

ASAP 2020 PLUS - CHEMISORPTION

The ASAP 2020 Plus Chemisorption option permits you to obtain valuable information about the physical and chemical properties of your catalyst, catalyst support, adsorbents, and other materials. Its unique design provides a high level of system cleanliness to permit low-pressure chemisorption isotherms.



Programmable, two-station degas system allows physisorption sample preparation while running a chemisorption analysis

Twelve gas inlets allow multiple probe gases to be investigated maximizing efficiency and range of applications

Dedicated exhaust port for external detector connections

High-temperature 1100 °C furnace rapidly ramps to temperature and provides excellent, stable temperature and control with quick cool downs

In situ chemisorption sample preparation and activation provide a fully automated method that does not require user intervention

Design permits quick and easy transition from chemisorption to physisorption analysis

Designed for Expanding Needs

HighVac Option

Equipped with a 10-mmHg transducer and a high vacuum pump. This system provides the low-pressure capability and pressure-measurement resolution required for low surface area analyses using krypton as the adsorptive.

Micropore Option

Includes a 0.1-mmHg transducer and a high vacuum pump. This system delivers accurate porosity data on pores between 0.35 and 3 nanometers and provides a comprehensive selection of micropore reports.

Enhanced Chemical Resistance Option

The stainless-steel manifold is available with chemically resistant Kalrez® seals to support analyses using aggressive gases or vapors as the adsorptive.

Vapor Adsorption Option

Includes optional vapor accessories.

Specifications

Pressure Measurement:
0 to 950 mmHg

Resolution: Up to 1×10^{-7} torr
(0.1-mmHg transducer)

Accuracy: > 0.15% of reading

Degas System: Ambient to 450 °C, 1 °C increments

System Capacity:
1 analysis, 2 degas ports

Sample Temperature: Ambient + 10 °C to 1100 °C, 1 °C increments

Control: Ramp up to
20 °C/min to 800 °C
10 °C/min to 1000 °C
5 °C/min to 1100 °C