PLG 1000



The PLG 1000 is a cold atomizer intended for use in air-conditioned rooms. If the room cannot be air-conditioned, a heatable device version should be used, e.g., PLG 2000 H.

Operation principle

Aerosol generator for the defined atomization of oils and use on filter test rigs

The liquid to be dispersed is filled in the reservoir. The nozzle system developed by Palas® is immersed in the liquid. This nozzle system is based on the Laskin principle and guarantees extremely precise dosing constancy with uniform particle size. The mass flow is adjusted using the volume flow through the nozzle. A pressure regulator and a manometer on the device control the volume flow.

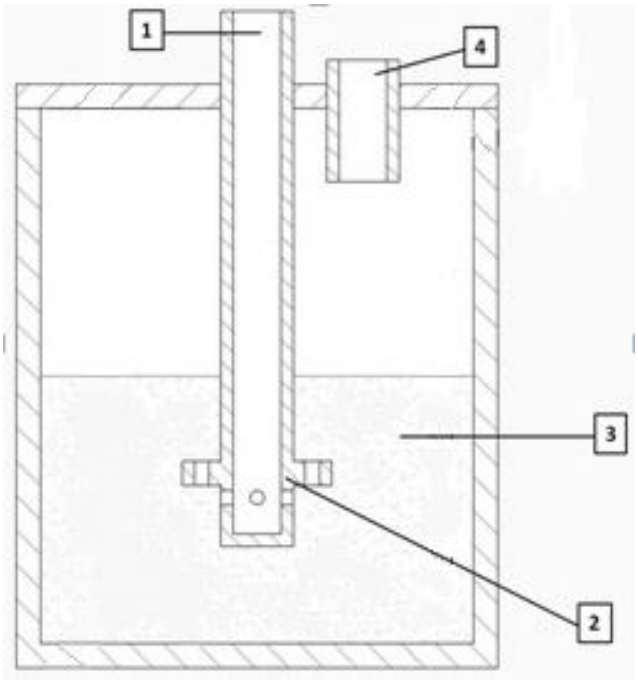


Fig. 1: Functional principle of the PLG series

1) Compressed air

2) Special Laskin nozzle

3) Aerosol substance

4) Aerosol outlet

This nozzle system is based on the Laskin principle and guarantees extremely precise dosing constancy with uniform particle size (see Fig. 3).

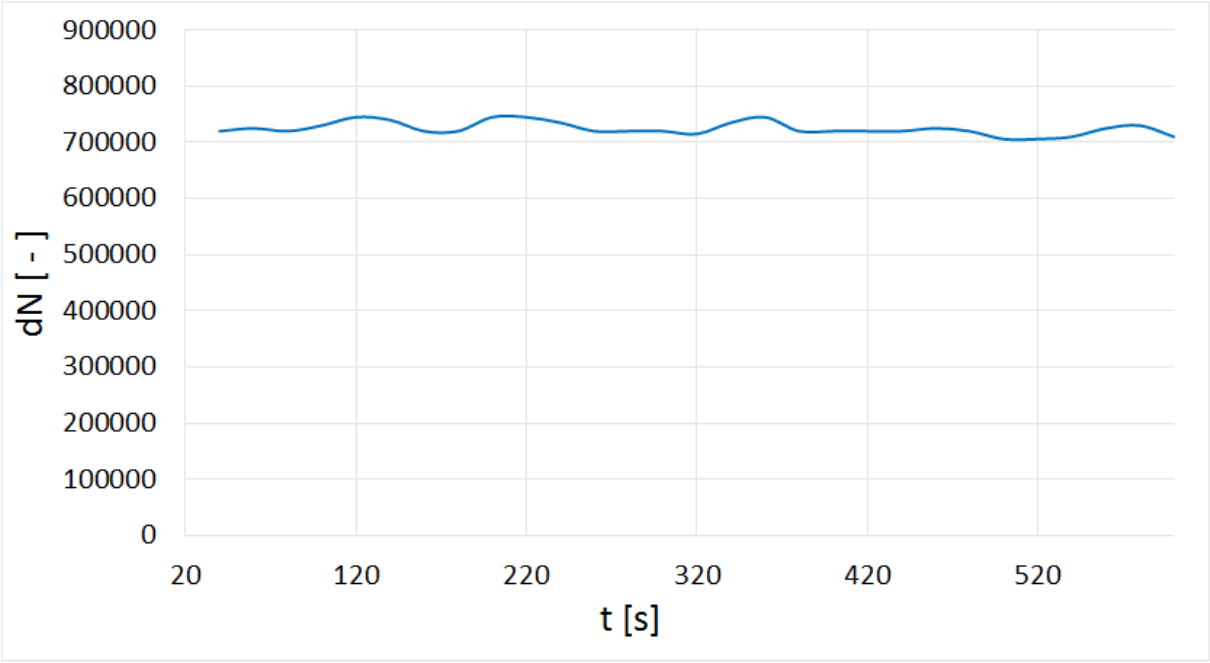


Fig. 2: Highly constant particle concentration over time at a resolution of 30 s

The PLG 1000 generates mass flows of up to approx. 5 g/h max. (depending on the aerosol substance in use).

Benefits

- Excellent short-term and long-term dosing constancy
- Best reproducibility with respect to particle size distribution and particle concentration
- Large mass volume range (very low and very high)
- Robust design (optionally resistant against chemically aggressive liquids)
- Compact and light
- Easy to operate, proven in industrial applications
- Reliable function
- Low maintenance

DATASHEET

Volume flow	1 – 23 l/min
Mass flow (particles)	2.5 g/h
Filling quantity	70 ml
Aerosol outlet connection	$Ø_{innen}$ = 11 mm, $Ø_{außen}$ = 14 mm
Mean particle diameter (number)	0.4 μm (DEHS)
Dimensions	280 • 130 • 100 mm (H • W • D)
Weight	Approx. 2 kg

Applications

- Filter industry/oil separators
  - Determination of separation efficiency
  - Determination of fractional separation efficiency
  - Loading test
  - HEPA/ULPA filters
- Test of cooling lubricant separators
- Comparison of particle measurement devices
- Tracer particles
- Flow visualization

Mehr Informationen:
https://www.palas.de/en/product/plg1000