# 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

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|---|---|
| Particle size range | 0.1 – 100 $\mu$m |
| 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 g/$cm^3$) |
| Filling height | 180 mm |
| Filling quantity | 36 g (reservoir Ø = 16 mm), 56 g (reservoir Ø = 20 mm), 110 g (reservoir Ø = 28 mm), 144 g (reservoir Ø = 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: $Ø_{inside}$= 5 mm, $Ø_{outside}$ = 8 mm; Dispersion cover type D: $Ø_{inside}$= 5 mm, $Ø_{outside}$ = 8 mm |
| Dispersion lid | Type A, Type D |
| Dimensions | 1.160 • 530 • 500 mm (H • B • T) |
| Weight | Approx. 40 kg |