



Linkoptik Application Note #3

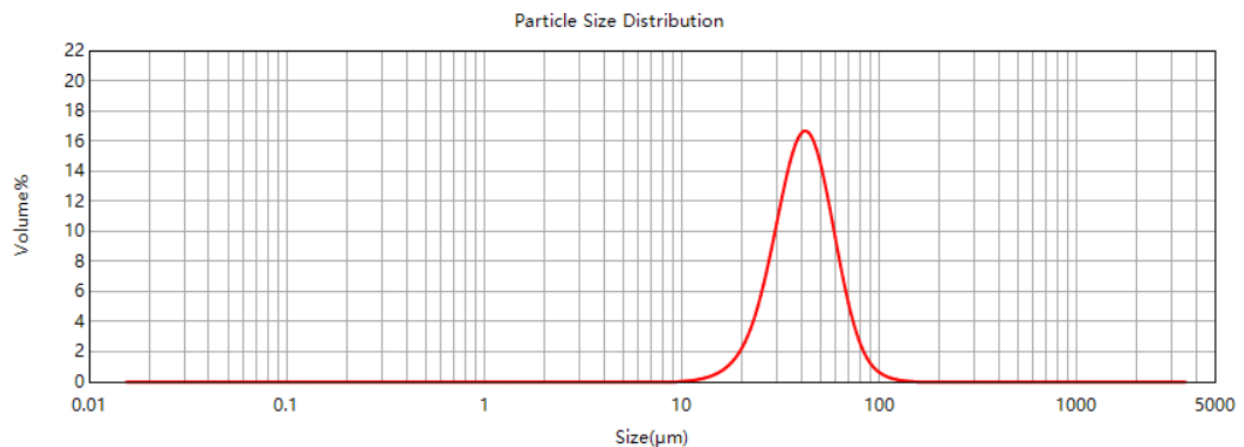
Glass Beads – Measurement Accuracy of the LT2200 Laser Diffraction Platform

A series of glass beads were run on the LT2200 and Hydrolink SE Wet Sample Dispersion Unit. Results were then compared against the expected values provided by the supplier to demonstrate system accuracy across a range of sizes.

Glass Bead #1

Analysis conditions:

Particle RI	Absorption	Dispersant	Dispersant RI	Obscuration	Pump
1.52	0.00	Water	1.33	8-15%	1800 RPM



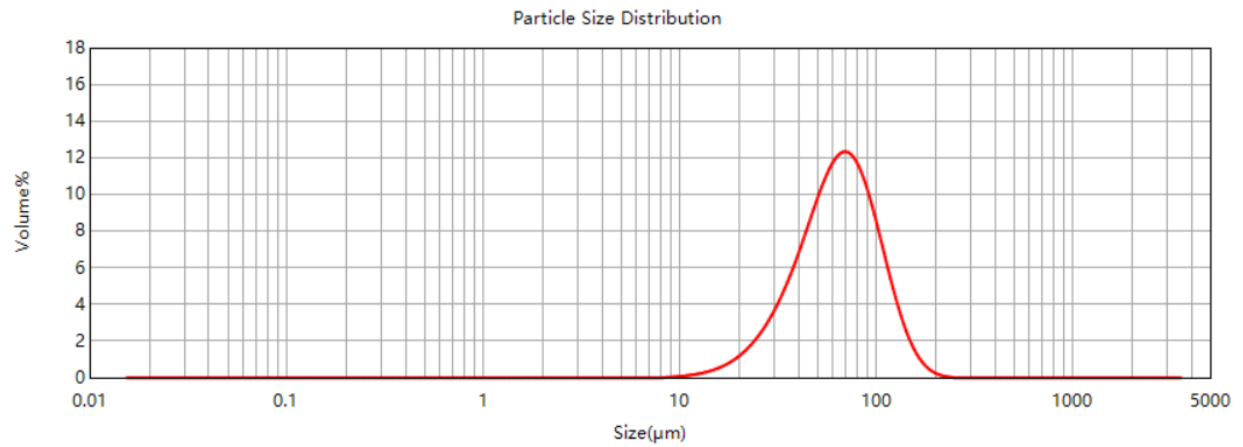
Measurement results:

	D10	D50	D90
Expected Results	25.80 +/- 0.90 μm	41.10 +/- 1.20 μm	63.30 +/- 2.00 μm
LT2200 Results	25.71 μm	41.28 μm	64.07 μm

Glass Bead #2

Analysis conditions:

Particle RI	Absorption	Dispersant	Dispersant RI	Obscuration	Pump
1.52	0.00	Water	1.33	8-15%	1800 RPM



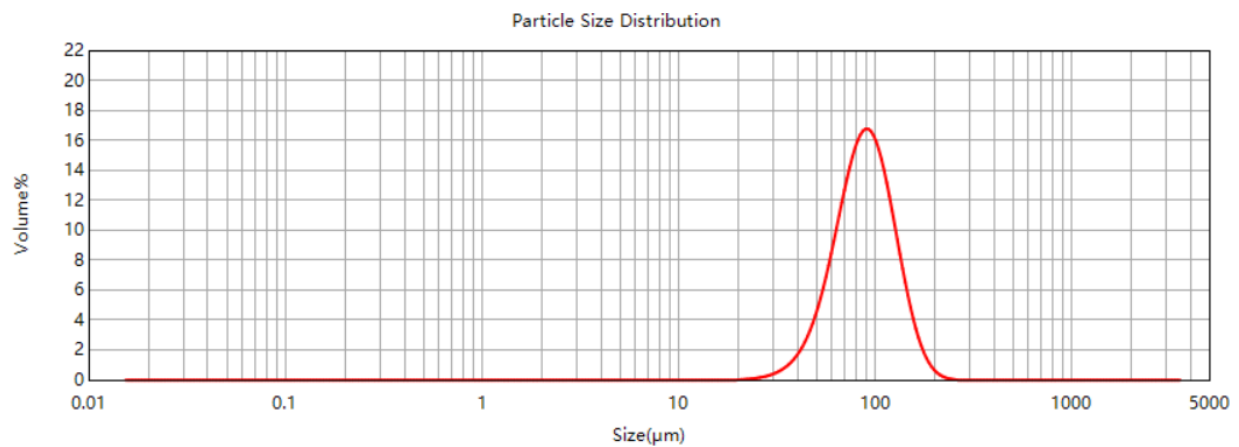
Measurement results:

	D10	D50	D90
Expected Results	33.00 +/- 1.20 μm	64.00 +/- 2.00 μm	110.80 +/- 3.40 μm
LT2200 Results	32.77 μm	63.99 μm	111.46 μm

Glass Bead 3

Analysis conditions:

Particle RI	Absorption	Dispersant	Dispersant RI	Obscuration	Pump
1.52	0.00	Water	1.33	8-15%	2000 RPM



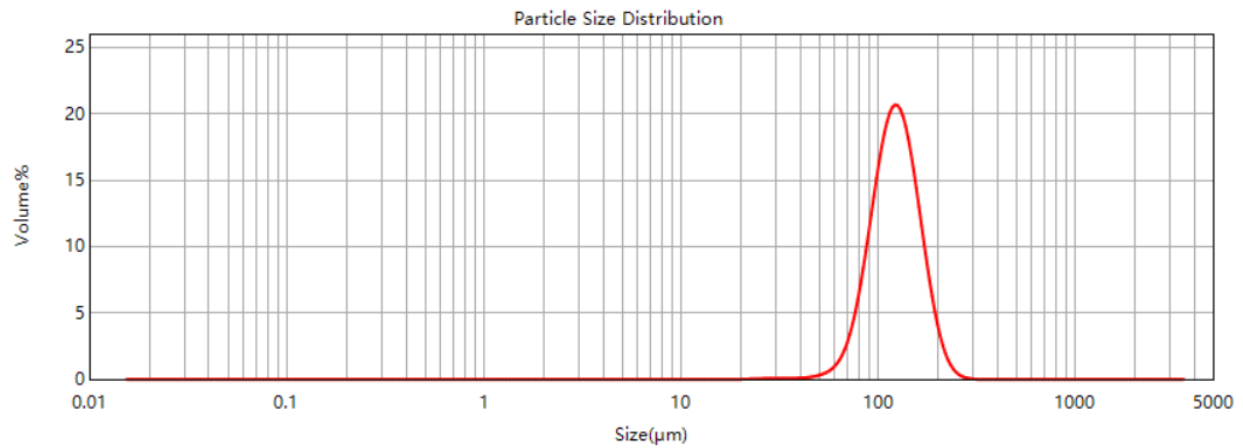
Measurement results:

	D10	D50	D90
Expected Results	55.60 +/- 2.00 μm	89.10 +/- 2.50 μm	134.80 +/- 4.10 μm
LT2200 Results	54.66 μm	87.83 μm	134.06 μm

Glass Bead 4

Analysis conditions:

Particle RI	Absorption	Dispersant	Dispersant RI	Obscuration	Pump
1.52	0.00	Water	1.33	8-15%	2000 RPM



Measurement results:

	D10	D50	D90
Expected Results	84.5 +/- 2.70 μm	121.2 +/- 3.10 μm	170.60 +/- 5.15 μm
LT2200 Results	84.69 μm	121.87 μm	172.51 μm

The LT2200 demonstrates particle size measurement accuracy across a range of sizes and distributions.