



■ TRACEABILITY

When Quality Management and Traceability are Important – Data Integration is Crucial

The effective management of quality and traceability information is critical to the strategic and competitive success of food manufacturers. Demonstrable traceability, rapid response and product recall capabilities are crucial to gaining a competitive advantage.

Meeting current traceability and food safety challenges demands a previously unprecedented level of information management throughout all operational areas. It means creating the physical and operational conditions necessary for enforcing validation and quality rules and using available technology to effortlessly access traceability data in real-time and support complex grade allocation and audit challenges.

In many of today's food manufacturing facilities, the degree of data integration and lot specific information necessary for end-to-end traceability does not exist. Typical areas of concern include:

- A lack of real-time yield and quality profile on raw materials and ingredients. This critically undermines a company's rapid response capabilities.
- A lack of integration between the intake measurement system and the ERP's stock records, plant automation data, quality management and traceability system. This results in a lack of real-time validation and control.
- Key manufacturing data held in disparate systems and manual records.

- No central quality management system handling data to sub-batch level and tracking product movements by quantity and batch code. This results in a deficient data link between bulk finished products and their physical packing.
- A lack of real-time quality validation to ensure that the traceability chain remains intact and cannot be compromised.

SoftTrace: An Integrated Traceability and Quality Management Solution

The SoftTrace suite of software modules has been developed to address the Food industry's quality, traceability, product safety, yield, and risk management challenges.

SoftTrace seamlessly integrates all critical quality, manufacturing and business data to guarantee bi-directional traceability from raw material intake through in-process to finished goods, storage and dispatch. This is achieved by focusing at plant level to track and integrate all relevant data and manage quality in real-time throughout the process.

SoftTrace's capabilities are proven in the field. Customers in Ireland, UK and USA include Kerry Group, Glanbia, Lakeland Dairies, Pritchitts, Dairygold, Arrabawn, Carbery, FMC BioPolymer and Irish Dairy Board.

At customers' facilities the SoftTrace Weighbridge, MilkData and LIMS modules control and trace all raw materials released into the process. Data from milk tankers is imported into MilkData for verification against 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. Full integration with SoftTrace LIMS provides real-time access to tanker and silo analysis data for determining process / product suitability.

Integration with the In-Process module extends traceability to the in-process batches and bulk fin-



ished product. Integration with the Inventory Management module establishes an electronic link between the process control, packing, quality and inventory records and provides traceability on finished goods to pack and pallet level. The Inventory Management module holds a quality and grading profile of finished goods inventories to sub-batch level. Traceability to the customer is maintained to unit level – completing the electronic traceability chain from source to customer.

A Modular System to Meet a Range of Requirements & Budgets

SoftTrace is a modular system designed to grow with each customer's business needs. It integrates with process automation and ERP systems and with existing hardware (weighbridges, barcode printers, analytical instruments etc) to ensure users leverage any investments made to date. While SoftTrace can be implemented as a stand-alone system, greater benefits can be achieved when it is integrated with existing systems to link all critical data in one data collection and management system.

More Than Traceability

Technologies, such as SoftTrace, are transforming traceability from a burdensome expense to a mission critical solution capable of improving the bottom line. Traceability software, built on a central database technology, provides food manufacturers with the opportunity to efficiently leverage internal logistical and quality related information and achieve tangible levels of performance improvement in areas such as production efficiency, labour costs, yield management and product value optimisation. □

