

IQ / OQ / PQ

Laboratory Instrument Validation
Performed and Documented in GLP Format

Temperature, Humidity, CO₂, and Light Controlled Devices

Biomatic Technologies

OQ - Operational Qualification

Environmental Chambers, CO₂ Incubators, Cold Rooms, Ovens, Freezers, and other Laboratory Devices

Biomatic Technologies utilizes state-of-the-art equipment to verify temperature accuracy and stability of various temperature sensitive laboratory equipment. From NIST certified thermocouples to computerized temperature recording and data processing with comprehensive documentation following regulatory guidelines for ease of auditing.

- Temperature, CO₂, and humidity accuracy and stability
Short and long term measurements and recording at multiple set points as specified by the user or according to their existing SOP with calibrated and NIST traceable sensors
- Temperature, CO₂, and humidity uniformity mapping
Measurements and recording at various locations within the device (top, middle, and bottom levels) with calibrated sensors to verify temperature uniformity
- Temperature, CO₂, and humidity recovery mapping
Measurements and recording at various locations following changes in the environment (opening and closing the door, new parameter set point, other parameters)
- User defined Measurement verification

IQ - Installation Qualification

- Inventory of instruction manuals, components and serial numbers
- Installation verification (power connection, venting, drainage, fluidics,..)

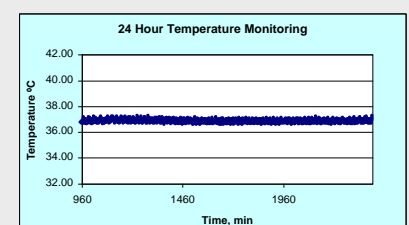
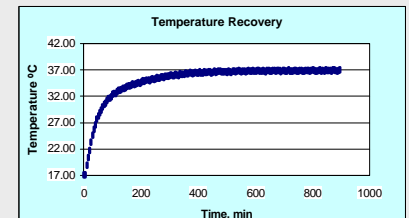
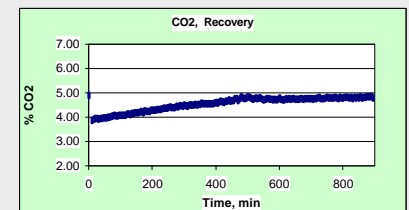
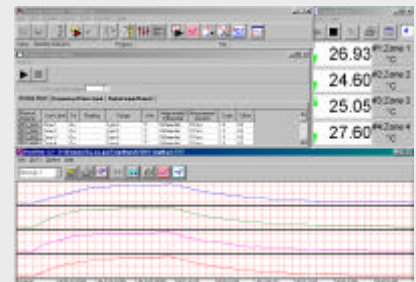
PQ - Performance Qualification

- System performance and robustness
Temperature, CO₂, and humidity monitoring and performance verification of the system under actual running conditions

Data Analysis of Test Results Graphical Display & Charts

Oven Temperature Accuracy and Stability, GC System					
Set Temperature, C	50.00	150.00	200.00	250.00	300.00
Average	50.29	152.91	201.36	253.80	304.38
Average Dev.	0.05	0.11	0.04	0.13	0.16
% RSD	0.11	0.07	0.02	0.05	0.05
Maximum	50.45	153.23	201.52	254.23	304.96
Minimum	50.17	152.68	201.22	253.49	304.01

Oven Temperature Uniformity, GC System			
Set Temperature, C	200.00		
	Top	Middle	Bottom
Average	203.12	201.36	201.62
Average Dev.	0.09	0.04	0.06
% RSD	0.04	0.02	0.03
Maximum	203.41	201.52	201.81
Minimum	202.92	201.22	201.39



Biomatic Technologies Specialties

- Reconditioned Lab Equipment
 - Service & Maintenance of Lab Equipment
 - Instrument IQ, OQ, PQ Validation
 - Asset Management & Inventory Control
 - Contract R & D and Consulting

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