

RBG 2000



The RBG system disperses non-cohesive powders, e.g., mineral dusts, active pharmaceutical ingredients, pollen, etc., within the size range of $< 100 \mu\text{m}$ and with a fine fraction of $< 100 \text{ nm}$. 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 RBG 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 μm |
| Maximum particle number concentration | Ca. 10^7 particles/ cm^3 |
| Volume flow | 40 – 80 NL/min |
| Mass flow (particles) | 1 – 560 g/h (with an assumed compacted density of $1 \text{ g}/\text{cm}^3$) |
| Filling height | 180 mm |
| Filling quantity | 36 g (reservoir $\varnothing = 16 \text{ mm}$), 56 g (reservoir $\varnothing = 20 \text{ mm}$), 110 g (reservoir $\varnothing = 28 \text{ mm}$), 144 g (reservoir $\varnothing = 32 \text{ mm}$) |
| 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: $\varnothing_{\text{inside}} = 5 \text{ mm}$, $\varnothing_{\text{outside}} = 8 \text{ mm}$; Dispersion cover type D: $\varnothing_{\text{inside}} = 5 \text{ mm}$, $\varnothing_{\text{outside}} = 8 \text{ mm}$ |
| Dispersion lid | Type A, Type D |
| Dimensions | 1.160 • 530 • 500 mm (H • B • T) |
| Weight | Approx. 40 kg |