Chill water monitoring with an ITM-4

The Application

A chilled water line used for heat exchangers to cool products in a dairy plant has a turbidity meter installed in the return line prior to the cold storage tank.

The Requirements

Failure of plates or gaskets of a heat exchanger can lead to contamination of the chill water. A turbidity meter is used to detect the presence of the contamination.

ITM-4

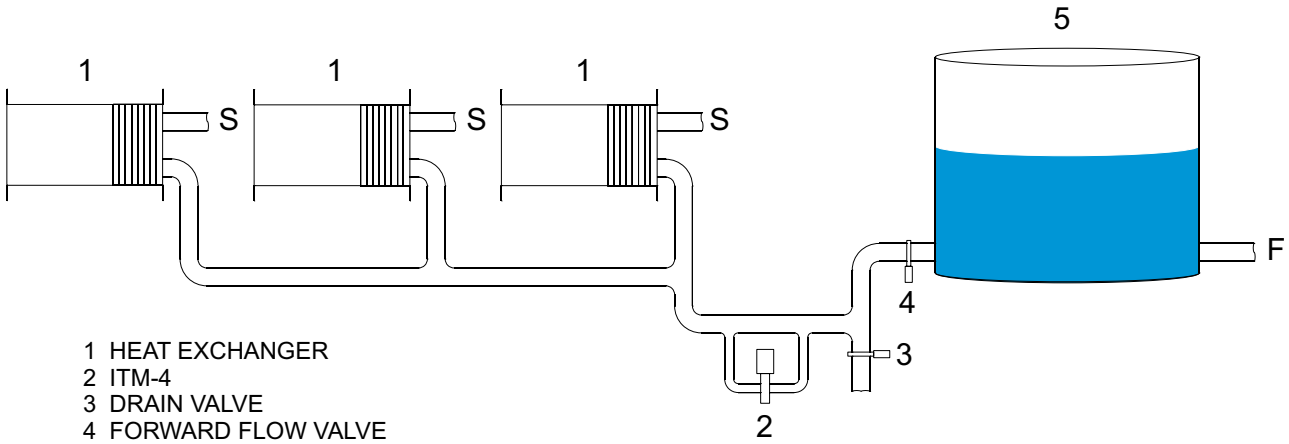
The Anderson Solution

Prior to discharging the returned water into the storage tank an ITM-4 monitors the water turbidity. The output of the ITM-4 is used to alarm when the measured turbidity exceeds acceptable levels and redirect the water to drain. In addition to preventing contamination of the chilled water tank, the time of the failure can then be used to determine what events in the process lead to the heat exchanger failure.

The Anderson Advantage

- Integral switched output reduces the complexity of integration into a plant process by controlling the output to a user programmable set point.
- LED lamp technology provides significantly longer life than other illumination methods reducing down time.
- Four-beam technology offers continuous compensation for lense fouling reducing the need to service optics.

Application Drawing



1 HEAT EXCHANGER
2 ITM-4
3 DRAIN VALVE
4 FORWARD FLOW VALVE
5 CHILLED WATER STORAGE TANK

S CHILLED WATER FROM SUPPLY SYSTEM
F CHILLED WATER OUTPUT

ANDERSON INSTRUMENT CO., INC • 156 AURIESVILLE RD. • FULTONVILLE, NY 12072 • USA • 800-833-0081 • FAX 518-922-8997
ANDERSON INSTRUMENT CO. LP • 400 BRITANNIA RD. EAST, UNIT 1 • MISSISSAUGA, ONTARIO L4Z 1X9 • CANADA • 905-568-1440 • FAX 905-568-1652
NEGELE MESSTECHNIK GmbH (A Division of Anderson) • Raiffeisenweg 7 • D-87743 Egg a. d. Günz • GERMANY • +49 (0) 8333/9204-0 • FAX +49 (0) 8333/9204-49

www.andinst.com