

RBG 1000



Low-concentration solid particle aerosols produced from powders are required for many research, development, and quality assurance applications and for calibrating particle measurement devices.

For more than 25 years, the RBG system has been used worldwide with great success for the reliable dispersion of non-cohesive powders such as mineral dusts, active pharmaceutical ingredients, pollen, etc., in size range of $< 100 \mu\text{m}$ and with a fine fraction of $< 100 \text{ nm}$. Also, monolithic solid materials such as blackboard chalk are finely dispersed with the highest dosing constancy.

The unique advantage of this dosing and dispersion system is that in the case of the RBG 1000, mass flows ranging from approx. 10 mg/h up to approx. 430 g/h are dispersed with the highest level of dosing constancy.

Optional:

- Pressure-resistant up to 3 bar
- Low-pressure operation from 300 mbar (absolute pressure), operation with nitrogen

BENEFITS

- Highest short-term and long-term dosing constancy
- Disperses virtually all non-cohesive dusts
- Easy exchange of different solid material reservoirs and dispersing covers
- Easy determination and adjustment of the mass flow
- Pulse mode
- Device easy to clean
- Quick and easy to operate
- Reliable operation
- Little maintenance required
- Reduces your operating expenses

CASE STUDIES

- Filter industry:
 - Determination of fractional separation efficiency
 - Determination of total separation efficiency
 - Long-term dusting
 - Filter media and ready-made filters
 - Dust removal filters
- Calibration of particle measurement devices
- Flow visualization
- Inhalation tests
- Tracer particles for LDA, PIV, etc.

MODEL VARIATIONS

model available in additional variations

... more variations available

... more variations available

DATASHEET

Volume flow	0.5 – 5.0 m ³ /h
Weight	Approx. 19 kg
Particle material	Non-cohesive powders and bulks
Dosing time	Several hours nonstop
Maximum particle number concentration	Ca. 10 ⁷ particles/cm ³
Mass flow (particles)	0.04 – 430 g/h (with an assumed compacted density of 1 g/cm ³)
Particle size range	0.1 – 100 μm
Carrier/dispersion gas	Random (generally air)
Pre-pressure	4 – 8 bar
Maximum counter pressure	0.2 barg
Feed rate	5 – 700 mm/h
Compressed air connection	Quick coupling
Reservoir inner diameter	7, 10, 14, 20, 28 mm
Filling height	70 mm
Dispersion cover	Type A, type B, type C, type D

additional parameter on our website ...



Further information:
<https://www.palas.de/product/rbg1000>