

# AGF 2.0



The AGF 2.0 is an aerosol generator for atomizing liquids and latex suspensions with a constant particle rate and defined particle spectrum.

The AGF 2.0 system comprises an adjustable binary nozzle to adjust the desired mass flow and a cyclone with a cut-off of  $2 \mu\text{m}$ . As a result, virtually no particles  $> 2 \mu\text{m}$  are generated.

## BENEFITS

- Exact adjustment of the operating parameters
- Number concentration ( $C_N$ ) can be varied by the factor of 10
- Particle size distribution remains virtually constant if  $C_N$  is modified
- Number distribution maximum is within the MPPS range
- Virtually no power losses
- Optimal concentration, no coagulation losses
- Resistant to numerous acids, bases, and solvents
- Robust design, stainless steel housing
- Easy to operate
- As opposed to the collision method, AGF 2.0 does not generate particles  $> 2 \mu\text{m}$  thanks to its cyclone.
- Because the AGF generates virtually no droplets  $> 2 \mu\text{m}$ , the consumption of materials is very low, thus ensuring a long dosing time.
- With the use of DEHS, the mean particle size is within the MPPS range for HEPA/ULPA filters

## APPLICATIONS

- Clean room technology
  - Acceptance tests and leak tests as per ISO 14644 and VDI 2083
  - Leak tests, fit testing
  - Recovery tests
- Filter testing, quality control
  - Filter cartridges
  - Car interior filters
  - Filter media, particulate air filters
  - Aerosol generation for MPPS determination of HEPA/ULPA filters
- Tracer particles
  - Inhalation experiments
  - Optical flow measurement procedures with positive pressure values of up to 10 bar (model version AGF 2.0 D)
  - LDV
- Calibration of counting particle measurement methods
  - Nebulization of latex suspensions  $< 1 \mu\text{m}$
- Smoke detector test

## MODEL VARIATIONS

... model available in additional variations

## DATASHEET

Volume flow	6 – 17 l/min
Mass flow (particles)	< 4 g/h (DEHS)
Filling quantity	300 ml
Particle material	DEHS, DOP, Emery 3004, paraffin oil, other non-resinous oils
Dosing time	> 24 h
Compressed air connection	Quick coupling
Aerosol outlet connection	$\varnothing_{\text{inside}} = 6 \text{ mm}$ , $\varnothing_{\text{outside}} = 8 \text{ mm}$
Mean particle diameter (number)	0.25 $\mu\text{m}$
Particle diameter (maximum)	2 $\mu\text{m}$
Dimensions	325 • 300 • 175 mm (H • W • D)
Weight	Approx. 9 kg

## NORMS AND CERTIFICATES

ISO 14644, VDI 2083