



Is It Worth It?

Quick Checklist:

- Less product waste
- Less BOD related sewage cost
- Fewer chemicals used in CIP
- Less water used
- Longer life for durable products (i.e. yogurt and cheese)
- Higher quality product maintains and enhances brand
- Less maintenance than current system
- Boiler damage risk management
- Payback in weeks or months

Detail for Cost of Delay - Return-on-Investment

What will it cost you to keep putting off an upgrade to the ITM-3 relative turbidity monitor from your current approach, or from upgrading your first generation turbidity meters?

Unfortunately, the calculation involves more than simply plugging a few numbers into a spreadsheet. The good news is that if you can provide most of the information below, we can give you an exceptionally accurate estimate of what it's costing you today and what you'll save tomorrow. We'll also be able to calculate how long it will take you to get a return on your investment.

Either complete the forms below and do your own calculations or call your Anderson Regional Sales Manager for assistance.

Factor	Your Values	Example
Estimated seconds saved in flush/changeover with turbidity sensor		30
Flow rate (gallons per minute)		30
Estimated product loss per flush/changeover cycle		15 gallons product, 15 gallons water
Selling price (SP) per gallon or liter		\$2.75
Manufacturing cost (MC) per gallon or liter		
Margin per gallon or liter		
Monetary value of product loss per flush/changeover (margin X product loss)		
Cost per 1000 gallons of fresh water		\$4.17
Cost per 1000 gallons of wastewater (BOD)		\$7.48
Total loss per flush/changeover (include fresh water, lost product and wastewater charges)		\$65.00
Flushes per day		6
Total loss per day (cost per day X Flushes per day)		



Factor	Your Values	Example
Investment cost for ITM-3 including assembly: (equipment price approximately \$2,500 US plus assembly costs)		
Amortization achieved after X phase changes (=investment costs/monetary value loss per phase cycle)		
Number of phase changes per week in your plant		
Amount of time in weeks (=number of phase changes up to amortization/number of phase changes per week)		
Savings with an assumed life service duration of 5 years (260 weeks) = (260 week - amortization time) X phase change per week X monetary value loss per phase change		

Sewer Surcharges

Factor	Current	Target
Current and target waste load in pounds of BOD5 per thousand pounds of milk processed		
Daily production in thousands of pounds of milk		
Multiply current and target waste loads by daily production to find daily waste load in pounds		
Enter your BOD5 surcharge cost per pound		
Multiply the daily waste load by the surcharge cost to find your daily surcharge cost		
Enter the number of days your plant operates each year		
Multiply the daily surcharge cost by the number of days your plant operates annually to find the annual surcharge cost		
Subtract the annual surcharge cost for the target waste load from the annual cost for the current waste load to find your annual savings		