



**Automatic Specific Surface Area / Pore Slze Distribution Measurement** 

# BELSORP-mini + BELPREP-flow



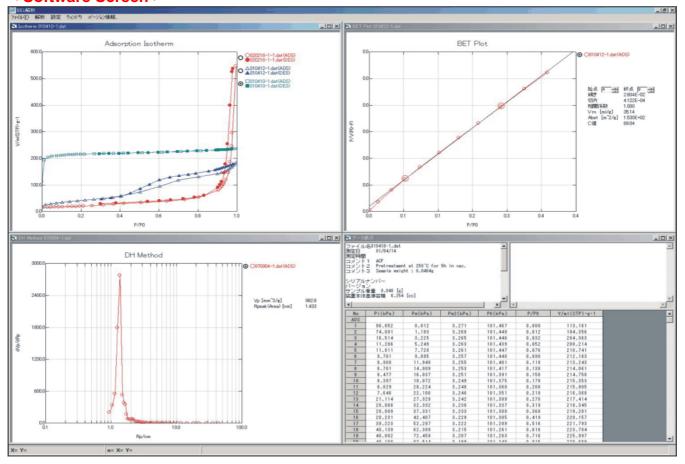


## 3 Samples Simultaneous and Independent Measurement!

- 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.



#### < Software Screen >



#### **BELSORP-mini (Measurement System)**

Volumetric gas adsorption method Measuring principle N<sub>a</sub> and other non-corrosive gases Adsorbate gas Measurement port High precision mode : 1 port Standard mode : 2 ports

Multi sample mode : 3 ports

Specific surface area 0.01 m<sup>2</sup>/g and above (N<sub>a</sub>, depending on sample density)

0.35 - 200 nm (diameter) Pore size distribution Pressure measurement Range : 0 - 133 kPa

Dewar vessel

: ± 0.25% of F.S.(manufacturer's spec.) Accuracy

Resolution : 4 Pa Volume : 2 L

: 30 h Holding time

Approx. 2 cm3 (Option: 5 cm3) Sample cell Vacuum pump Volume rate displacement: 30L/min (Ultimate vacuum: 1Pa and below)

CPU and Motherboard chip (INTEL), 128MB main memory, Computer (Option) - essential spec. 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

Adsorption / desorption isotherm Analysis program

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)

He, N<sub>a</sub>: 0.5 - 1.5bar (1/8 "Swagelok joint) Utility

110mm 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 RT - 500°C Temp. range Temp. accuracy ±5°C

Size and weight W387 x H560 x D322 mm, 19 kg Utility N<sub>2</sub>: 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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