

# PLG 2300

Aerosol generator for the defined atomization of oils with very high mass flows of up to 300 g/h



## Model Variations



### PLG 2300 S

Heated version of the PLG 2300 with automatic refill unit

## Description

The PLG 2300 uses a nozzle system developed by Palas®. Depending on the application, a special nozzle that is able to be heated to 80°C is used in order to enable quick and reproducible adjustment to the desired particle size distribution and concentration. The heating of the oil changes the number concentration, as well as particle size distribution, of the material to be dispersed due to a change in the viscosity. This additionally enables materials to be dispersed which are unable to be nebulized at cooler temperatures due to their viscosity. The PLG 2300 generates very high mass flows of up to 300 g/h max. (depending on the aerosol substance in use). **Startup** The liquid to be dispersed is simply 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. The volume flow is controlled by a pressure regulator and a manometer on the device.

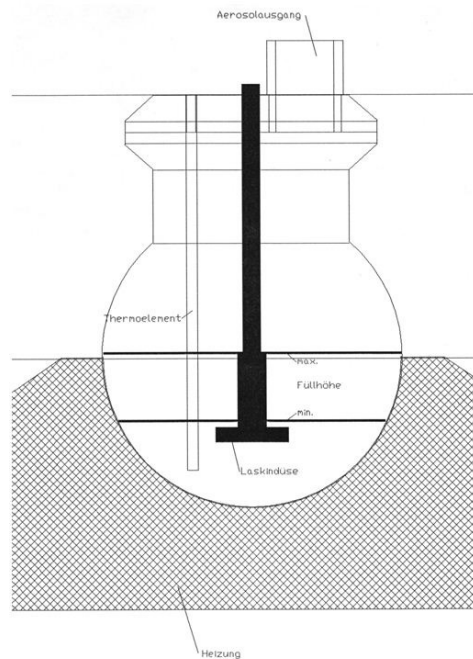


Fig. 1: Schematic diagram of the PLG 2300 aerosol generator

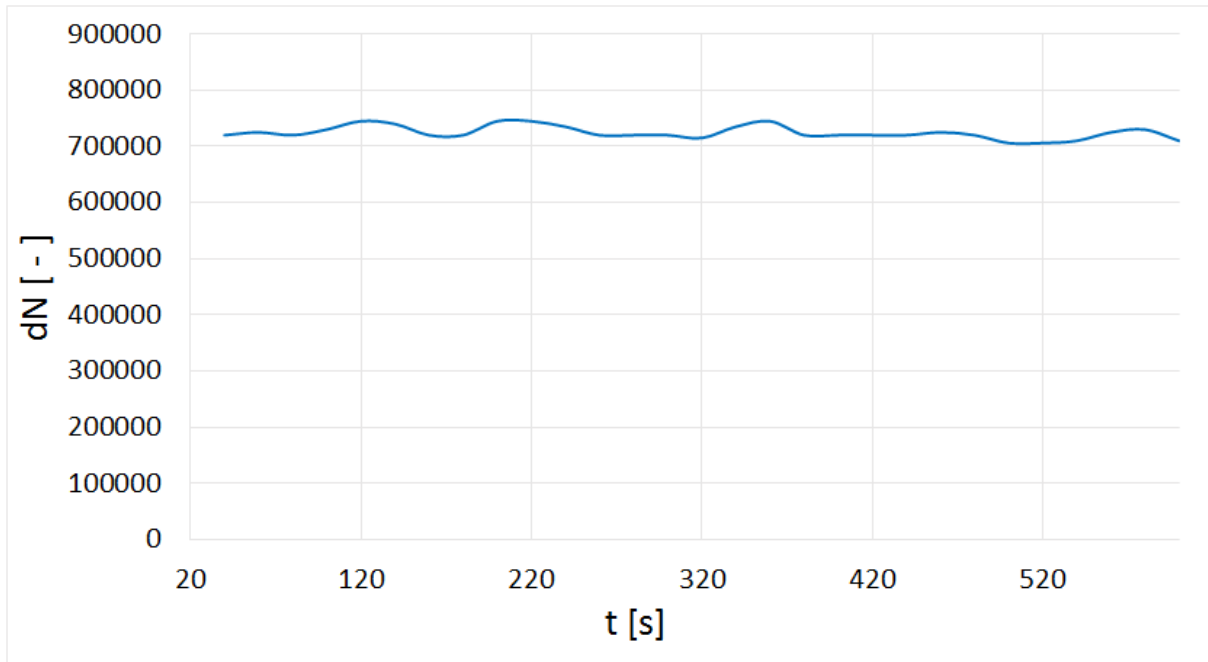


Fig. 2: Highly constant particle concentration over time at a resolution of 30 s

## Benefits

- Very high mass flow of up to 300 g/h
- Excellent short-term and long-term dosing constancy
- Heatable
- Best reproducibility with respect to particle size distribution and particle concentration
- Large mass volume range (very low and very high)
- Long dosing time over several days with automatic refilling (optional)
- Robust design (optionally resistant against chemically aggressive liquids)
- Compact and light
- Easy to operate, proven in industrial applications

## Datasheet

Parameter	Description
<b>Volume flow</b>	15 - 75 l/min
<b>Power supply</b>	115 - 230 V, 50 - 60 Hz
<b>Dimensions</b>	410 • 350 • 380 mm
<b>Weight</b>	approx. 18 kg
<b>Mass flow (particles)</b>	300 g/h (white oil)
<b>Aerosol outlet connection</b>	Ø <sub>inside</sub> = 60 mm, Ø <sub>outside</sub> = 75 mm
<b>Special features</b>	Heatable up to 80°C
<b>Mean particle diameter (number)</b>	1.5 µm (DEHS)
<b>Filling quantity</b>	1 l

## Applications

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

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