

Turbidity Measurement Dairy Industry

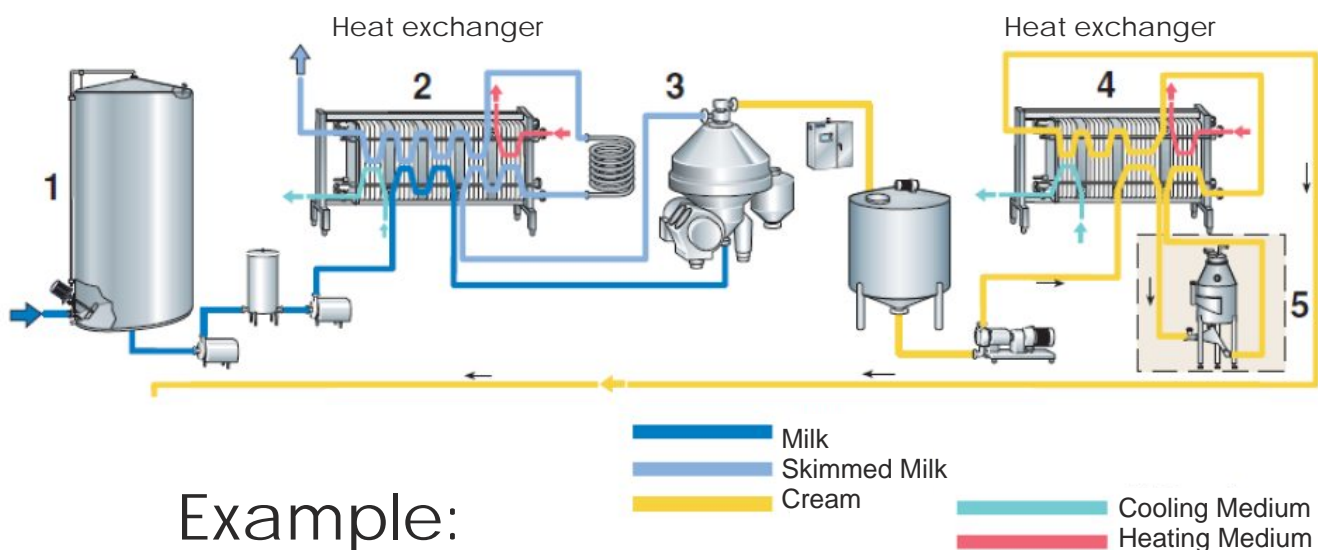
Contamination or product inclusions

In the milk processing industry, products are heated or cooled.

This is done e.g. over milk heaters or coolers. These are operated depending on the function with steam or ice water. So that a defect can be detected in the so-called heat exchanger, the circuits are provided with turbidity meters. This will immediately detect a product entry into the carrier medium and prevent further damage via the controller.



Heat exchanger

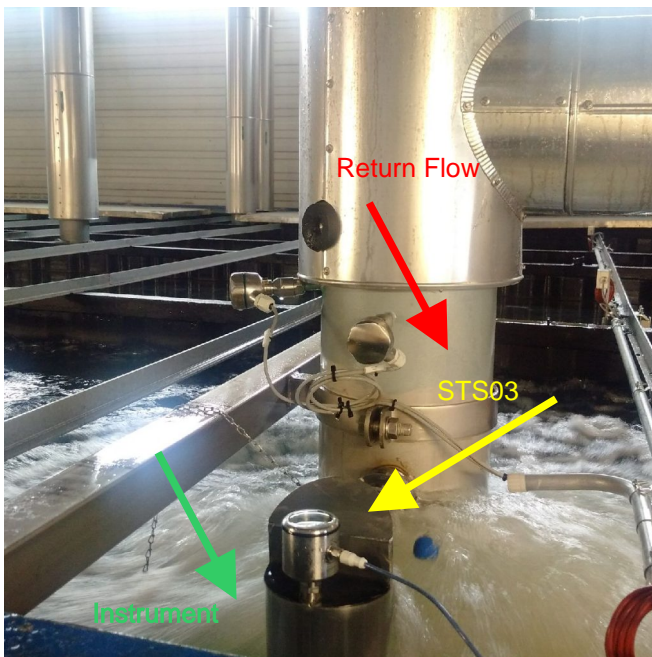


Example:

Production line for the production of cream (excluding butter processes) according to [9]
(1) Milk intake. (2) Pasteurisation of the milk. (3) fat separation. (4) cream pasteurization. (5) degassing (optional)

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Here a turbidity meter STS03 is installed in an ice water tank. For degassing before the measuring device, the device was integrated into a valve, which accomplishes a calming of the ice water.

To ensure a very fast detection, the device has been installed directly on the return line.



In the heating circuit, a turbidity sensor STS01 is installed directly in the feed water return of the steam generator. Again, it is about the quick detection of product injections.

The detection of the sudden increase in turbidity is recorded here in 70 ms!