



Particle sizing by laser light scattering

Messgrößen

- Particle size and particle concentration

Prinzip

The measurement device is based on combined analysis of laser line-of-sight absorption and forward light scattering. The light scattered by the spray is collected by a Fourier lens that projects the resulting interference pattern at infinity on the sensor. A deconvolution of this interference pattern leads to a model-based droplet size distribution of the spray.

Anwendung

The system is optimal for hollow-cone sprays at atmospheric conditions. Multi-scattering in dense spray is a source of error, which can be corrected to a certain degree. Measurements can be performed under elevated pressure, but the windows may result in light multi-reflections as a source of error. The device can also be used in investigations of non-transparent particles (powder) or emulsions.

Kontakt

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