Gemini VII 2390 Series

mi micromeritics®

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Description

Micromeritics' Gemini® VII 2390 Series of surface area analyzers rapidly and reliably produces accurate

Surface Area, Total Pore Volume, and Pore Volume Distribution

Accurate, Fast and Economical Micromeritics' Gemini VII 2390 Series of surface area analyzers rapidly

Unique Capabilities

The design of the Gemini provides unique capabilities found only in more expensive products. Many error

•The Windows® version includes easy-to-follow installation videos and system verification tests to ensu

•The patented twin-tube design negates free-space errors introduced by thermal gradient variations or b

•Permits low surface area measurements without requiring krypton by essentially eliminating free-space

• Accelerates delivery of the analysis gas because sample uptake rate is used to control the rate at whic

• The use of a servo valve to control the rate of gas flow into the sample tube assures accurate attainme

• Three choices of software control: embedded software with a keypad enabling the Gemini VII to be ope

Three Gemini VII Model Options

Gemini VII 2390a
This option is ideal for rapid and accurate surface area determinations Also provides standard methods f

Gemini VII 2390p
Provides additional precision with the addition of a P0 (saturation pressure) tube allowing the user to mo
Gemini VII 2390t
Gemini Has all the capability of the 2390 with the additional ability to perform a BJH or Dollimore Heal po

The Gemini Series of surface area analyzers uses the Static Volumetric Technique to generate high-spe

Features
 •Low cost
•Fully automatic operation
•High throughput – up to four Geminis can be operated with single computer
•Capable of measuring low surface area materials
•Keypad or computer-operated with Windows-driven software
•Choice of analysis mode (scan or equilibrate)
•No pressure overshoot
•Common mode rejection of free-space error effects
•No thermal-diffusion errors
•Optional stainless-steel Dewars
• 21 CFR Part 11 software option
• IQ/OQ Validation service (optional)

 Analysis Technique

 The Gemini uses an adaptive rate, static volumetric technique of operation. It is the first gas sorption m
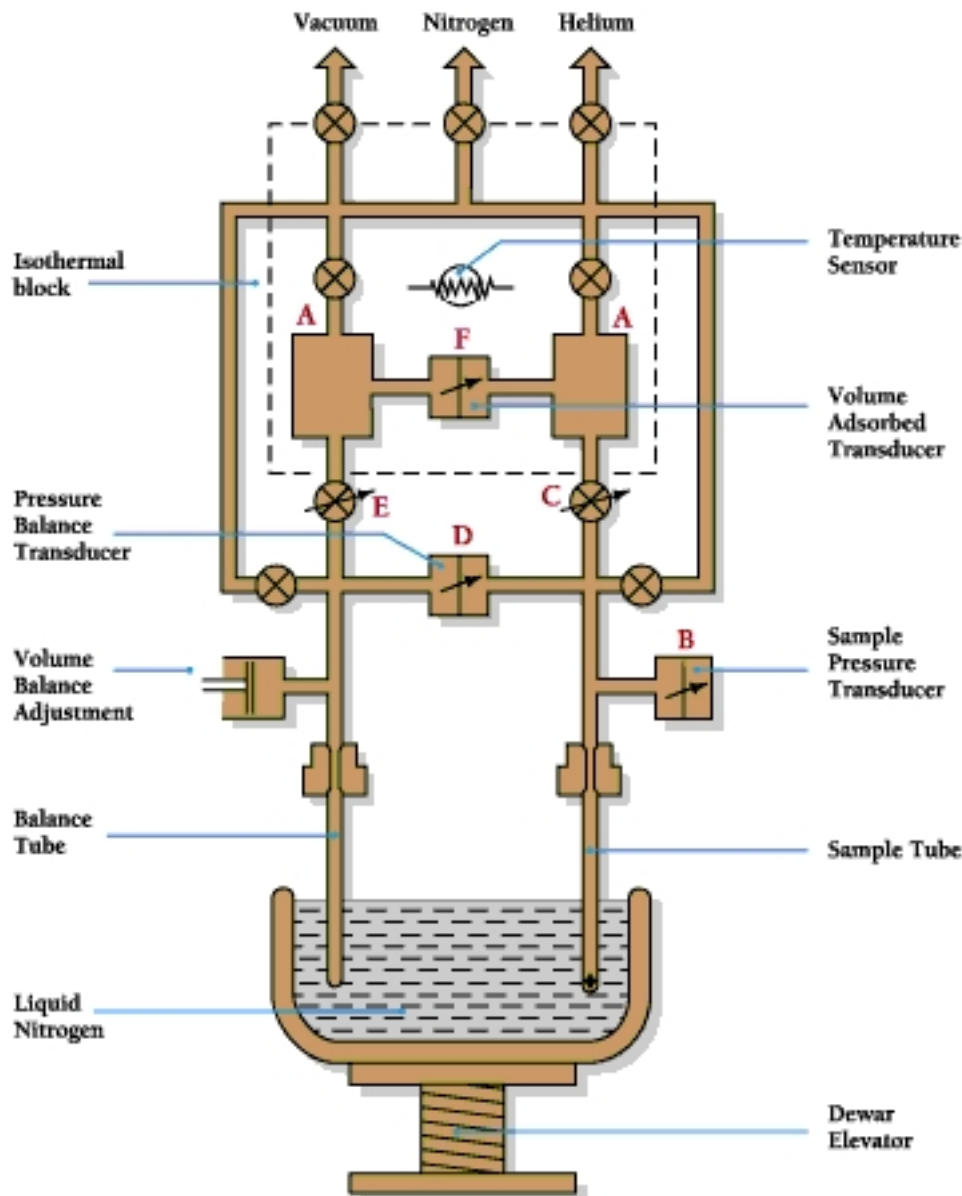
Twin-tube design
 The sample and balance tubes are identical in every way. Conditions within one tube exactly reproduce

 Accelerated dosing of the analysis gas the Gemini design, the sample uptake rate controls the rate at which

Two categories of software control

 Embedded software: The Gemini V Series continues to be a stand-alone physical adsorption analyze

Intuitive and powerful Windows-based software:
 The optional Windows-based software allows the Gemini V Series to be controlled from a PC, thus prov

 For applications that fall under FDA's 21CFR11 software Gemini provides the security features and audi

Windows Option Software Features
 The easy-to-use Gemini software utilizes a Windows interface to help plan, launch, and control the anal

Windows Option Analyses and Reports
The new Gemini Windows software includes powerful data reduction software.
- Single- and Multipoint BET (Brunauer, Emmett, and Teller) surface area
- Langmuir surface area
- Pore volume and pore area distributions in the mesopore and macropore   ranges by the BJH (Ba
- Pore volume (distribution and total pore volume) in a user-defined pore   size range
- Micropore distribution by the MP-method (2380 model) and total micropore   volume by the t-Plot
- Halsey, Harkins-Jura, Carbon Black STSA, Broekhoff-de Boer and   user-entered thickness curve

The 2380 model also includes

- Dubinin-Radushkevich (D-R)
- Dubinin-Astakhov (D-A)
- Fixed pore size tables
- Linear & Log Plots (isotherm, pore volume, pore area)
- Cumulative and Differential data
- Plot overlays, any type

21 CFR Part 11 Option
Also available is confirm™ software, which addresses the many requirements specified by 21 CFR Part

Specification
plicability:

leasurement:
le   Tubes:

Gases:
n   System:
Electrical:
Physical:
iscellaneous: