

From Material Evaluation (Specific Surface Area and Pore Size Distribution) to Gas and Vapor Separation Performance Evaluation!

With BELSORP-maxII, it is possible to evaluate the specific surface area and pore size distribution of various functional materials, as well as the adsorption amount and adsorption rate of various gases and vapors. A new lineup of high-temperature vapor adsorption measurement and high-pressure gas adsorption measurement specifications have now been added to BELSORP-maxII, enabling not only material characterization but also gas and vapor adsorption measurements at high temperatures and high pressures.

High Accuracy Gas / Vapor Adsorption Amount Measurement Instrument **BELSORP®-maxII**

- Measurement range: Specific surface area = 0.01 m²/g or more (N₂), 0.0005 m²/g or more (Kr)
Pore size distribution = 0.35 to 500 nm (diameter)
- Achieves even higher throughput evaluations with simultaneous measurement of three specimens at extremely low pressure and a maximum of four specimens.
- Significantly reduced measurement time (valve-activated control and GDO).
- Enables high-precision measurement with low sample volume by way of our Advanced Free Space Measurement method (AFSM™).
- Fully automatic measurement (optional) is possible from pretreatment to adsorption isotherm measurement.



NEW

Specifications of High Temperature Vapor Adsorption Amount Measurement

BELSORP®-maxII-HV

- The functions of BELSORP-maxII enable evaluation of gas and vapor (water vapors and VOC) adsorption up to an adsorption temperature of 70° C (depending on the adsorbate).
 - Dedicated analysis software BELMaster Ver. 7 enables the evaluation of not only BET and pore size distribution but also adsorption rates.
- Applications: Cement, concrete, building materials, desiccant air-conditioning, low-temperature exhaust heat utilization, batteries**

Specifications of High Pressure Gas Adsorption Amount Measurement

BELSORP®-maxII-HP

- The functions of BELSORP-maxII enable the adsorption measurement of high pressure gas (up to a maximum of 1 MPa) up to an adsorption temperature of 70° C.
 - Dedicated analysis software BELMaster Ver. 7 enables the evaluation of not only BET and pore size distribution but also adsorption rates.
- Applications: CO₂ reduction, energy storage (CH₄, MCH, H₂), and air separation, etc.**

NEW

		BELSORP-maxII	BELSORP-maxII-HV	BELSORP-maxII-HP
Pressure gauge	1MPa	—	—	1 unit
	133kPa	6 units	6 units	5 units
	1.33kPa	4 units max	4 units	3 units
	13.3Pa	3 units max	—	2 units
Air thermostatic chamber		50°C	80°C	50°C
Measurement range	N ₂ @77K	P/P ₀ =1E-8~0.997	P/P ₀ =1E-6~0.997	P/P ₀ =1E-8~0.997
	High pressure Adsorption	—	—	~950kPa
	H ₂ O	P/P ₀ =0.95@40°C	P/P ₀ =0.95@70°C	P/P ₀ =0.95@40°C

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