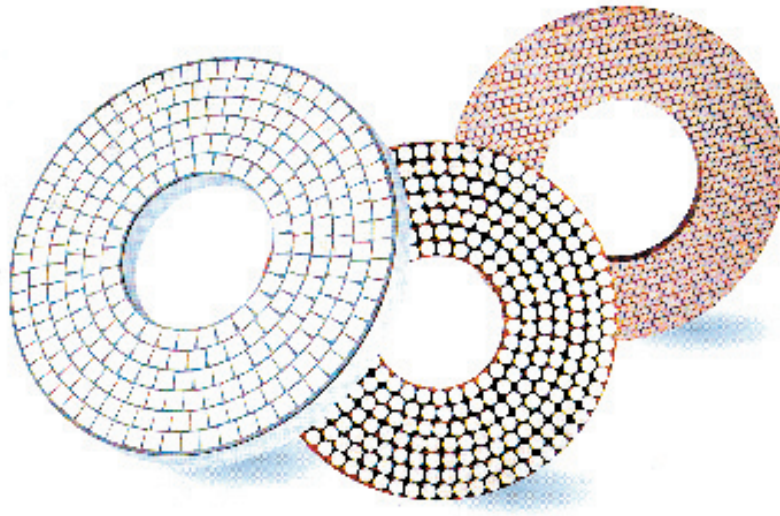




FINE GRINDING WHEELS



- FASTER MATERIAL REMOVAL RATES
 - FINER FINISHES
 - BETTER FLATNESS CONTROL
 - MORE CONSISTENT PROCESS CONTROL
 - VERY COMPETITIVE PRICING
- Lapmaster International's full line of super-abrasive (CBN or Diamond) fine grinding wheels easily adapt to all brands of fine grinding machines and many types of conventional single and double side lapping systems. The fine grinding process produces flat lapping quality on a variety of materials without the expense and "mess" associated with lapping. Fine grinding using Lapmaster supplied fine grinding wheels produces material removal rates are up to 20 times faster than lapping. Our special vitrified and resin bonds combined with our use of the highest quality most closely graded super abrasive powders means consistent quality for all parts ground on Lapmaster supplied fine grinding wheels.
- Vitrified wheels are supplied with configurations comprised of round, square or hexagonal pellets applied to steel backup wheels. Pellet type wheels are available with spaces (grooves) between the pellets or with the inter-pellet spaces filled to provide a smooth surface. Segmented wheels which appear as a solid grinding surface are also available. Grinding surface pattern, abrasive particle size, bond and thickness of grinding media are all customized for your specific application. Vitrified bonds are the longest lasting and easiest to control for flatness.
- Our resin bond wheels are provided with a solid segmented grinding surface. This surface can be either serrated or plain depending on the application. Resin wheels are suited for applications where minimal material removal and fine surface finish are required.
- A variety of wheel diameters are available to suit your single side or double side fine grinding needs. Lapmaster fine grinding technicians are available to determine wheel specifications best suited for your specific application(s). Send for our Lapmaster fine grinding wheel questionnaire.



CBN & DIAMOND WHEEL FINE GRINDING APPLICATIONS SPECIFICATIONS

MATERIAL	MESH SIZE	TYPE OF ABRASIVE	PELLET TYPE	ROUGHNESS	TOTAL STOCK REMOVAL	HARDNESS	STOCK REMOVAL RATE	FLATNESS ACCURACY
SCM415	CBN230	C3N	Hexagonal Round	0.40 Ra	0.4 mm 0.05 mm	58-62 HRC	65µm/min 35µm/min	<3µm for Ø30 <1.5µm for Ø30
IC(Mo)	CBN30/40	C3N	Hexagonal Round	0.20 Ra	0.3 mm 0.05 mm	58-62 HRC	65µm/min 35µm/min	<3µm for Ø90 <1.5µm for Ø80
Carbon Steel	CBN230	C3N	Hexagonal Round	0.40 Ra	0.3 mm 0.03 mm	63 HRC	60µm/min 30µm/min	<2µm for Ø150 <1.5µm for Ø150
SK5	CBN30/40	C3N	Hexagonal Round	0.20 Ra	0.3 mm 0.05 mm	68-70 HRC	50µm/min 25µm/min	<2µm for Ø70 <1.5µm for Ø70
Bearing Steel 100Cr6 - SCM	CBN230	C3N	Hexagonal Round	0.40 Ra	0.3-0.4 mm	8-9 Michs	300µm/min 100µm/min	<3µm for Ø35 <1.5µm for Ø35
HSS	CBN30/40	C3N	Hexagonal Round	0.20 Ra	0.1 mm	8-9 Michs	100µm/min 50µm/min 30µm/min 15µm/min	<3µm for Ø35 <2µm for Ø35 <1.5µm for Ø35 <1µm for Ø35
Al2O3 Sintered Water Pump Seals	DIA200	DIAMOND	Hexagonal Round	0.60 Ra	0.3mm	9 Michs	200µm/min 80µm/min	<2µm for Ø51 <1.5µm for Ø51
Sapphire	DIA200	DIAMOND	Hexagonal Round	0.60 Ra	0.4mm	9 Michs	200µm/min 80µm/min	<3µm for Ø30 <2µm for Ø30
Quartz	DIA400	DIAMOND	Hexagonal Round	0.40 Ra	0.5mm	8 Michs	100µm/min	<3µm for Ø30
SiC	DIA230	DIAMOND	Hexagonal Round	0.20 Ra	0.3mm	9 Michs	200µm/min 125µm/min	<3µm for Ø30 <2µm for Ø30
Silicon Nitride	DIA100	DIAMOND	Hexagonal Round	0.50 Ra	0.5mm	8 Michs	100µm/min	<3µm for Ø30
Tungsten Carbide/Cermet/PCD/PCD Insert	DIA140	DIAMOND	Hexagonal Round	0.60 Ra	0.6mm		300µm/min 200µm/min 100µm/min	<3µm for Ø20 <2µm for Ø20 <1µm for Ø20
Carbon	DIA230	DIAMOND	Hexagonal Round	0.80 Ra	0.6mm		400µm/min 200µm/min 100µm/min 60µm/min	<3µm for Ø40 <2µm for Ø40 <1.5µm for Ø40 <1µm for Ø40
Plastics, PPS, Vincolite, PVC	DIA1000	DIAMOND	Hexagonal Round	0.60 Ra	0.6mm		150µm/min	<3µm for Ø40
Brass, Copper, Aluminum and Alloy	DIA230 DIA400 DIA800 DIA1000	DIAMOND	Hexagonal Round	0.80 Ra 0.40 Ra 0.20 Ra 0.10 Ra	0.4mm 0.2mm 0.1mm 0.05mm		300µm/min 250µm/min 100µm/min 70µm/min	<3µm for Ø35 <2µm for Ø35 <1.5µm for Ø35 <1µm for Ø35