

## Specification for Micron Diamond Powder

9/2003

### DP – polycrystalline synthetic diamond, precision size range

DP size µm	Median (50% Value) µm	Median - Tolerance µm	Upper Limit (99% Value) µm max.
0 - 0.05	0.025	0.020 - 0.030	0.09
0 - 0.1	0.050	0.040 - 0.060	0.15
0 - 0.15	0.075	0.060 - 0.090	0.20
0 - 0.2	0.090	0.070 - 0.110	0.25
0 - 0.25	0.125	0.105 - 0.145	0.33
0 - 0.35	0.18	0.155 - 0.205	0.42
0 - 0.5	0.21	0.18 - 0.24	0.53
0.25 - 0.5	0.35	0.31 - 0.39	0.70
0.25 - 0.75	0.50	0.45 - 0.55	0.90
0.5 - 1	0.71	0.65 - 0.77	1.30
0.75 - 1.25	1.00	0.95 - 1.05	1.7
1 - 1.5	1.19	1.13 - 1.25	2.0
1 - 2	1.42	1.35 - 1.49	2.3
1.25 - 2.25	1.69	1.61 - 1.77	2.6
1.5 - 2.5	2.00	1.90 - 2.10	3.0
1.5 - 3	2.39	2.27 - 2.51	3.5
2.25 - 3.5	2.84	2.70 - 2.98	4.1
2.5 - 4	3.37	3.20 - 3.54	4.9
3 - 5	4.02	3.82 - 4.22	5.8
4 - 6	4.87	4.63 - 5.11	6.8
4.5 - 7	5.7	5.42 - 5.98	7.9
5.5 - 8	6.8	6.46 - 7.14	9.2
6 - 10	8.1	7.70 - 8.50	10.9
8 - 12	9.6	9.12 - 10.08	12.9
10 - 16	12.5	11.9 - 13.1	17.9
10 - 20	15.0	14.2 - 15.8	21.5

### FG – polycrystalline synthetic diamond, standard size range

FG size µm	Size Range µm	Median (50% Value) µm	Median - Tolerance µm	Upper Limit (99% Value) µm max.
0.25	0 - 0.5	0.30	0.25 - 0.35	0.75
0.5	0 - 1	0.55	0.40 - 0.70	1.3
1	0 - 2	1.10	0.90 - 1.30	2.7
1.5	1 - 2.5	1.60	1.35 - 1.85	3.3
2	1 - 3	2.10	1.81 - 2.39	4.0
3	2 - 4	3.2	2.8 - 3.6	5.5
4	2 - 6	4.2	3.7 - 4.7	7.5
5	3 - 7	5.3	4.7 - 5.9	9.0
6	4 - 8	6.3	5.6 - 7.0	10.5
9	6 - 12	10.0	8.8 - 11.2	15.0
12	8 - 16	14.0	12.4 - 15.6	20.0
15	12 - 22	17.5	15.4 - 19.6	26.0
30	20 - 40	32.0	28.2 - 35.8	48.0