



Respirometer : BMT

Measurement of biomass activity within a waste water plant



Thermostatic control bath

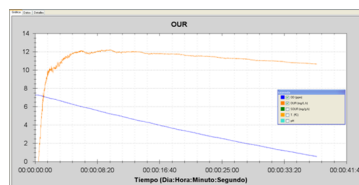
Reactor vessel

Applications:

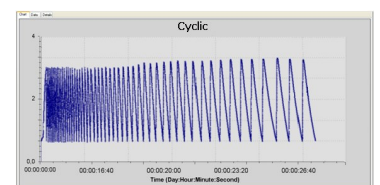
- Oxygen requirement and energy optimization
- Bioaugmentation control and tracking
- COD fractionation
- BOD5 estimation
- Influence of the temperature, pH & oxygen
- Operative parameter optimization
- Nitrification
- De-nitrification
- Anoxic - Anaerobic process
- Toxicity referred to one specific biomass
- Kinetic parameters

Features:

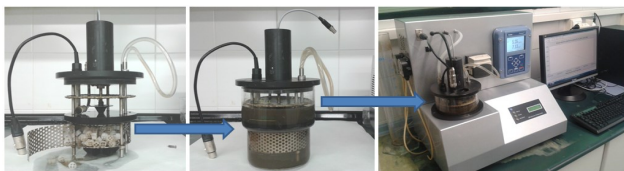
- PC and software included in the system
- Compact analyzer, with very low maintenance and user friendly operation
- Direct oxygen measurements from a *maintenance-free* oxygen sensor
- Capacity for test conditions setting and modify them throughout the test performance.
- Automatic measurements: OUR, SOUR, bCOD, rbCOD, sbCOD, U (COD utilization rate) and q (specific U)
- Several results at any time during the test and see them simultaneously on tabular or graphic modes
- Automatic temperature control in the analyzers EVO, EVO2 & Advance, Advance2, and out of the analyzer in BM-T+
- BM respirometers measure data that can be directly input into modeling – simulating software
- Option for a special reactor assembly for moving beds bio-films (MBBR) and/or granular biomass



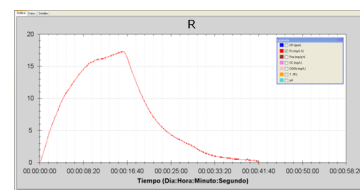
Static Mode



Cyclic Mode



Option for biomass carriers



Dynamic Mode



System Specification	
BMT :	Batch, closed circulation circuit, laboratory respirometer
Operational Principle:	Measurement of DO consumption with time using an electrochemical DO probe.
Range	0-600mg/l.h
Repeatability:	+/- 0.5% (under identical conditions)
Respiration rate accuracy:	1-2%
Oxygen uptake accuracy:	2-5%
Min response time for Rs:	1 sec
Equipment items:	
1 jacketed Reactor vessel Optional external thermostatic bath and circulator PC + operating software (provided) Interface for PC Circulating pump DO sensor and transmitter (built in) Electrical requirement: 230VAC 50 Hz, 3A (excluding water bath) Analyser dimensions - 340x330x460mm (wxdxh)	
Thermostatic water bath:	
Dimensions:	70x40x45mm
Weight:	25kg
Capacity:	13l
Circulation rate:	12l/min max
Power:	230V/50Hz, 1.5kW
Temp range:	0-60 °C - stability 1 °C
Computer System:	
Program environment:	Windows 2000, XT, NT, Vista
File Types:	sn (BM-T) & CSV (Excel) Windows compatible
Security file generation – Automatic	
Personal file generation – BM-T program storing mode	
Data entry – via PC keyboard	

System Features
Individual assay configurations Open assay system – allowing substance addition during assay Graphic and tabular data display Zoom capability on graphics Respirogram overlay capability – for easy comparisons Manual input of VSS – to permit SOUR calculation User programmable data collection rate Auto temperature control and display Data export in excel format – for easy manipulation and reporting

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