Dairy farm deploys BarTender® labeling system to enable FSMA compliance

The Food Safety Modernization Act (FSMA) is the first major update to US food safety policy in over 70 years, and it has created challenges for food producers and processors. FSMA requires companies to enact preventive controls, record testing and safety data for each lot of product, track a product’s journey throughout the supply chain — and be able provide this information to regulators within 24 hours of a request. All of this puts unprecedented pressure on an industry that has traditionally used manual methods for data capture and tracking, including one organic dairy producer in the US Midwest.

The challenge: Data collection for traceability

Under food safety regulations, when milk is collected from a dairy cow, a sample must be stored in an ice bath and tested periodically over 72 hours to ensure the milk is wholesome and pathogen-free. Each sample includes 12 vials, one for each test. The dairy farm was struggling to accurately label the 11,000 testing samples they handle each year. They were hand-labeling each vial, and then manually recording the data for each test, but they recognized that this highly manual process was cumbersome and time-consuming, with a high potential for human error.

Another farm had recently transitioned from a similar manual tracking system recommended BarTender labeling software as part of an automated solution. Now, a complete set of labels are printed for each testing batch, including BarTender-generated barcodes for automated data management and capture.

Printing each batch’s labels from one BarTender file ensures consistent and accurate data, and data capture is now a matter of a simple scan. The hours previously spent handwriting labels and recording batch data have been recovered.

A year after the deployment, the dairy farm is managing label production and creating new label formats on their own, with no IT or technical assistance needed.

To meet the rigorous testing requirements, the dairy farm also needed label media that could withstand up to 72 hours in chilled water and that was a specific size and shape to accommodate the containers used in the testing system.

The solution: Automation for food safety

The dairy farm considered several software options, but selected BarTender to drive their labeling, barcoding and printing based on its proven track record in food safety applications and its ease of deployment and adoption.

The new labels include BarTender-generated barcodes for automated data capture, increasing the testing system’s efficiency and reducing the potential for human error in this critical food safety application.

For label media, the farm chose a three-up, one-quart circle label from Zebra that met the farm’s requirements for size and durability. Now when a sample is taken, 18 labels are printed: 12 for labeling the sample vials, and the rest for paperwork and other documentation.

Results

The farm has been using the BarTender-driven labeling system for over a year. Label production has been running seamlessly, with minimal additional support required beyond ordering new label media as needed.

The dairy farm can now set up and print all 18 labels quickly and accurately from one BarTender file, and data capture is now a matter of a simple scan, without the potential for errors that came with handwritten labels and manual data recording.

And BarTender’s design interface is so intuitive that the farm is now creating new label formats on their own — no consulting or professional technical assistance needed.

The new BarTender-driven system enables compliance with the data capture and retrieval conditions of FSMA, enabling an agile information management solution that allows rapid response to requests for records and information from regulatory agencies.