

H-Sorb 2600™

**High Pressure & Temp.
Gas Sorption Analyzer**



Lead You to Particle World Better

GOLD APP INSTRUMENTS

Parameters

- ❑ **Analysis Method:** static volumetric, high pressure gas sorption
- ❑ **Versatility:** adsorption/desorption isotherms measurement (cryogenic to 500°C), Gibbs supercritical adsorption measurement
- ❑ **Data Reduction:** Langmuir model regression isotherm, PCT(Pressure-Composition-Temperature) diagram/curve/isotherm measurement, Langmuir maximum adsorption constant L and adsorption pressure constant B measurement; Langmuir correction model loading-ratio correlation regression (LCR) isotherm; Ono-Kondo (OK) lattice model isotherm regression; adsorptive gas density and vapor-liquid equilibrium accuracy calculation under different pressures and temperatures
- ❑ **Measuring Ranges:** continuous adsorption and desorption measurement from normal to 200Bar pressure
- ❑ **Accuracy:** repeatability errors <3%
- ❑ **Temperature Range:** cryogenic to 500°C, accuracy±0.1°C
- ❑ **Sample Ports:** two samples analyzing and two degassing, stainless-steel micro welding sample cells, software integrated temperature PID adjustment
- ❑ **Transducer Accuracy:** imported high precision transmitter, accuracy can reach 0.05% of F.S. (full-scale), long-duration usage stability is 0.025% of F.S.
- ❑ **Ultimate Vacuum:** 4×10^{-2} Pa (3×10^{-4} Torr), molecular pump system (1×10^{-6} Pa) is optional
- ❑ **Adsorbate Gas:** high purity nitrogen, CO₂ or others (Ar, Kr, H₂, CH₄ etc.)
- ❑ **Data Acquisition:** high-precision and high integration data acquisition modules, minimal error, strong anti-interference ability
- ❑ **Specifications:** Height 22.05 inches (56cm)* Width 20.87 inches (53cm)*Depth 23.62 inches (60cm); 132 pound (60kg); 220V/5A



2 sample degassing ports can efficiently clean and purify samples before analyzing

2 sample analyzing ports

Quartz sample cells for two systems ports

Transparent protective covers with operation notes printed on interfaces.

Heating mantle

Fully automated elevator

4L stainless steel thick wall Dewar with temp. preservation foam covered outside. Support more than 72 hrs analyzing.

Advantages

Control System

Imported VCR interface high pressure pneumatic valve can realize auto on-off within 200Bar, sealing performance is top to 1×10^{-10} Pa.m³/s, can be used more than 500 million times; programmable logic controller (PLC) system, high integration and sound anti-interference, improve stability and prolong life.

Analysis Management

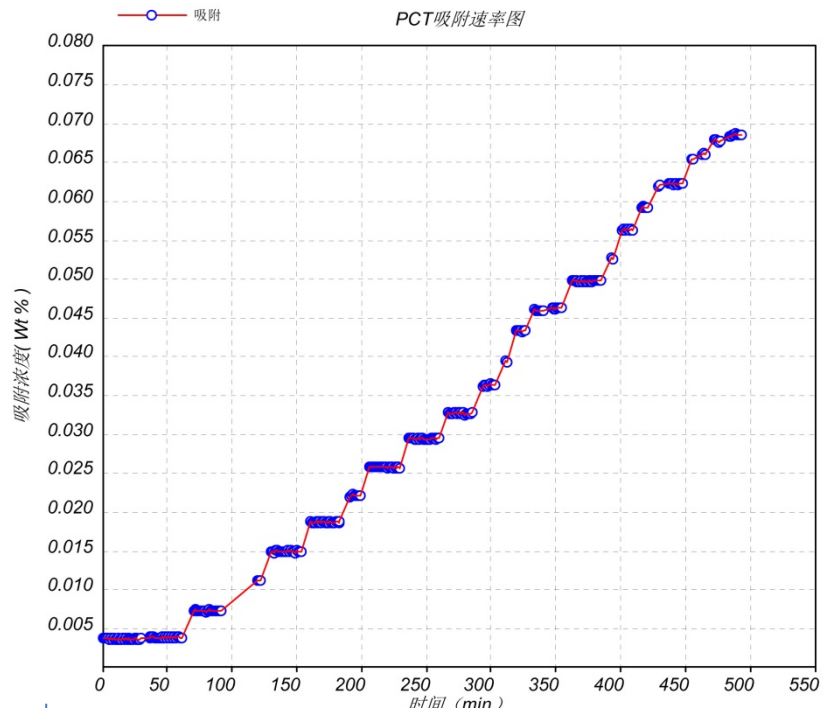
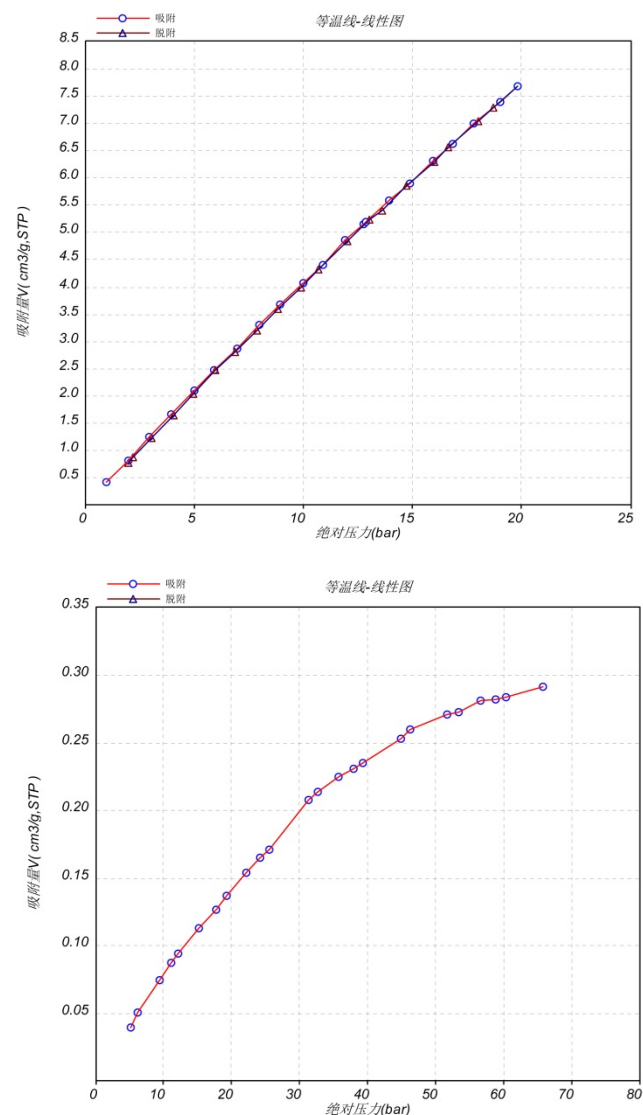
Parameters be set by software, fully automated, can realize unattended operation at night; H-Sorb mode is available for accurate control gas charging pressure points, gain ideal data points.

Manifold System

Imported 316L stainless steel thick-walled manifolds, micro welding sealing can reduce dead space largely; metal VCR connection is convenient for installation and uninstallation.

Safety Measures

H-Sorb asymptotic technology realizes auto gas-charging and degassing, prevents high pressure dangers caused by artificial mis-operation, and also minimizes large differential pressure's impact to pressure transducers.



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Fig.1 isotherm for hydrogen storage material

Fig.2 hydrogen adsorption PCT on hydrogen storage material

Fig.3 methane adsorption isotherm on shale material

Accessories

Item No.	Accessories	Quantity
1	H-Sorb 2600 Analyzer	1 set
2	Analysis Software (English)	1 set
3	Rubber O-rings for Sample Cells Sealing	10
4	Stainless Steel Sample Cells	4
5	V-shape Sample Filling Funnel	10
6	Pressure Transducer (imported with original packing)	1
7	Power Line	1
8	Manufacturer Data Wire	1
9	Supplied Stainless Steel Pipe	2 m
10	Fuse	2
11	High Pressure Gauge	1
12	Medium Pressure Gauge	1
13	Pressure Regulator	1
15	Protective Gloves	1 pair
16	User Manual(English)	1 copy
17	Software CD (English)	1
18	Need 40L High Purity H _e (99.999%)	1 pot
19	40L High Purity N ₂ (99.999%)	1 pot
20	Customer 40L High Pressure N ₂ (up to 20Mpa)	1 pot
21	Computer	1 set
22	Prepared Printer	1 set

WE SUPPLIED

BET surface area analyzer
 Surface area and pore size distribution analyzer
 Gas pycnometer true density analyzer
 High pressure and high temperature gas sorption analyzer
 Sample preparation degasser

WE SERVE

Particle, porous, solid, powder, fiber etc.
 nanomaterials cover nearly every industry field.
 Also provide assistances for universities and
 institutes researching and teaching programs.

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