

Reduce product loss with the modular, front flash turbidity sensor ITM-51

## Relative turbidity meter ITM-51

### Benefits in the production process

ITM-51 enables active automated phase separation instead of passive time or volume control. That saves time and cost in the transition of milk / water mass, of beer / yeast, or the base of brine analysis of the turbidity and active switching of the process.

- Minimization of resource loss and less loss of value
- The filling of tanks with wrong medium is avoided
- Less cost for waste water treatment
- Less need for additional laboratory analyses
- Non-pollish concentration and consistently high quality of the product such as milk / cream top, beer / wort
- Efficient separator control is necessary for uniform quality of cultured beer

### Benefits in the CIP-SIP-Process

Active automated and temperature-independent phase separation in the return of product / acid / caustic / water

- Active control of the degree of pollution of the agents
- Optimal multiple use of the cleaning agents
- Cost minimizing due to less waste disposal
- Reduction of the cleaning process time and thus also of the water consumption, active switching after reaching the desired degree of purity by active turbidity analysis and transfer pulses, Feed timing

### Practical experience / Applications

- Reduction of production loss from 1% to 0%, and 10% cost reduction due to less waste water treatment
- Less laboratory analyses necessary, thus less personnel / time requirement and faster reaction to deviations
- 1.000 l less water consumption in each CIP process
- ITM-51 processes reliably the contamination of a glycol cooler with milk products, a fact which before repeatedly disrupted the cooling process and caused a complete closing
- 99% more consistency in the quality of the end product due to more precise separation of cream, milk and beer / milk
- Consistent turbidity level for Craft Beer without filtering tanks to precise separator control in a brewery



### Technical specification at a glance

- Compact front flash turbidity sensor with backscatter principle, in modular setup
- New Hybrid Technology with digital + analog interface (0-12V + 4...20 mA)
- Increased application range (Process temperature up to 120°C, pressure 1...20 bar)
- Independent to reflectance at small diameters or electric polished surfaces
- No color dependency (wave length 660 nm)
- High reproducibility ± 2% of full scale
- Selective measuring range (1% T, 10% TBC)
- Extended sensitivity (100...100.000 NTU equivalent)
- Remote version with Smart Replace Design: Easy replacement of each component just by connecting