micromeritics®

Certified Remanufactured Instruments

SOLUTIONS FOR EVERY BUDGET

WHEN YOUR CAPITAL BUDGET IS UNDER PRESSURE, OPTIMIZE YOUR ACCESS TO TECHNOLOGY AND MAXIMIZE THE RETURN ON INVESTMENT

At Micromeritics® we are dedicated to making high quality, advanced scientific instruments to help you accomplish your objectives. We understand that occasional budget constraints could potentially limit your access to the technology you desire.

To that end, we are pleased to offer our certified factory remanufactured instruments. Backed with the precision and accuracy of Micromeritics award winning service team, these items are guaranteed to perform to current factory specifications.

Each instrument is put through a rigorous testing and validation cycle to ensure it meets or exceeds our current operating qualifications.

Recalibrating, testing, and validation that each instrument meets current manufacturing specifications

Comprehensive refurbishment that includes all new accessory kits

Latest compatible software and firmware

Full one year warranty

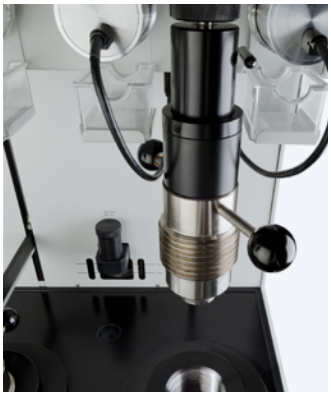
QUALITY INSTRUMENTS FOR A VARIETY OF APPLICATIONS

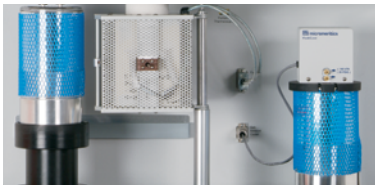
Certified Remanufactured Instruments offer excellent return on investment valuations:

Acquire our best technology at prices up to 50% off

Same complete warranty protection as a new instrument

Full technical service and sales support that comes with every instrument we sell





Certified Remanufactured Instruments inventory is dynamic and are subject to availability. Check with your Micromeritics Instrument Corporation Representative to obtain the most current list of available instruments.

LEARN MORE ABOUT MICROMERITICS INSTRUMENTS WITH THE LATEST LITERATURE

MIC SAS II
Micromeritics® Sub-Sieve AutoSizer II
Air-Permeability Particle Size

Measuring and understanding the flow properties of powders with the FT4 Powder Rheometer®

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PRODUCT DATA SHEET

SAA 8100 –
A Micromeritics' Selective Adsorption Analyzer

The Selective Adsorption Analyzer (SAA – 8100) is a dynamic adsorption analyzer based upon the vapor-solid equilibrium for reversible systems. The SAA – 8100 is a device for collecting both transient and equilibrium adsorption data for multi component systems where a dynamic system is preferred over a static adsorption analyzer due to the well mixed nature of flowing gas streams and the use of detector systems that allow for monitoring the transient behavior (mass transfer profile) of a multi component adsorption application.

PRINCIPLE OF OPERATION

The SAA – 8100 is a gas delivery system based upon the technology of PID Engineering & Technology, a Micromeritics company. The primary components of the system include mass flow controllers, blending valves, vapor sources, temperature control, and a simple column for evaluating adsorbents. The basic procedure for evaluating an adsorbent candidate includes: activation (degassing) of the adsorbent, flow a mixture of gases (or vapors) through the column containing the adsorbent, and monitor the composition of the effluent gas from the column containing the adsorbent. The quantity of gases adsorbed may be determined from a simple mass balance using the mass flow entering the column minus the mass flow of components exiting the column. This difference is the accumulation (adsorption) of components from the gas phase.

Having both the fraction of gases entering the column and fraction of components (from the gas phase) adsorbed, the selectivity for the adsorbent may be calculated. This selectivity is a critical parameter for comparing adsorbents.

KEY FEATURES & BENEFITS

- Optimized and minimized "dead volumes" over full measuring range enables determination of whether a separation is possible; then selectivity is calculated based on the quantities.
- Simple column design with exceptional flow control gives ability to use multiple gases and perform highly-controlled blending.
- The sample column is housed in a temperature-controlled hotbox which enables high quality adsorption experiments to be performed with precise and accurate temperature control, especially important for Breakthrough measurements. Precise temperature control is essential to eliminate cold spots, avoid condensation of vapors, and sampling near the column is needed to minimize mixing. After a separation, we want to obtain the best resolution and mixing will negatively impact the data (Note: Many applications are performed at relatively low temperatures so a furnace is not always required).
- Proprietary blending valves provide important advantages for gas mixing control and minimize the system dead volume.
- Back pressure control that allows the user to perform experiments at commercially relevant conditions.
- The SAA 8100 is a precision gas delivery system that is flexible in that its capabilities can be expanded over time with the addition of different detectors and other optional accessories its ability to provide high quality separation and excellent flow rate data ensures high quality selectivity values.

SMART SOLUTIONS FOR
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SentinelPro
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Micromeritics Instrument Corporation
4356 Communications Drive
Norcross, GA 30093 USA

micromeritics.com • 770-662-3636

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