5E-AC/PL
Calorimeter

Standard Configuration

Main analyzer
Oxygen Vessel
Data System (PC & Printer)
Handle Oxygen Charger
Crucibles
Ignition Wire
Benzoic Acid
O-ring kit
Tool kit

Optional Configuration

Lens paper
Pellet press
Bench-top oxygen charger
Halogen Resistant Oxygen Vessel

Typical structure ensures trouble free operation

Features

1. Water cycling system applies the theory of communicating vessels, simple and reliable.
2. Large jacket volume minimizes the heat transfer between bucket and the environment.
3. Large water tank is equipped for cooling down water from the bucket after each analysis.
4. Auto-diagnosis, remote data transfer and balance connection available.

Test Data

calibrate mass, g	temperature rise	°C or °F	as-determined heat capacity	units
0.8207	2.1783	°C	9885	J/K
0.8115	2.1811	°C	9887	J/K
0.8881	2.3862	°C	9888	J/K
0.9111	2.4498	°C	9880	J/K
0.9746	2.6188	°C	9885	J/K
0.9965	2.6735	°C	9878	J/K
1.0957	2.9393	°C	9879	J/K
1.2052	3.2391	°C	9880	J/K
1.1251	3.0238	°C	9889	J/K
1.2214	3.2827	°C	9879	J/K
Average:9883J/K			RSD:0.043%	

Remark: ASTM-D5865, the precision of ten acceptable calibration test runs shall have a relative standard deviation (RSD) no greater than 0.17% and CKIC's specification is less than 0.05% RSD.
Conclusion: 5E-C5500 Automatic Calorimeter exceeds the ASTM Precision Requirement.

Specification

Model	5E-C5500		5E-C5508		5E-AC/PL	
Conforms to Method	AS 1038.5, ASTM D5865, ASTM D4809, ASTM E711, BIS 1350, BS EN 15400, GB/T 213, GB/T 30727, ISO 1928, ISO 9831					
Precision (1g Benzoic Acid)	0.05%RSD*					
Measuring Range	Up to 40MJ/kg					
Temp. Resolution	0.0001°C					
Control Ability	2 Units/1 PC available					
Analysis Time per Sample	Dynamic Method:10mins, Classical Method:15mins				Classical Method: 15mins	
Test Per Hour	Single control	Double control	Single control	Double control	Single control	Double control
	Up to 6	Up to 12	Up to 6	Up to 12	Up to 4	Up to 8
Jacket Type	Isoperibol					
Vessel Identification	Up to 2 for automatic, several for manual					
Balance Connection	Available					
Network Connection	Available					
Bucket Filling	Automatic					
Oxygen Filling	Semi-Automatic		Automatic		Semi-Automatic	
Structure	Benchtop or Vertical		Benchtop		Vertical	
Bomb Vessel Lifting	Manual		Automatic		Manual	
Power Supply	Single phase, AC220V±10%, 50/60Hz, ≤500W					
Net Weight	Bench top: 75kg		80kg		71kg	
	Vertical type: 103kg					
Dimensions(L×W×H)	Bench top: 480mm×500mm×420mm (Analysis unit) 370mm×500mm×420mm (Temp. control unit)		Analysis unit: 580mm×550mm×550mm Temp. control unit: 370mm×540mm×400mm		Vertical: 580mm×550mm×950mm	
	Vertical: 480mm×500mm×940mm					

*Test Condition:
1. Ambient temp. 20°C±1°C, humidity 75%±5% 2.No strong interference source nearby 3.Clean water circuit with distilled water