LDD 100

The dilution of large droplets is significant when measuring highly concentrated droplet aerosols. Since large droplets are challenging to dilute, standard systems only work up to a size of 1 - 2 μm. The dilution system LDD 100 (dilution factor 100) is the first system to dilute almost loss-free large droplets up to 10 μm

Model Variations

LDD 100 H
Heatable dilution system up to 150 °C for large droplets up to 10 μm

OPERATION PRINCIPLE

DEFINED DILUTION SYSTEM FOR LARGE DROPLETS UP TO 10 µM

The good dilution factor of large droplets was tested with monodisperse DEHS droplets (oil) of different sizes. The results for the sizes 5 µm and 7 µm are shown in Table 1.

Particle size	Number count without-dilution	Number count withdilu-tion	Dilution factor
5 µm	304322	3043	100.01
7 µm	236687	2370	99.87

Tabelle 2: Dilution of monodisperse DEHS droplets with LDD 100

Chart 1: Dilution of monodisperse DEHS droplets with LDD 100

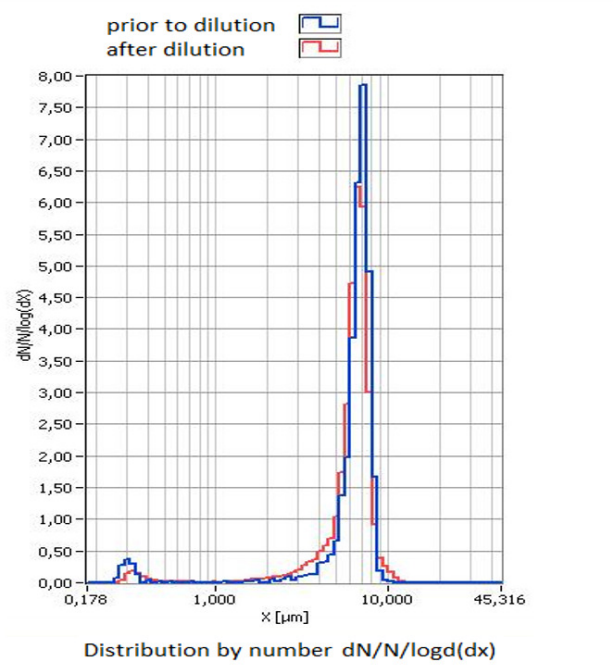

Fig. 1: Distribution of LDD 100 (7 µm)

Benefits

- Defined dilution of large droplets of factor 100
- Proven dilution factor 100 for droplet sizes up to 7 μm
- Easy connection with Promo® and welas® digital aerosol spectrometers
- Internal pump for autonomous operations
- Resistant to pressure fluctuations of ± 200 mbar
- Simple handling
- Robust, durable, low maintenance
- Cost effective

APPLICATIONS

- Measurement of blow-by aerosols according to ISO 17536
- Dilution of compressed air
- Measurement of cooling lubricant aerosols

Mehr Informationen:
https://www.palas.de/product/ldd100