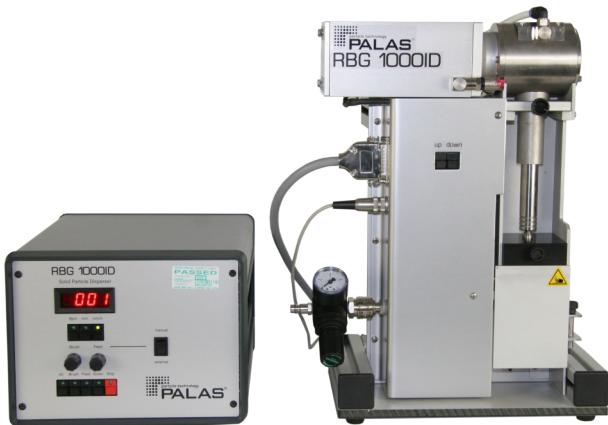


RBG 1000 SD



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.

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

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

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 $\varnothing = 7$ mm), 5.5 g (reservoir $\varnothing = 10$ mm), 10.8 g (reservoir $\varnothing = 14$ mm), 22 g (reservoir $\varnothing = 20$ mm), 43 g (reservoir $\varnothing = 28$ 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, 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: $\varnothing_{\text{inside}} = 5$ mm, $\varnothing_{\text{outside}} = 8$ mm Dispersion cover type B: $\varnothing_{\text{inside}} = 3.6$ mm, $\varnothing_{\text{outside}} = 6$ mm Dispersion cover type: $\varnothing_{\text{inside}} = 2.5$ mm, $\varnothing_{\text{outside}} = 6$ mm |
| Dispersion cover | Type A, type B, type C, type D | Dimensions | 465 • 320 • 200 mm (H • W • D) |
| Weight | Approx. 19 kg | | |