



*Surface Finish Values
For Resin Bonded Diamond and
CBN Grinding Wheels*

Tech Sheet # 12

SURFACE FINISH

Use the table as a starting point in selecting the proper mesh size for your resin bonded diamond or CBN grinding wheel. Other variables such as type of material being ground, material removal rate, machine condition, infeed and the use of coolant will all influence eventual part finish.

Diamond Mesh Size	RMS Finish in Micro Inch	Ra Finish in Microns	CBN Mesh Size	RMS Finish in Micro Inch	Ra Finish in Microns
100/120	64 - 90	1.5 - 2.09	100/120	30 - 40	.67 - .90
140/170	32 - 48	.73 - 1.09	140/170	25 - 30	.57 - .67
170/200	24 - 32	.55 - .73	170/200	20 - 25	.48 - .57
200/230	20 - 24	.45 - .55	200/230	15 - 20	.34 - .45
230/270	14 - 16	.32 - .36	270/325	10 - 15	.23 - .34
325/400	13 - 14	.29 - .32	325/400	4 - 8	.09 - .18
400/500	12 - 13	.27 - .29			

RMS—is defined as the “ root mean square ” of the profile height deviations from the mean line of the surface. Lower values indicate a smoother finish. The above table expresses the RMS values in micro inches.

RA is the arithmetic average of the mean deviation of the surface valleys and peaks. Again, the lower the value, the smoother the finish. The RA values listed here are in microns.

Graff
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