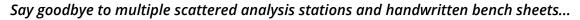
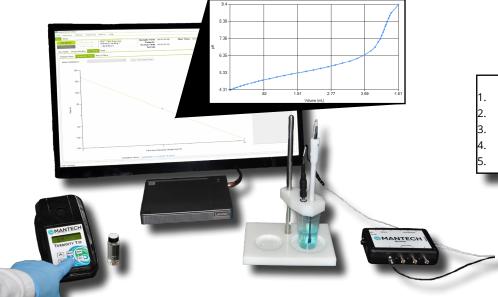
MANTECH SOLUTIONS FOR WINERIES

GET THE RESULTS YOU NEED WITHOUT PERFORMING THE TEST



MANTECH all-in-one systems measures multiple critical parameters for winemakers from one centralized, simple-to-use and SMART <u>software</u>-controlled <u>MT3 and MT5 systems</u>.



ONLY Five Simple Steps!

- Approach analyzer
- 2. Click shortcut for required test
- 3. Follow quick & easy set-up instructions
- 4. Press start & perform other tasks
- 5. Email notification for test completion & saved results

Take Your Wine Production to the Next Level & Upgrade to MANTECH Today!

MANTECH SYSTEMS

- ✓ Analyze multiple parameters from one system
- ✓ Desktop monitor displaying live analysis curves
- \checkmark Easy database management with LIMS capability
- ✓ Customizable shortcuts
- ✓ Upgrapdable to automated or online systems

TRADITIONAL & OUTDATED SYSTEMS

- Analyze a single parameter per system
- · LCD dislaying final results
- Minimal data storage & requires handwritten bench sheets

PARAMETER	METHODOLOGY	CONFORMS TO:	RANGE OF MEASUREMENT	CALCULATED METHOD DETECTION LIMIT (MDL)"	RSD SPECIFICATIONS'''
Total Acidity	Potentiometric Titration	AOAC 962.12	1.0 - 15ppt	N/A	Red wine: 7.86% @ 0.45ppt
(TA)					White wine: 1.54% @ 0.10ppt
					Rose wine: 0.82% @ 0.05ppt
Free and Total	Redox Electrode	AOAC 892.02	0.8 - 800ppm	N/A	Red wine: 2.40% @ 0.52ppt
Sulfites					White wine: 1.10% @ 0.28ppt
					Rose wine: 1.93% @ 0.94ppt
рН	pH Electrode Measurement	EPA 150.1, 150.2; SM 4500-H+ B;	1 - 14	N/A	+/- 0.05
		ASTM D 1293; ISO 10523			
Turbidity	Nephelometric	EPA 180.1; SM 2130 B;	0.1 - 2000NTU	0.05	2.95% @ 1NTU
		ASTM D 1889; ISO 7027			
Reducing Sugars	N/A	Variation of Rebelein's (Gold	2.5 - 180 g/L	2.5ppm	White wine (2.95g/L): 2.03% @ 0.06ppt
		Coast) Method			Red wine (10.46 g/L): 4.80% @ 0.50ppt

Additional parameters are available.

MANTECH SOLUTIONS FOR WINERIES

WASTEWATER MANAGEMENT MADE MANAGEABLE



A key resource throughout the winemaking process, water, is causing operational challenges. These challenges are related to high volumes of untreated wastewater containing highly concentrated organic matter, known as biochemical oxygen demand (BOD), which cannot be flushed down the drain. On top of that, traditional BOD analysis is complex and requires a 5-day waiting period, often generating operational inefficiencies. These operational challenges don't justify higher price tag, leaving wineries to absorb these additional costs - affecting their bottom-line. It is crucial that wineries implement fast and cost-effective solutions to measure their wastewater BOD levels.

INTRODUCING MANTECH'S RAPID BIOCHEMICAL OXYGEN DEMAND (BOD) ANALYZER



Using revoluntionary patented nanotechnology, our rapid screening tool accurately estimates BOD that strongly correlates to the traditional BOD method (BOD5). The <u>BOD estimator</u> improves operational efficiencies by:

- ✓ Reducing wait times to **10 minutes** vs. several days
- ✓ Ensuring compliant effluent dischage (avoiding fines)
- ✓ Providing key insights to optimize processes & management of wastewater composition

The easy-to-use BOD estimator was designed with staff unfamilar with water quality analysis in mind. Hundreds of private and government entities all over the world rely on the BOD estimator so, you can put full confidence in your results.

GET BACK TO FOCUSING ON WHAT YOU DO BEST BY LETTING US HANDLE WHAT WE DO BEST



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