

# 3P meso series



HIGH-THROUGHPUT ANALYSIS  
BY UP TO FOUR INDEPENDENT  
MEASURING-STATIONS

HIGH DEGREE OF AUTOMATIZATION

FAST PHYSISORPTION RESULTS

## FAST PHYSISORPTION ANALYSIS BY SUPERIOR INSTRUMENT DESIGN

PARTICLE CHARACTERIZATION

POWDER ANALYSIS

PORE DETERMINATION

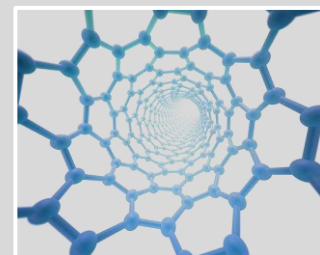


Characterization of  
particles • powders • pores

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## AUTOMATIC SORPTION ANALYSIS OF UP TO FOUR SAMPLES

The most commonly used and most reliable method for measuring isotherms is the static volumetric method of gas adsorption. The **3P meso** series follows the principle of independent analysis ports for determination of meso and macropores from 2 up to more than a few 100 nm. One, two and four port systems are available to meet optimal client demands. Designed for the field of quality assurance and/or production control, these analyzers provide an independent dosing manifold equipped with 1000 Torr transducers for each measurement port. Each of the measurement stations include the capability to degas the sample in-situ (up to 400 °C), this principle avoids sample contamination during sample transfer from separate degassers to the analysis port without making any further precautions. However, for materials where this effect are insignificant, external degassers are available as well.



### 3P meso series

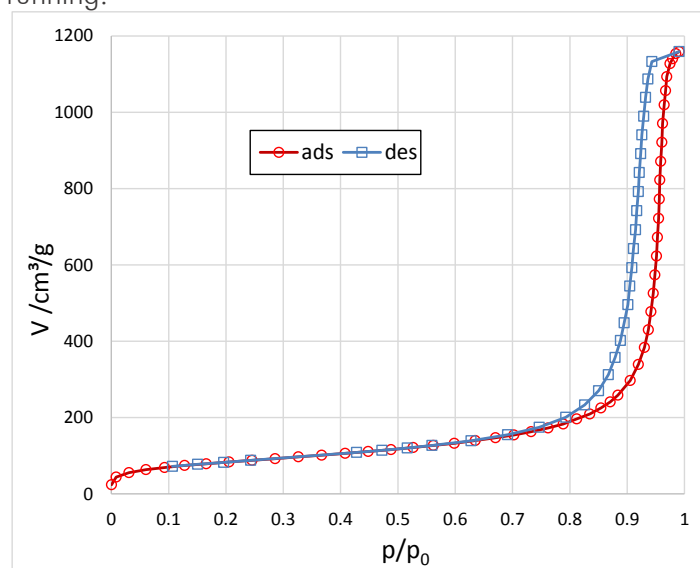


- HIGH-THROUGHPUT ANALYSIS
- HIGH DEGREE OF AUTOMATIZATION
- FAST PHYSISORPTION

- One, two or four independent stations!
- In-situ degassing standard, external degassing optional!
- Software shows kinetic real-time plot together with physisorption isotherm. You will never have under-equilibrated isotherm data without noticing!

### KEY BENEFITS

As each analysis port acts completely independent, there is zero time loss, independent if one, two or four analyses are started at the same time or if another measurement is started while others are already running.



### APPLICATIONS

Catalysts



Glas & Ceramics



Building materials



Graphite & Carbon blacks



Pharmaceutics



Soils & Sediments



### SPECIFICATION

Model	3P meso 112	3P meso 222	3P meso 400
Measuring range	Surface Area $\geq 0.0005 \text{ m}^2/\text{g}$ Pore Size 2 - 500 nm Pore Volume $\geq 0.0001 \text{ cc/g}$		
Pump	Mechanical pump, ultimate vacuum $6.7 \times 10^{-2} \text{ Pa}$		
Analysis ports	1	2	4
Transducers	1	2	4
Degassing ports	2	2	4
$p/p_0$ range	$10^{-4} - 0.998$		
Adsorptives	$\text{N}_2, \text{CO}_2, \text{Ar}, \text{Kr}, \text{H}_2, \text{O}_2, \text{CO}, \text{NH}_3, \text{CH}_4$		



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