

ITM-3 HTST Water Flush Transition Detection

ITM-3

The Application

A turbidity sensor is located on the discharge piping prior to the final pasteurized storage tanks.

The Requirements

Following a production run a pasteurization piping schematic is chased with water to recover pasteurized product to the storage tanks. A turbidity monitor gives indication that the product-water interface has finished moving through the piping schematic.



The Anderson Solution

The ITM-3 is located at the discharge of an HTST processing system to continuously monitor the relative turbidity of liquid in the pipeline. When a product process run is completed a water flush is initiated on the input side of the system to push the product from the system into the pasteurized storage tanks. The ITM-3 continuously monitors the solids content of the outgoing liquid and gives an analog output signal of the relative turbidity. As the turbidity begins to decline caused by dilution with water a decision is automatically made by the control system to redirect flow from the storage tanks to drain or the waste water recovery system.

The Anderson Advantage

- · Fast acting electronics offer quick response to product changes enabling predictable recovery
- · LED lamp technology avoids deterioration in measurement experienced by other illumination sources providing years of trouble free service.
- · Standard programmable switched and analog outputs simplify integration into plant control systems
- Extended length "L" model overcomes the difficulties of measuring transition with high viscosity product applications
- · Selectable ranges increase resolution to achieve optimal trigger points for flow diversion

Application Drawing

- 1 FLOW DIVERSION VALVE
- 2 REGENERATOR
- 3 COOLER
- 4 ITM-3 5 DRAIN VALVE 6 STORAGE TANK VALVE 7 PASTEURIZED STORAGE **||**| 6

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