

# 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  $\mu\text{m}$ . The dilution system LDD 100 (dilution factor 100) is the first system to dilute almost loss-free large droplets up to 10  $\mu\text{m}$

## MODEL VARIATIONS



### LDD 100 H

Version heatable up to 150 °C for large droplets up to 10  $\mu\text{m}$

## 工作原理

### DEFINED DILUTION SYSTEM FOR LARGE DROPLETS UP TO 10 $\mu\text{m}$

The good dilution factor of large droplets was tested with monodisperse DEHS droplets (oil) of different sizes. The results for the sizes 5  $\mu\text{m}$  and 7  $\mu\text{m}$  are shown in Table 1.

Particle size	Number count without dilution	Number count with dilution	Dilution factor
5 $\mu\text{m}$	304322	3043	100.01
7 $\mu\text{m}$	236687	2370	99.87

Table 2: Dilution of monodisperse DEHS droplets with LDD 100

Chart 1: Dilution of monodisperse DEHS droplets with LDD 100

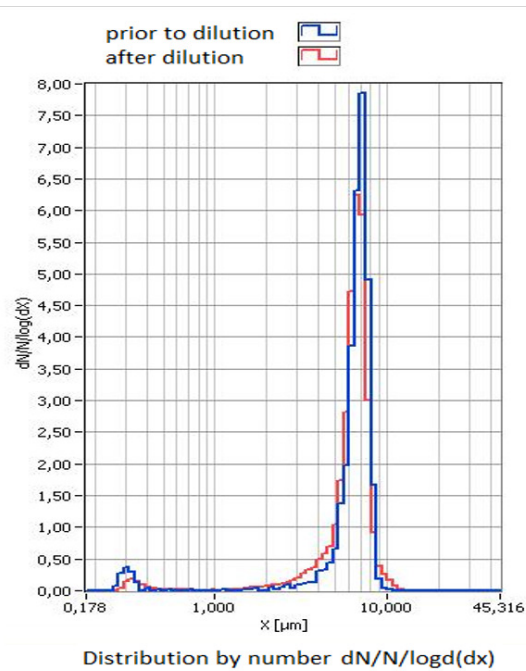


Fig. 1: Distribution of LDD 100 (7  $\mu\text{m}$ )

## BENEFITS

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

## 标准和证书

ISO 17536

## 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>