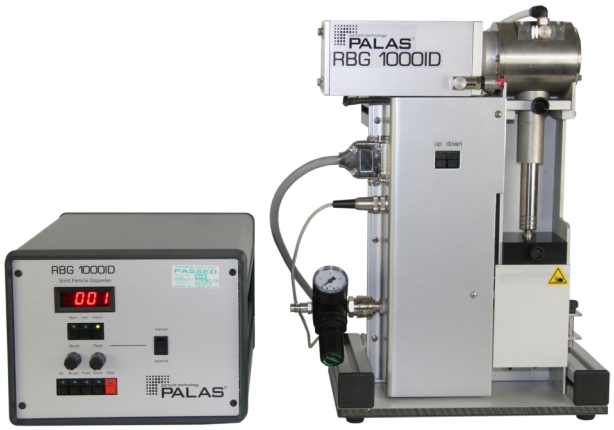
RBG 1000 IGD



This device disperses particles at positive pressure values of up to 3 bar. 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.

The RBG 1000 IGD has a higher gear ratio. This means that at very low feed rates (< 10 mm/h), the feed rate can be better adjusted by means of a potentiometer. The maximum feed rate is 300 mm/h.

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

The feedstock reservoir with a diameter of 28 mm is not pressure-resistant but can be used with the RBG 1000 IGD under atmospheric conditions.

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

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

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

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 – 185 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	1 – 300 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 mm; Dispersion cover type B: $Ø_{inside}$= 3,6 mm, $Ø_{outside}$ = 6 mm; Dispersion cover type: $Ø_{inside}$= 2,5 mm, $Ø_{outside}$ = 6 mm
Dispersion cover	Type A, type B, type C, type D	Dimensions	Dispersion unit: 1,800 • 430 • 300 mm (H • W • D)
Weight	Approx. 19 kg		