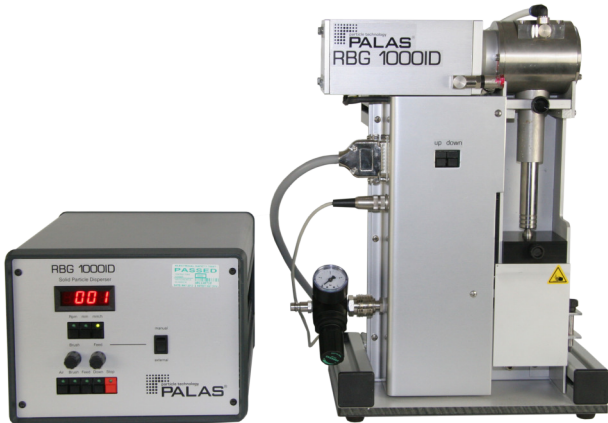


RBG 1000 SD



This device disperses particles at positive pressure values of up to 3 bar and can also use nitrogen, in addition to air, as the dispersing gas.

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

The 7-, 10-, 14- or 20-mm feed stock reservoirs are pressure-resistant.

For operation with low pressure special pressure-resistant feed stock reservoirs are needed. Their piston is strongly connected to the feeding unit by a claw. This enables an undisturbed operation with low pressure. Old RBG models can be upgraded with this function by Palas®.

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

OPERATION PRINCIPLE

BENEFITS

- Pressure-resistant up to 3 barg overpressure
- Optional: Low pressure operation from 300 mbar absolute
- Nitrogen as dispersing gas
- Optional: Remote control or computer-controlled

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 $1 \text{ g}/\text{cm}^3$)
Filling height	70 mm
Filling quantity	2.7 g (reservoir $\varnothing = 7 \text{ mm}$), 5.5 g (reservoir $\varnothing = 10 \text{ mm}$), 10.8 g (reservoir $\varnothing = 14 \text{ mm}$), 22 g (reservoir $\varnothing = 20 \text{ mm}$), 43 g (reservoir $\varnothing = 28 \text{ mm}$)
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	Air, nitrogen
Maximum counter pressure	0.2 barg
Compressed air connection	Quick coupling
Feed rate	5 – 700 mm/h
Reservoir inner diameter	7, 10, 14, 20 mm
Aerosol outlet connection	Dispersion cover type A: $\varnothing_{\text{inside}} = 5 \text{ mm}$, $\varnothing_{\text{outside}} = 8 \text{ mm}$ Dispersion cover type B: $\varnothing_{\text{inside}} = 3.6 \text{ mm}$, $\varnothing_{\text{outside}} = 6 \text{ mm}$ Dispersion cover type C: $\varnothing_{\text{inside}} = 2.5 \text{ mm}$, $\varnothing_{\text{outside}} = 6 \text{ mm}$
Dispersion cover	Type A, type B, type C, type D
Dimensions	465 • 320 • 200 mm (H • W • D)
Weight	Approx. 19 kg

APPLICATIONS

- All applications pressure resistant up to 3 bar overpressure
- Testing of compressed air filters
- 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/product/rbg1000sd>