

NEW

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Automatic Specific Surface Area / Pore Size Distribution Measurement

BELSORP-mini **+ *BELPREP-flow***



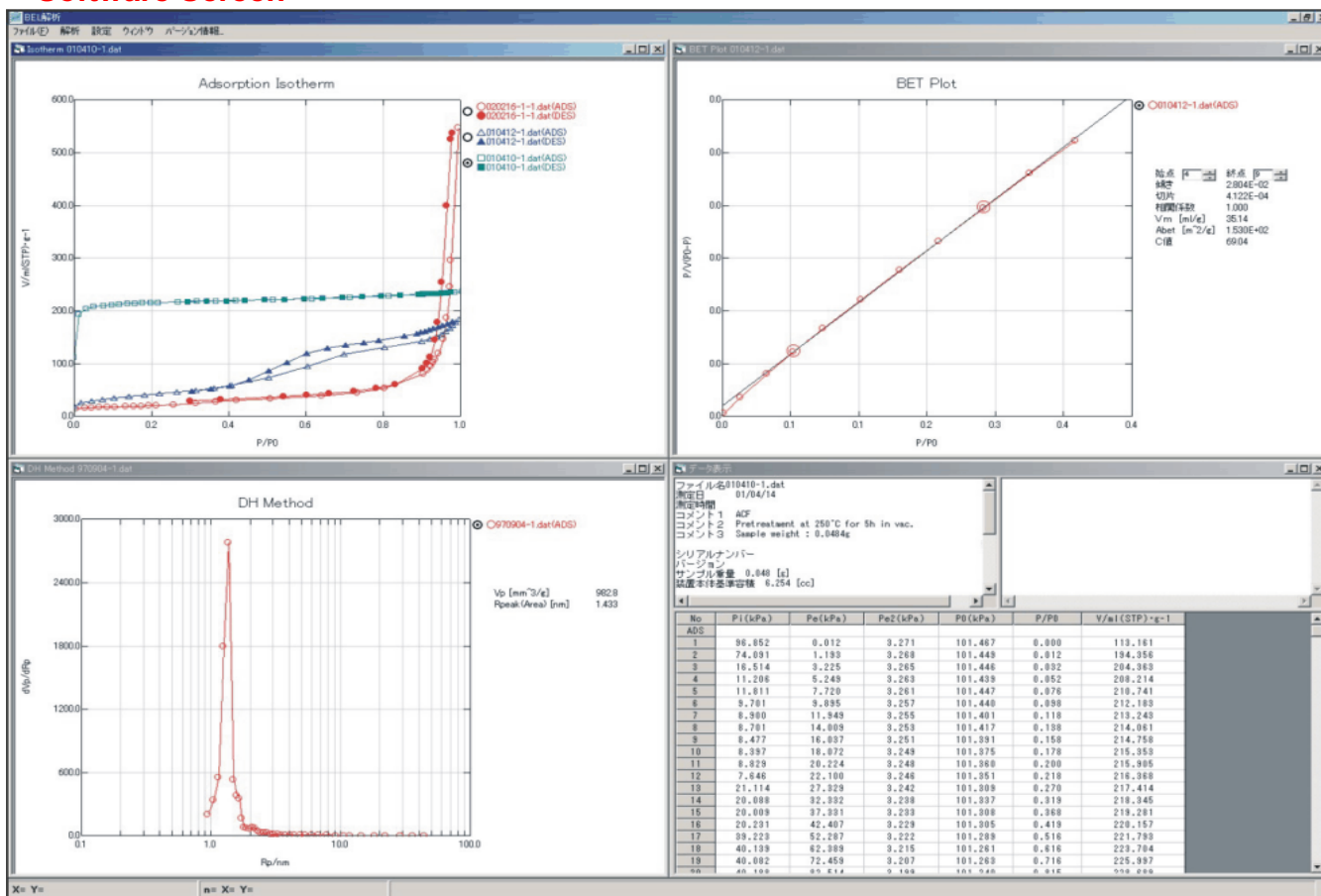
3 Samples Simultaneous and Independent Measurement!

- Specific surface area and pore size distribution measurement of powder and porous material.
- Each port has a pressure gauge so that 3 samples can be measured simultaneously and independently.
- Up to 4 units can be controlled by a personal computer.
- Liquid nitrogen level control is no longer necessary due to our unique measuring method of dead volume (Patent pending).
- No complicated system so that anyone can operate easily.

BEL Japan, Inc.



< Software Screen >



BELSORP-mini (Measurement System)

Measuring principle	Volumetric gas adsorption method
Adsorbate gas	N ₂ and other non-corrosive gases
Measurement port	High precision mode : 1 port Standard mode : 2 ports Multi sample mode : 3 ports
Specific surface area	0.01 m ² /g and above (N ₂ , depending on sample density)
Pore size distribution	0.35 - 200 nm (diameter)
Pressure measurement	Range : 0 - 133 kPa Accuracy : ± 0.25% of F.S.(manufacturer's spec.) Resolution : 4 Pa
Dewar vessel	Volume : 2 L Holding time : 30 h
Sample cell	Approx. 2 cm ³ (Option: 5 cm ³)
Vacuum pump	Volume rate displacement: 30L/min (Ultimate vacuum: 1Pa and below)
Computer (Option) - essential spec.	CPU and Motherboard chip (INTEL), 128MB main memory, 1GB free area in hard disk, 1 port each for Serial and USB, 1024 x 768 screen resolution, Windows98™ 2nd edition
Measurement program	Adsorption / desorption isotherm measurement
Analysis program	Adsorption / desorption isotherm Specific surface area by BET method Specific surface area by Langmuir method Micropore volume and diameter by t-plot and MP method Mesopore distribution by DH, CI or BJH (Please ask for other kind of software)
Size and Weight	W313 x H650 x D390 mm, 45 kg (Not includes Vacuum pump and computer related things)
Utility	He, N ₂ : 0.5 - 1.5bar (1/8 "Swagelok joint) 11Ømm Rotary pump connection port
Power	Single phase: AC100 - 240V / 600VA (400VA is for Rotary pump)

BELPREP-flow (Pretreatment System)

Pretreatment principle	Flow and heat degassing method
Pretreatment port	3 ports
Gas flow volume	10 - 100 ml/min
Temp. range	RT - 500°C
Temp. accuracy	± 5°C
Size and weight	W387 x H560 x D322 mm, 19 kg
Utility	N ₂ : 0.5 - 1.5bar (1/8 "Swagelok joint)
Power	Single phase: AC100 - 240V / 400VA

(Windows98™ is the trademark of Microsoft Co., Ltd.)

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