

This application brief describes some specific ways that IVC cameras and software are improving operations at a cheese processing plant.

Plant Manager's Problem:

Determining why the operators making specific changes to the process via the SCADA HMI? How do I show the operators what they did wrong and train them to be more efficient in an effective way.

Example:

In order to break the raw material into curds and whey, a compound called rennet is added by the operator during a specific part of the process. Due to nuisance alarms in the SCADA system, alarm pop-ups are typically ignored. An experienced operator recently ran four vats of product without adding rennet and didn't pay attention to the SCADA alarms. This rendered 260,000 pounds of product, with a value of \$35,000, unusable.

Solution:

By looking at the historical SCADA database, plant management are able to see when certain data values were entered into the system. However, this type of information alone does not translate well to operator training and process improvement.

Video is the perfect medium for quickly understanding what was done incorrectly and what corrections should be taken to deal with specific situations moving forward. By using the video mapped to SCADA alarms and events, it's easy to extract video clips surrounding incorrect procedures or golden rules to drive good manufacturing practices and increased operator efficiency.

IVC's cameras and Longwatch software are the tools needed to provide the visual correlation of the historical SCADA database and video recordings of both the process and operators' HMI screens. The result is an excellent training tool that illustrates both what not to do and best practices.