

Return on Investment Using MANTECH Multi-Parameter Analysis Systems

Case Study: Eurofins

Since 2008 Eurofins has been using MANTECH systems at various facilities around the world. Their first system ran 200,000 samples in five years. The unit analyzed 7 different parameters per sample and operated 24 hours/day, 7 days/week. **This generated €5,000,000 in revenue. Their initial investment was €60,000.**

The system discussed in this case study analyses pH, conductivity, alkalinity (speciated), turbidity and absolute color from a single 50ml tube. The cost per sample was 0.91 Euros. After factoring in the non-revenue generating quality control samples, it was revealed that **the Return on Investment for this system was only 21 days.** With MANTECH's RapidAlk™ and IntelliRinse™ technologies, and small volume sample tubes, it is the most sustainable and the “greenest” system on the market, as it reduces plastic waste and reagent consumption.



Analysis

Hourly Labour Rate: €35.00
 PC Titrate System Price: €60,000
 Overhead Percentage: 50%
 Percentage of Quality Control Samples: 25%
 Total Selling Price for all Parameters: €25.00

Case Specifics	
Samples per Year (including QC, spikes, blanks, etc.)	40,000
Samples per Day (based on 250 working days)	160
Cost per Day	
Technician Time per Day with PC-Titrate	1.31 hours = €45.69
Supply Cost per day with PC-Titrate (based on 250 working days, includes consumables, electrodes, reagents, tubes, etc.)	€53.05
Total Cost per day for Technician and Supplies	€159.14
Cost Calculations	
Divided by Number of Analyses per day = Analysis Cost per Sample for 4-7 Parameters	€0.91
Selling Price Per Sample	€25.00
Gross Profit Margin per Sample	€24.09
Result	
Instrument Payback time in DAYS!	21

NOTES:

1. Estimated values are conservative. For example, for sample tubes, a cost of \$0.15/tube + 10% extra was assumed.
2. Analysis Cost is TOTAL cost for 4-7 parameters per sample using a PC-Titrate TitraSip™ Autosampler.
3. The technician time will decrease if sample run lists were automatically imported from Excel/LIMS
4. Technician time includes an estimate for preparing standards, titrants, etc.
5. Reagents cost vary based on purchasing them versus preparing in-house. Note, purchasing reagents will decrease the amount of technician time required.
6. Additional savings are realized from a decreased turnaround time, improved QC protocol, and the ability to operate unattended overnight.
7. Instrument payback takes into account only revenue-generating samples (i.e., not the percentage of QC samples entered above).