



METAL DISPERSION RATE ANALYZER

## BELMETAL 3

## METAL DISPERSION ANALYSIS

Metal dispersion rate is one of the important factors to determine the performance of metal supported catalyst. The BELMETAL series instruments are specialized in measuring metal dispersion rate. BELMETAL 3 is designed for pulse chemisorption measurement and it provides the metal dispersion, surface area, and particle size of metal supported on catalysts.

As this system can pretreat and measure 3 samples simultaneously, it is useful for quality control. Just setting the measurement conditions, the measurement are carried out automatically from pretreatment and pulse chemisorption measurement. The chemisorption measurement such as ammonia and H<sub>2</sub>S, is available with the corrosion resistant option.

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## TECHNICAL DATA

<b>Measuring principle</b>	Pulse injection method by dynamic flow method
<b>Detector</b>	Semi-diffusing four-element thermal conductivity detector (TCD)
<b>Measurement/ Pretreatment Port</b>	3 ports
<b>Dosing gas</b>	Carrier gas: 1 port Pretreatment gas: 3 ports, OP: 4 ports Pulse gas: 1 port, OP: 2 ports
<b>Pulse loop</b>	1 OP: 2
<b>Pulse loop volume</b>	0.5cc, OP: 1.0 cc
<b>Measurement electric furnace</b>	Temperature control range: 50~1200°C Temperature ramp rate: 70°C / min (50~500°C), 30°C / min (500~800°C) Quick cooling: 30 min (400 -> 50 °C)
<b>Dimensions (W x H x D)</b>	600 x 700 x 720 mm
<b>Weight</b>	106 kg
<b>Utility</b>	Gas: Carrier / pretreatment / pulse: 0.1±0.02 Mpa (Gauge), 1/8" Swagelok connection, valve drive gas: 0.45-0.55 Mpa (Gauge), 1/8" Swagelok connection

<b>Power</b>	Main unit AC 100-120 V / 1500 W, 50 / 60 Hz
<b>CE certified</b>	no
<b>Recommended Monitor</b>	Full HD monitors

This product is available with a manufacturer's declaration.

[www.microtrac.com/bel-metal-3](http://www.microtrac.com/bel-metal-3)