

Desktop quality check



The latest test data on food products in production is now just a mouse click away.

Progress knows no bounds it seems. At least that is the case when it comes to routine control of meat products.

The use of near infrared (NIR) analysers has become common for meat producers seeking to track quality and consistency of products. And now a new option for handling the results from routine testing is making NIR analysis even more convenient, as Devault Foods, Pennsylvania, USA, has discovered.

Amy Roth, quality control manager at the family-owned company explains how quality control is paramount to meet expectations for portion-controlled products from customers, including local chains and national accounts. “Quality control is viewed as number one by the company to meet our customer requirements, to meet USDA regulations and to produce a good product,” she says.

A FOSS FoodScan™ is used for routine control of raw ground products such as beef patties and meatballs. Each batch is tested at the production line for parameters such as fat and moisture. But as the responsible manager, Amy also needs to keep a close eye on tests being made by production staff.

Results delivered directly

Previously, Amy would have to leave her office and interrupt production whenever she needed to review the results stored on the instrument computer. That was until the company had the option of trying the FOSS Remote Internet Analysis (RINA) software that simplifies the management of near infrared analysis instruments such as the FoodScan.

The Internet-based RINA software connects the FoodScan instrument directly to Amy’s computer in her office. “We decided to try RINA because we wanted real-time readings without going onto the production floor to see them or download them,” says Amy. “When I go onto the floor, I interrupt what they are doing, but RINA allows us to get this information at any point in time from an office area away from production.”

Keeping an eye on fat percentages

The FoodScan is used mainly to control fat content with an analysis made on every batch. The software helps Amy to track fat percentages for production for a given day, week or quarter and to check if operators are hitting their fat targets.

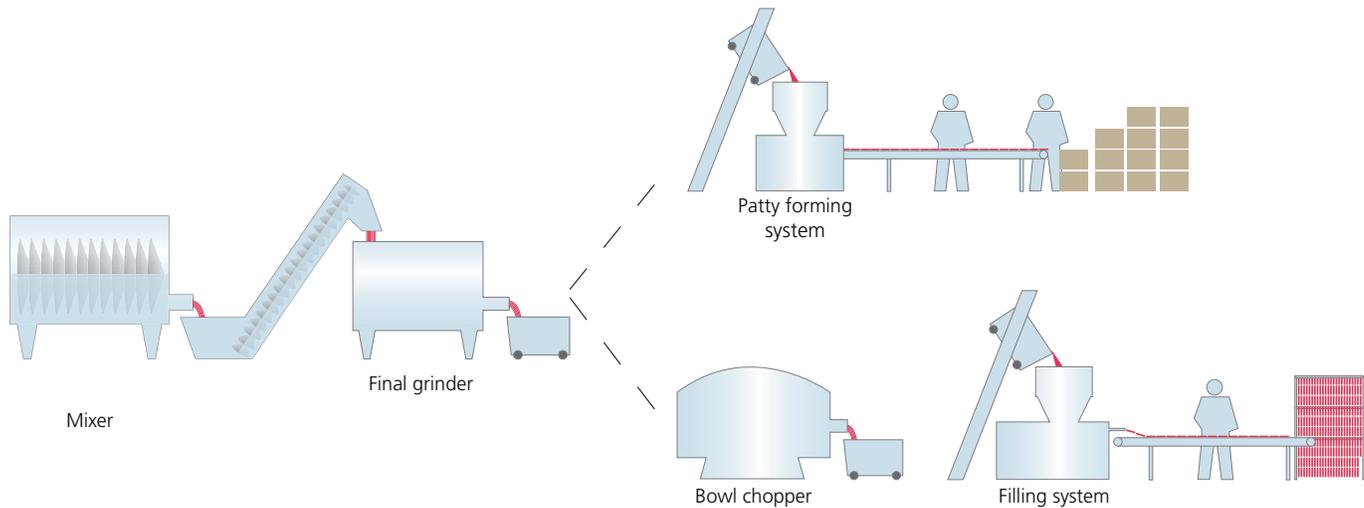
The system stores data for as long as required, helping to spot trends in different batches, for instance by product type. “The USDA requires that we meet fat percentages, and we can make sure that we are not trading on the high side or the low side,” she says.

The RINA system has been used since the end of April and apart from being less obtrusive to operators on the production floor, the system is also helping to make error-free reports available to management. FOSS experts set up a custom re-



With NIR instruments linked to new Internet software it is now possible to keep an eye on product tests from your office

Typical process: FoodScan™ can be used to standardise raw materials before going to the final grinder or to test in-process products before the final stage providing all the information needed to make process adjustments almost immediately. FoodScan can also provide a fast and accurate analysis of key parameters for quality control and labelling purposes before products are shipped.



port that automatically includes the latest test data, for instance, if a batch has to be tested a second time, the report will only take the latest result. Likewise, if the authorities ask for a report it is very easy to provide one.

Custom report templates include both production (tests made as production is adjusted according to specifications) and final batches that only show the final shipping fat content in the last sample of each batch.

The installation went smoothly with help from FOSS support staff. It took the production staff about two days to adapt to the new software interface that comes as part of the RINA upgrade. Overall, the speed and ease of use of the FoodScan is unaffected.

Data management potential

Devault Foods has just one instrument linked to the Internet software, although Amy can see a clear potential in linking more instruments. “I can see other companies using FOSS machines for the same type of product in different locations and this would be a wonderful tool to have to link everything together,” she says. But for now the company is happy to exploit the benefits on a relatively small scale.

Amy sums up how FOSS in general has improved quality and on top of this the RINA system helps to track results from the convenience of her desktop. The system is also making reporting easier and error-free. “Everyone enjoys it and it is very easy to use,” she says. It is easy to download the information and it is also great to be able to review tests as they are occurring in production. If the company president wanted to see the fat percentages, we could download the information directly to his computer.”

by Richard Mills, FOSS (rim@foss.dk)

Remote Internet Analysis (RINA)

The RINA software suite provides an Internet-based network connecting individual instruments to a control centre. In the case described, just one instrument is linked to an external computer. NIR experts from FOSS can also access the instrument remotely to help set up required reports. RINA can support any number of instruments at different geographical locations.

More about RINA: www.foss.dk/rina



Devault Foods, family owned and operated since 1949, is a southeastern Pennsylvania-based national supplier of portion controlled meat products for the foodservice industry. Products include “Philadelphia-Style” Sandwich Steaks, Meatballs including their famous Mrs. DiFillippio’s™ brand, Hamburgers, Ground Beef and own brand Steakwich™, plus a variety of specialty items.

The facility in Devault, Pennsylvania, houses ultra modern equipment with the latest safety devices. This provides the capacity to process more than two million pounds of beef products weekly. Meat is prepared according to strict HACCP regulations and specifications.