



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 H₂S, is available with the corrosion resistant option.

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TECHNICAL DATA

Measuring principle	Pulse injection method by dynamic flow method
Detector	Semi-diffusing four-element thermal conductivity detector (TCD)
Measurement/ Pretreatment Port	3 ports
Dosing gas	Carrier gas: 1 port Pretreatment gas: 3 ports, OP: 4 ports Pulse gas: 1 port, OP: 2 ports
Pulse loop	1 OP: 2
Pulse loop volume	0.5cc, OP: 1.0 cc
Measurement electric furnace	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)
Dimensions (W x H x D)	600 x 700 x 720 mm
Weight	106 kg
Utility	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

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

This product is available with a manufacturer's declaration.

www.microtrac.com/bel-metal-3