

BET SAA- 3660

Surface Area and Pore Size Analyzer



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

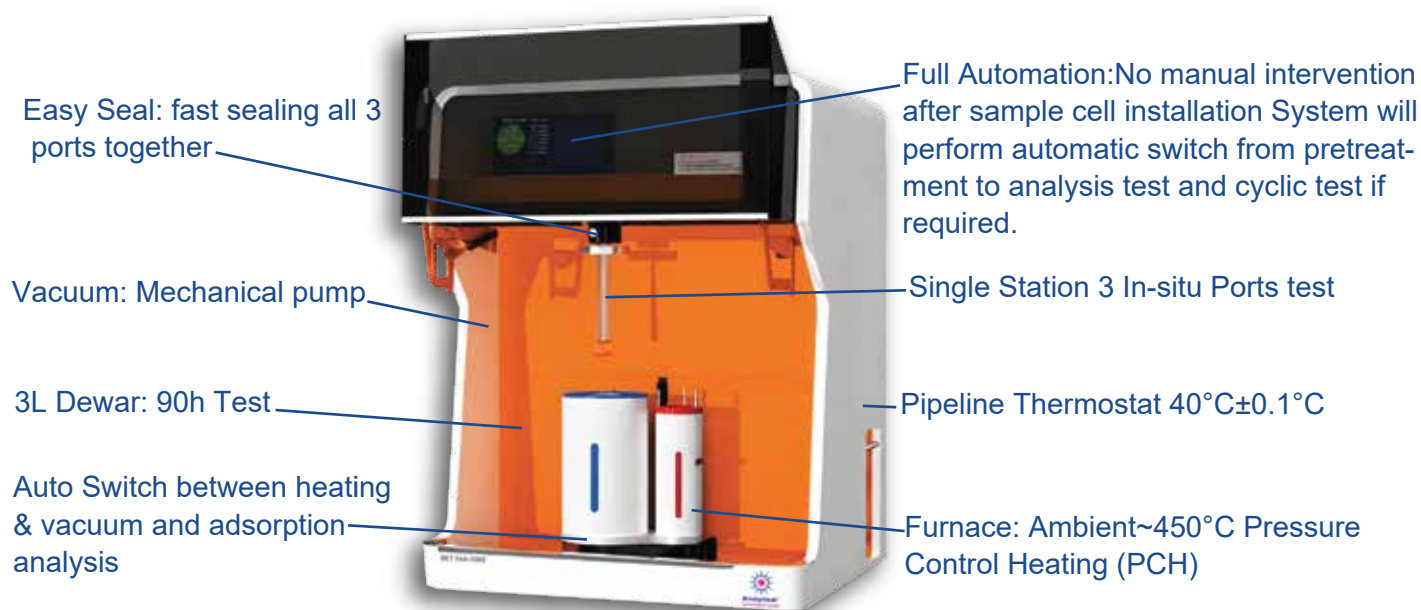
- Redefine 'Full Automation': Auto-switching between degassing and testing;
- High Throughput: a total of 3 in-situ degassing & analysis ports;
- Zero Helium Pollution: vacuum heating degassing and adsorption test run in the same position, no need to remove sample cell. In-situ activation & analysis. No transfer of sample cell to avoid potential contamination

Feature:

- High-throughput and Fast Surface Area Analysis;
- Pore size (0.7nm-500nm) and pore volume analysis;
- Adsorption heat, IAST selective adsorption;
- Gas Adsorption isotherm (E.g. N₂, Ar, CO₂);
- Automatic cyclic test for durability or service life evaluation

Technical Parameter:

- Test Range: > 0.0005m²/g for surface area; 0.7nm-500nm for pore size;
- High Accuracy: <0.5% RSD (BET SSA of Standard Sample);
- Pressure Transducer: Transducers are equipped for each analytic station, PO station and calibrated volume respectively, which work independently with precision at 0.15%
- Vacuum System: 10 Pa with mechanical pump



Technical Advantages:

High-throughput

- 3 analytic ports simultaneous analysis;

Fully Automatic Analysis

- Auto-switching between furnace and Dewar cup improve research test workflow;
- Patent: Fully automatic physical adsorption analyzer with autoswitching position of heating furnace and thermostatic bath cup

Zero Helium Pollution

- In-situ vacuum heating degassing with molecular pump; Automatic switching to adsorption test; No need to remove sample cell;

Programme Control Pressure and Temperature to Prevent

Sample (Fine Powder Materials) from Elutriation

- PCH will adjust the heating rate by the pressure change that originate from porous material desorption during the degassing.
- Patent: Physical adsorption analyzer with programmable pressure control and anti-flying degassing system

Thermostatic Gas Pipeline System

Internal gas pipeline system keep thermostatic at 40°C; accuracy $\pm 0.1^\circ\text{C}$;

Easy Seal: one seal for three ports

- Seal 3 tubes -the same time in one analytic station, no need to seal respectively;
- Patent: A physical adsorption analyzer with a dense multi-sample tube co-sealed tube jacket

Upward moving door

- User friendly design and save the space in lab;

Electric Turbine Liquid Nitrogen Pump

- Move freely and safely add liquid nitrogen;
- Patent: An electric liquid nitrogen pump with impeller structure (non-pneumatic)

Telecommunication with Balance

- Automatic input of weighing result from balance;

High Efficiency

- Auto-run based on program setting, efficiency improved;

High Stability

- Intelligent software, safe and durable hardware.

Automatic cyclic test for multiple adsorbents (optional)

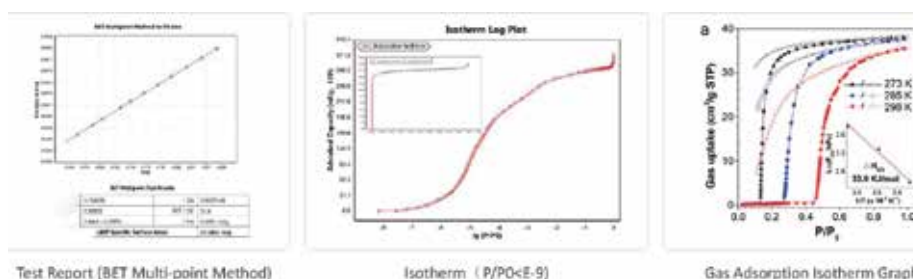
- It can support automatic cyclic test of multi adsorbents at different adsorption tempera-

tures,automatically completing gas path flushing,adsorption temperature switching,dega-ssing and analysis test and repeated process.No manual control or intervention is required in the whole process

Technical Specification:

Model	BET SAA-3660
Station	1 independant stations
Analysis Ports	3 in-situ ports
Analysis Range	1.0x 10 to 1.0 P/PO
Vacuum Pump	1x mechanical oil pump
Independent PD tube	Pantent spiral stainless steel PO tube
Surface Area	>0.01 mg (N2) >0.0005 m ³ /g (Kr)
Pore Size Range	0.7nm-500nm
Pore Volume	0.001cc/g and above
Adsorptive	
Adsorptive	"Regular gas like N2, Ar, Kr, CO2"
Degas	
In Situ	3 In Situ ports
Heating	Ambient to 450C
Pumping	1.0x 10 Pa
None In Situ	12 available with VD12
Test Temperature	
Cryogen Dewar	Volume 3L, Test Hours 90hrs
Free Space Control	Servo motor control by system software calculation
Water bath	Thermostatic water bath -10°C to 80°C
Physical specs	
Width	750 mm
Height	1,010 mm
Depth	680 mm
Weight	86 kg
Electrical	220 to 240VAC,50/60 Hz,single phase 110 to 115 VAC,50/60 Hz,single phase
Environmental	Temperature between 10°C to 35°C relative humidity from 0% to 95%
Controller	PC with Windows
Valve drive gas	Compressed air or nitrogen at 7 bar,dry,free of particles >0.2 μm

Test Report:



HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

Trainings :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

Instruments :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



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Our Products & Technologies



LCMS



Automated Prep-Flash
Chromatography system



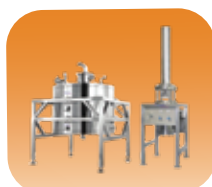
Maldi TOF



Optima Gas
Chromatograph



Flash
Chromatograph



DAC
Column



GCMS
3068



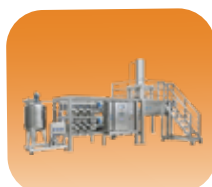
UHPLC



HPTLC



Ion Chromatograph



Production
HPLC



HPLC



Column



DLS



Water purification
system

▶▶▶ Regulatory compliances



▶▶▶ Corporate Social Responsibility

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Analytical Foundation

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