

CIP drain monitoring for product loss detection

Application

Monitor product carryover during clean-in-place rinsing. VOM backscatter turbidity can support process-specific COD estimates. Product losses can increase the organic load in wastewater. Validate the relationship against laboratory COD measurements; dissolved sugars may not be represented by turbidity alone.

Measurement and control

Insert the VOM probe in the CIP drain to monitor product carryover from milk, cream, whey and other optically detectable products. Confirm wetted-material compatibility with the cleaning chemicals. Remote electronics send a continuous 4-20 mA signal to the PLC. Review recorded spikes to identify the source of product losses. Compare the first rinse with the expected process baseline and investigate unexpected peaks before adjusting recovery settings. The installation can be moved to another drain once the first process has been optimized.

Using the measurement

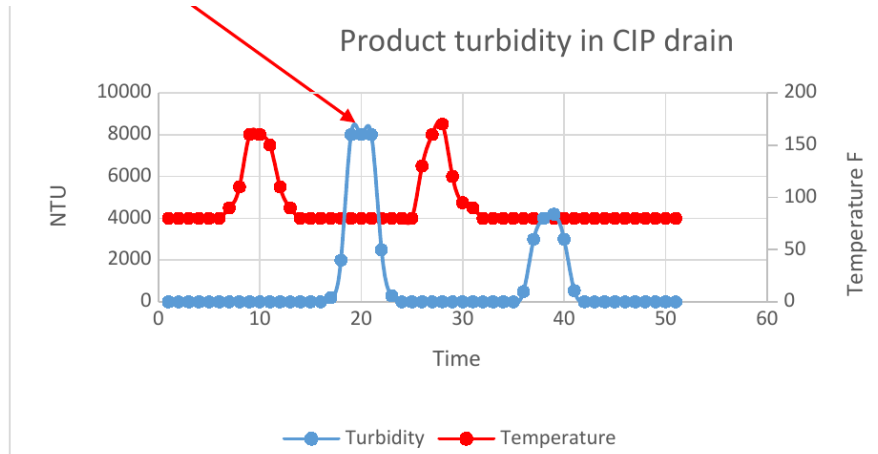
The trend identifies product carryover during rinsing. Investigate each peak and the related operating step to reduce avoidable product losses. Temperature data can help identify the source of the discharge.



VOM probe and remote electronics

Features and application details

- Configurable calibration range
- Measurement history
- Temperature output on the second mA loop
- Integrated USB port
- Long-life LED
- Stainless steel 316L cable
- Remote electronics
- Water-resistant configuration
- Designed for difficult environments



Turbidity and temperature trends during rinsing