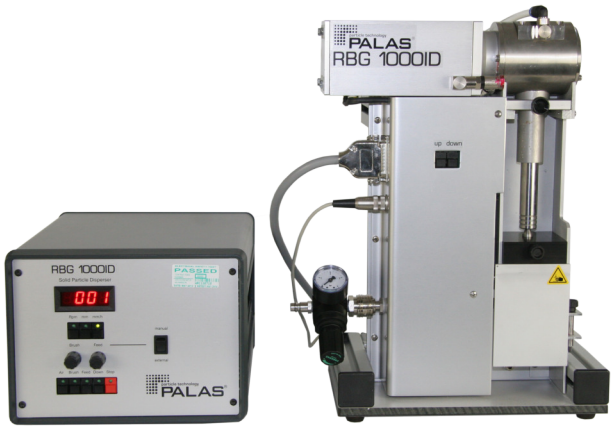
RBG 1000 ID



The dispersion unit and the electrical control unit can be set up up to 2 m apart from each other. The return speed for container changeover is optimized on the RBG 1000 I and is faster than on the other RBG variants. It is only approx. 1 minute.

Optional operation with low pressure from 300 mbar absolute is possible.

The feedstock reservoirs with a 7, 10, 14, or 20 mm diameter are pressure-resistant.

For operation with low pressure, special pressure-resistant feedstock reservoirs are needed. Their piston is strongly connected to the feeding unit by a claw. This enables an undisturbed operation with low pressure.

The 28 mm diameter feedstock reservoir is not pressure resistant, but can be used in the RBG 1000 ID when dosing in atmospheric conditions.

In the RBG 1000 D pressure-resistant version, compressed air is used as the disgerger gas. Operation with nitrogen or other inert gases is not permitted.

OPERATION PRINCIPLE

Benefits

- Pressure resistant up to 3 barg overpressure
- Optional: negative pressure operation from 300 mbar absolute, remote control or computer control
- Highest short-term and long-term dosing consistency
- Disperses practically all non-cohesive dusts
- Easy exchange of different solids containers and dispersion lids
- Easy determination and adjustment of mass flow
- Pulse operation
- Easy cleaning of the unit
- Quick and easy operation
- Reliable function
- Low maintenance
- Reduces your operating costs

DATASHEET

Particle size range	0.1 – 100 μm
Maximum particle number concentration	Ca. 10^7 particles/cm^3
Volume flow	0.5 – 5.0 m^3/h
Mass flow (particles)	0.04 – 430 g/h (with an assumed compacted density of 1 g/cm^3)
Filling height	70 mm
Filling quantity	2.7 g (reservoir Ø = 7 mm), 5.5 g (reservoir Ø = 10 mm), 10.8 g (reservoir Ø = 14 mm), 22 g (reservoir Ø = 20 mm), 43 g (reservoir Ø = 28 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	Air
Maximum counter pressure	0.2 barg
Compressed air connection	Quick coupling
Feed rate	5 – 700 mm/h
Reservoir inner diameter	7, 10, 14, 20, 28 mm
Aerosol outlet connection	Dispersion cover type A: $Ø_{inside}$= 5 mm, $Ø_{outside}$ = 8 mmDispersion cover type B: $Ø_{inside}$= 3.6 mm, $Ø_{outside}$ = 6 mmDispersion cover type: $Ø_{inside}$= 2.5 mm, $Ø_{outside}$ = 6 mm
Dispersion lid	Type A, type B, type C, type D
Dimensions	Dispersion unit: 430 • 300 • 180 mm (H • W • D)
Weight	Approx. 19 kg

Applications

- All applications pressure-resistant up to 3 barg overpressure
- Dispersion of radioactive substances
- Dispersion of pharmaceutical powders
- Filter industry:
  - Determination of fractional separation efficiency
  - Determination of total separation efficiency
  - Long-term dusting
  - Filter media and ready-made filters
  - Dust removal filters
  - Vacuum cleaners and vacuum cleaner filters
  - Car interior filters
  - Engine air filters
- Calibration of particle measurement devices
- Flow visualization
- Inhalation tests
- Tracer particles for LDA, PIV, etc.
- Coating of surfaces

Mehr Informationen:
https://www.palas.de/en/product/rbg1000id