

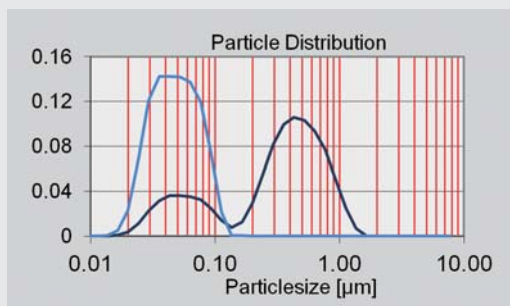
DS-1

Disper Sizer
Particle size distribution analyzer

EKO

www.eko.co.jp

- Acoustic attenuation spectroscopy (AcAS)
- Non-invasive and non-destructive
- Ab-initio method - no calibration



Beyond Accuracy.

DS-1

Disper Sizer
Particle size distribution analyzer

DS-1 is a powerful, reliable and easy to use particle size distribution analyzer which delivers reliable and reproducible results in concentrated, turbid, colored or viscous dispersions. Invasive sample preparation procedures are not necessary. DS-1 features non-invasive and non-destructive acoustic technology which is based on the viscous effect observed in dispersions. The resolution depends on the density difference between particles and solvent and on the volume concentration of the particles. The contributions of dust and other impurities can be neglected in most of the cases. Thus, field samples can be measured with ease.

Advantages:

- Optimal technology for dispersion analysis in a compact and robust unit
- User-friendly input and output interfaces ensure reproducible results and continuity
- High resolution measurements in concentrated, colored and turbid dispersions in all solvents
- Flow-through and batch modes ensure lab and plant applicability
- Stirring ensures studies in unstable samples and prevents sedimentation
- Field ESA, Rhometer and Titrator can be integrated and ensure automated process optimization through smart sensor technology

Application:

- Highly efficient product development through work at production concentration
- Improvement in recipe stability
- On- and off-line quality analysis and quality control
- Automated process control of reactors

	DS-1	
Measured Parameters	Lower Limit	Upper Limit
Particle size range	10 nm	5 μm *
Ultrasonic Attenuation	0.1 dB/cm	100 dB/cm
Frequency Range	1 MHz	100 MHz
Sample characteristic		
Volume	0.5 ml	-
Density difference	0.1 g/cm ³	-
Particle concentration	0.5 % v/v	50 % v/v*
Solvent	Aqueous and non-aqueous solvents	
Measurement Parameters		
Time per single measurement	2 min	