# **RBG 2000**







The RBG system disperses non-cohesive powders, e.g., mineral dusts, active pharmaceutical ingredients, pollen, etc., within the size range of < 100  $\mu$ m and with a fine fraction of < 100 nm. Monolithic solid materials, e.g., blackboard chalk, are finely dispersed with optimal dosing constancy. The feedstock reservoirs of RBG 2000 are longer (fill level= 180 mm) than the feedstock reservoirs of RBG 1000. Also a reservoir with a bigger diameter is available. Thus, the dosing time with the same mass flow can be extended by more than a factor of 3. Mass flows of between approx. 200 mg/h and 560 g/h are dispersed with optimal dosing constancy.

Optional: Pressure-resistant up to 3 bar

### **BENEFITS**

- Optimal short-term and long-term dosing constancy
- Double the dosing time in comparison with the RBG 1000
- Disperses virtually any non-cohesive dusts
- Easy to switch out different solid material reservoirs and dispersion covers
- Easy to determine and adjust the mass flow
- Able to adjust higher mass flows than the RGB 1000
- Pulse mode
- Easy to clean
- · Quick and easy to operate
- · Reliable function
- Low maintenance
- Reduces your operating expenses

#### **APPLICATIONS**

- Filter industry
  - Determination of fractional separation efficiency
  - Determination of total separation efficiency
  - Long-term dusting
  - Filter media and assembled filters
  - Dust filters
- Calibrating particle measurement devices
- Flow visualization
- · Inhalation experiments
- Tracer particles for LDV, PIV, etc.

#### **MODEL VARIATIONS**

... model available in additional variations



## **DATASHEET**

Particle size range	$0.1-100~\mu\mathrm{m}$	Maximum particle number concentration	Ca. 10 <sup>7</sup> particles/cm <sup>3</sup>
Volume flow	40 – 80 Nl/min	Mass flow (particles)	1-560 g/h (with an assumed compacted density of $1$ g/cm <sup>3</sup> )
Filling height	180 mm	Filling quantity	36 g (reservoir $\emptyset$ = 16 mm), 56 g (reservoir $\emptyset$ = 20 mm), 110 g (reservoir $\emptyset$ = 28 mm), 144 g (reservoir $\emptyset$ = 32 mm)
Power supply	115 – 230 V, 50/60 Hz	Particle material	Non-cohesive powders and bulks
Dosing time	Several hours nonstop	Pre-pressure	4 – 8 bar
Carrier/dispersion gas	Random (generally air)	Maximum counter pressure	0.2 barg
Compressed air connection	Quick coupling	Feed rate	5 – 700 mm/h
Reservoir inner diameter	16, 20, 28, 32 mm	Aerosol outlet connection	Dispersion cover type A: $\varnothing_{\text{inside}} = 5 \text{ mm},  \varnothing_{\text{outside}} = 8 \text{ mm};  \text{Dispersion cover type D:} \\ \varnothing_{\text{inside}} = 5 \text{ mm},  \varnothing_{\text{outside}} = 8 \text{ mm}$
Dispergierdeckel	Type A, Type D	Dimensions	1.160 • 530 • 500 mm (H • B • T)
Weight	Approx. 40 kg		