidan.com)

www.moistscan.com