

## **Main Function**

- NH<sub>3</sub>, SO<sub>2</sub> Gas Adsorption Analysis;
- ♦ H<sub>2</sub>, CH<sub>4</sub>, C<sub>2</sub>H<sub>6</sub>, C<sub>2</sub>H<sub>4</sub>, C<sub>3</sub>H<sub>6</sub> and etc Adsorption Analysis;
- N<sub>2</sub>, O<sub>2</sub>, Ar, CO<sub>2</sub> and etc Gas Adsorption Analysis;

- BET Specific Surface Area and Pore Structure Analysis;;
- Adsorption Heat Capacity Analysis;
- IAST Competitive Adsorption Simulation;

## **Test Report**



Adsorption and Desorption Isotherm of  $\mathsf{NH}_{\scriptscriptstyle 3}$ 



Adsorption and Desorption Isotherm of  $SO_2$ 



Adsorption and Desorption Isotherm of  $C_{\!_3}H_{\!_8}$ 

## **BSD-PMC** Corrosive Gas Adsorption Analyzer



## Feature

- Test temperature range: from -196 °C to 400 °C ;
- Vacuum System: mechanical pump & molecular pump to reach 10-6Pa;
- Pressure transducer: double transducer 1torr 1000 torr with 0.1%;
- Independent degassing system and analysis system, so degas and adsorption run independently;
- Pre-treatment system with 2 degassing stations, which support auto adsoption and degassing at same time;
- Analysis station: 1/2 optional;
- Corrosion-resistant pipeline and structure design to protect vacuum pump;
- Four independent gas inlets;
- High air-tightness: Multi manifold modules developed by BSD
- Instrument, make sure vacuum and stability;
- Cold trap: protect vacuum system;
- ◆ Anti-Contamination System: Exclusively designed filter dust system to prevent flying sample away from polluting instrument, which shorten vacuum time and improve efficiency;
- Intelligent software: Auto running and programme controlled degassing and analysis;

◆ Support IAST theoretical model:multi-component competitive adsorption analysis can be obtained by simulating and calculating according to the isotherm of pure component, which can be used for prediction of multisolute sorption;

The adsorption heat is obtained by fitting the

adsorption isotherm to the adsorption of the same adsorbent at different temperatures.



VCR Metal Hard Connection Structure



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