



SoftTrace

delivering full traceability & a competitive edge

Customer:

Kerry Group, (Newmarket Cooperative), Co. Cork, Ireland



Kerry Group is a world leader in food ingredients and flavours serving the food and beverage industry and a leading supplier of value added brands and customer branded goods to the Irish and UK markets. Through a strategic acquisition programme, Kerry has established a global processing and technical network. Headquartered in Ireland, the Group employs over 20,000 worldwide and has established manufacturing facilities in 23 countries and sales offices in 20 countries globally

Part of Kerry Group, Newmarket Cooperative Creameries Ltd, located in North Cork is a leading manufacturer of cheese from a state-of-the-art cheese production facility. With an annual manufacturing capacity in excess of 35,000 tonnes, Newmarket manufactures cheese for the Group's branded cheese business.

Today the emphasis is on verification and speed. Providing a service to our customers including the guarantee of high quality, fully traceable product is vital. Being able to quickly demonstrate full traceability as well as rapid response and product recall capabilities is the key to gaining a competitive advantage. SoftTrace has provided us with traceability from farm to dispatch of the finished product at the touch of a button.

Jeffrey Collins
Quality Manager

Challenges:

- Replace paper-based and legacy systems with an electronic traceability and quality system
- Ensure traceability of milk received back to supplier farms
- Ensure traceability of all ingredients through the manufacturing process to the finished product
- Ensure traceability of dispatches to customers
- Achieve KPIs and plant efficiencies
- Integrate data from discrete systems including plant automation and CIP data
- Integrate weighbridge, milk intake, production, laboratory, inventory and dispatch data
- Integrate with the existing financial system
- Achieve full control over production parameters
- Comply with environmental regulations
- Maximise the value of cheese inventory

Solution:

- SoftTrace integrated with laboratory instruments, plant automation systems, Kerry Group's milk management and payment system, external regulatory systems, and the Group's ERP system.

Key Benefits:

- Demonstrable traceability from farm to dispatched product – in minutes
- Seamless integration of all critical quality, manufacturing and business data to guarantee full forward and backward traceability
- Full adherence to quality and validation rules
- Optimised rapid response capabilities
- Strengthened retailer and consumer confidence
- Minimal product non-conformance
- Significant efficiencies in production data management and resource deployment
- Costs savings and rapid return on investment
- Superior yield and plant management capabilities
- Product value optimisation

Full Traceability in Action

At Newmarket, SoftTrace guarantees traceability from farm to outbound pallet as well as demonstrable rapid response and crisis management capabilities. The system provides full traceability in minutes.

Since 1993, Newmarket has used a computerised quality management system to meet their quality, traceability, yield and risk management requirements. The decision to upgrade to the SoftTrace suite of quality management and traceability modules was, according to Quality Manager Jeffrey Collins, taken against a background of ever intensifying emphasis on food safety and market trends pointing towards the need for increased levels of data integration.

By implementing SoftTrace at their Newmarket facility, Collins agrees that Kerry Group have optimised the value of cheese and significantly reduced losses incurred as a result of product downgrades.

The level of process monitoring SoftTrace provides has allowed us not only to manufacture higher quality products but also to increase efficiencies, reduce costs and keep our pricing competitive. Being able to run forward and backward traceability routines throughout the plant – and the confidence that inspires – has been an effective tool in attracting and retaining customers in today's highly competitive market.

Jeffrey Collins

Although Newmarket has, fortunately, never experienced a product recall crisis, they manage risk by regularly running product recall scenarios and random traceability checks from a variety of points in the traceability chain to instantly return all points of traceability on the raw materials used during a defined period of production. Such demonstrable traceability capabilities have significantly increased customer confidence and reduced their requirements for on-site audits.

The **SoftTrace Weighbridge, MilkData and LIMS modules** control and trace all raw materials released into the process. When milk tankers weigh into the production facility, information from each tanker's automatic data capture system (Deissel GEA) is downloaded and imported into MilkData for verification and comparison against the weighbridge loads. MilkData maintains a full profile of farm collection, compositional analysis and farmer payment data. This is integrated with data captured by the Weighbridge module to complete intake reconciliation and track milk into silo batches which are then released into the manufacturing process. This provides full traceability from tanker to intake silo. Full integration with SoftTrace LIMS provides real-time access to tanker and silo analysis data. When the tanker passes over the weighbridge, the laboratory worksheets are automatically populated with the relevant load details to facilitate quality testing and assistance in determining process / product suitability.



Integration with the **SoftTrace In-Process module** extends the traceability to the in-process batches, bulk finished product and whey batches. This allows Newmarket to track all cheese and whey movements by quantity and batch code and provides a full profile of the data held on each batch. Integration of the In-Process and **Inventory Management** modules establishes an electronic link between the process control, packing, quality and inventory records and extends the traceability chain on finished goods to pack and pallet level including whey production. The Inventory Management module holds a quality and grading profile of all cheese inventories to sub-batch level. Traceability to the customer is maintained to unit level – completing the electronic traceability chain from source to customer.



More than Traceability!

At Newmarket, Collins confirms that real-time access to all quality, traceability and critical management and production information means that the management team have immediate access to the data necessary for informed decision making. In addition, real-time access to quality data means that product non-conformance is kept to a minimum.

As all quality and traceability records are held in a single, central database Newmarket has benefited from significant efficiencies in production data management, resource deployment and cost reductions.

Automated interfaces throughout the production process from raw material intake to dispatch allow Newmarket to benefit from optimal deployment of staffing resources. Subsequently, production output has been increased significantly without incurring the expense of additional resources. In addition, cost savings have been achieved and resource deployment optimised across the functional areas such as the laboratory, quality assurance, production, warehousing and dispatch.



Before we installed SoftTrace, increased production would have required an increase in staffing levels to manage all the paperwork and documentation required in a paper intensive production process. Automated interfaces and real-time information allow us to keep staffing levels to a minimum.

Jeffrey Collins

Newmarket uses SoftTrace to monitor plant performance via customised yield and mass balance reports that provide instant access to fat and protein usage across the entire plant; performance and yield analysis by process area; performance and yield analysis by production run(s). Newmarket uses the system to monitor production output against milk volume at intake. The quality of production is monitored against the test results recorded in the laboratory. At dispatch, management can easily compare product shipped from storage against actual production and subsequently track any losses occurring due to damage during storing etc.

At Newmarket, the degree of inventory management afforded by SoftTrace has reduced costs and significantly increased profitability. By providing a full profile of the quality and grade of all cheese inventory to individual pack level and the functionality to cross match customers' quality specifications with each pallet's quality attributes – the Inventory Management module has allowed Newmarket to optimise inventory utilisation for maximum returns.