



**BET, Automatic specific surface area/  
pore size distribution measurement**



**Instrument Details**

**Make:** MicrotracBEL, Japan.

**Model:** BELSORP-max

**Specification:**

**Measuring principle:** Volumetric gas adsorption method+ Advanced Free Space Measurement (AFSM).

**Adsorptive:** N<sub>2</sub>, Ar, Kr, NH<sub>3</sub>, CO<sub>2</sub>, H<sub>2</sub>, CO, O<sub>2</sub>, CH<sub>4</sub> and other non-corrosive gases such as H<sub>2</sub>O, MeOH, EtOH, C<sub>6</sub>H<sub>6</sub> and other non-corrosive vapor.

**Analysis port:** Standard mode (p/p<sub>0</sub>=10<sup>-4</sup> - 0.997) 3 ports.  
High accuracy mode (p/p<sub>0</sub>=10<sup>-4</sup> - 0.997) 2 ports.  
High accuracy mode (p/p<sub>0</sub>=10<sup>-8</sup> - 0.997) 1 port (OP : 2 ports).

**Specific surface area:** 0.01m<sup>2</sup>/g and above (N<sub>2</sub>/77K).

**Pore size distribution:** 0.32 - 500 nm in pore diameter.

**Degassing** RT-300 °C

**Temperature:**

The BELSORP-max is designed for wide range adsorption isotherm for specific surface area and pore size distribution analysis. It can measure adsorption isotherms from relative pressure as low as 1 x10<sup>-8</sup> (N<sub>2</sub> at 77K) using a 13.3Pa pressure transducer. Also AFSM, the new method for free space measurement which is applied and adsorption isotherm can be measured with high accuracy. Chemisorption option enables unattended chemisorption measurement from pretreatment with step programs.

**User Instructions**

1. Provide samples in form of powder/solid, Minimum amount required 20-30 mg.

**Contact us**

**Faculty in charge:** Dr. Mahaveer Kurkuri

**Email:** mahaveer.kurkuri@jainuniversity.ac.in

**Contact number:** +91 9449293499