



YIELD MANAGEMENT CASE STUDY: Food & Beverage

Project Background

This company manufactures food products on behalf of a leading South African retailer. The products range from packaged snacks such as muffins and sandwiches through to pre-prepared meals for home consumption. Products of this type have a particularly short shelf life measured in terms of a few days rather than weeks or months.

The company deals with high volumes and their customer has very strict delivery and product quality requirements. Meeting these exacting product standards while maintaining an acceptable profit margin is a challenge, which is where the TransLution Yield Management software comes in.

Yield Management Functionality

The project began by focusing on solving problems experienced within the biltong manufacturing process. Each step in the production process was defined, including all raw material inputs and the by-products and waste created during production. Each crate of raw material, by-product and waste is weighed at every production stage providing yield results throughout the process, identifying problems to be addressed during production, and recording actual yield for every batch.

The TransLution Yield Management module was developed specifically for reporting yield calculations and is designed to run on Touch Screen terminals on the production floor. Direct integration to the weighing devices used at each production step improves yield accuracy and simplifies operation for the users.

Recording of lot number controls, labour and machine usage and quality testing results on these same Touch Screen monitors enhances reporting and analysis of the production process and provides documentation required for validation of quality standards and information in the event of a product recall.

TransLution Overview

The TransLution configuration utilises the same application server sharing both the TransLution and the ERP software databases. Touch Screen terminals, hand held bar-code scanners and bar-code printers are used on the production floor for recording production activity and PC's are used for viewing reports and other management reporting.

Operators logging production data into the system are identified using fingerprint scanning built into the TransLution software.

The TransLution Touch Screen and scanner software is configured to match the process requirements for biltong at this client's production plant. Each input screen and scale integration is tailored to match its relevant place in the production process.

Key Benefits

- Scanning and weighing materials into and out of the production process and assigning lot control numbers provides full computer-based traceability across the entire process. Reports are used to measure supplier performance and are the key to having an effective product recall process in place.
- Capturing test results on the system provides quality assurance documentation required by the customer.
- Operators log into the Yield Management system using fingerprint scanners which provides labour utilisation data on each batch that could only be guessed at previously.
- Previously, yield results were only available days, sometimes weeks, after production was completed. The biltong production manager summed it up by saying 'We used to see historical yield data and ask why. Now we see yield results as a function of production and we know.'

Barcode Labels and Structures

Every crate is labelled with a unique barcode meaning individual product packs do not require barcodes. Scanning the crate barcode and weighing the crate is all that is required.

TransLution Yield Management system

Operation: **Tracking - Cut Steaks** Quantity:

Batch: Target Crate:

User Name: _____

Scan for Batch: 1234

Start Complete Save Cancel

Sequence Nr	Operation	Product	Location	Carrier	Mass	Product Qty	User Name	Process	Function Area
1	TrackingOp1 - Unpack Meat	A100	E-400A	BOX100	23	22	Admin	Make Blotong	Tracking - Unpack Meat
1	TrackingOp1 - Unpack Meat	A100	E-400A	BOX100	24	22	Admin	Make Blotong	Tracking - Unpack Meat
1	TrackingOp1 - Unpack Meat	A100	E-400A	BOX100	12	11	Admin	Make Blotong	Tracking - Unpack Meat
1	TrackingOp1 - Unpack Meat	A101	E-400C	BOX101	24	24	Admin	Make Blotong	Tracking - Cut Steaks
1	TrackingOp1 - Unpack Meat	A101	E-400C	BOX100	26	26	Admin	Make Blotong	Tracking - Cut Steaks

Yield Statistics

The TransLution Yield Management system provides yield data at each production step so users can identify problems while there is still time to resolve them.

