CBN Series

CBN monocrystal product

CBN-810

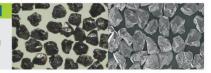
Black, irregular shape, medium strength, high thermal stability, protruding acute angle, providing higher performance and grinding efficiency, and used in resin and vitrified bond system



CBN-815 NEW



Black, texture structure surface, irregular shape, medium strength, good self-sharpness, good surface finish of machined workpiece, and used in resin and vitrified bond system



CBN-850

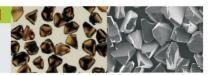
Black, medium blocky, medium strength, high thermal stability, balanced crushing strength and crushing features, combined the grinding efficiency with grinding wheel life, and used in vitrified bond system



CBN-980



Dark brown, single crystal, irregular shape, sharp acute angle, high strength, high thermal stability. Used in the vitrified, metal and resin bond system with high strength requirement.



CBN-950





Golden color, blocky crystal shape, high strength, high thermal stability, and used in the electroplating tool, metal and vitrified



CBN-901

bond system

Amber color, medium strength, irregular shape, good selfsharpness, and used in the resin bond system





R resin bond



V vitrified bond

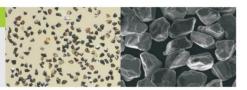




CBN micropowder product

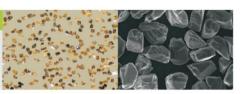
CBN-M850

Black powder, used in grinding and polishing ferrous metal, making honing oilstone, and making sintered body of polycrystalline.



CBN-M990

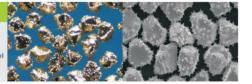
Amber micropowder, high purity, high wear resistance, high thermal stability, and used in making PCBN compact and sintered body of polycrystalline with longer life



CBN coating product

Electroplating coating product

Adopting mature electroplating technology, abrasive is plated with different proportion of nickel, which can effectively improve grinding whee



Chemical coating product

Adopting the mature chemical processing technology, the abrasive is treated with weigh increase and nickel coating, which greatly enhances the holding force and heat dissipation ability between the grains and improves the surface finis of the workpiece.



Titanium coating product

"T" refers to product with titanium-coated surface, and mainly applicable for metal and vitrified bond system. After titanium coating, it can protect the abrasive performance to get higher thermal resistance, and effectively improve the life of the grinding wheel.



R resin bond



V vitrified bond



SL electroplating tool

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Resin Bond Diamond Series

Resin bond diamond product

FVG-200

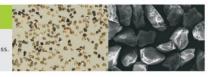
Light green, polycrystalline, rough surface, irregular shape, easy fragile, combination grinding efficiency with service life, and used in the long life and efficient grinding of gemstone, vitrified, glass and carbide tool



Resin bond diamond micropowder product

FVG-M200

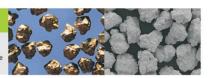
Light green, micropowder, good self-sharpness, and used in high-precision and high-efficiency grinding of ceramic and glass



Resin bond diamond coating product

FVG-200CN

Adopting chemical processing technology, abrasive is claded with nickel coating, which greatly enhances the holding force and heat dissipation ability between the grains and improves the service life of the grinding wheel.





Available Grain Size for CBN Monocrystal and Resin Bond Diamond

Grade Grade	CBN-810	CBN-815	CBN-850	CBN-980	CBN-950	CBN-901	FVG-200	
40/50					/			
50/60					/			
60/80	V	V	V	/	/	V	V	
80/100	/	V	V	V	V	/	V	
100/120	/	V	V	V	/	\	V	
120/140	/	~	V	~	V	\	V	
140/170	/	~		V	V	/	V	
170/200	/	~	V	V	~	\	V	
200/230	/	~	V	V	V	/	V	
230/270	/	~	/	V	V	\		
270/325	V	~	~	V	/	\	V	
325/400	V	~	V	V	/	\	V	
			•				. /- A	

√=Available

Available Grain Size for CBN Micropowder and Resin Bond Diamond Micropowder

Grain size Grade	CBN-M850	CBN-M990	FVG-M200
0-0.25	~	✓	V
0-0.5	~	✓	V
0-1	/	/	V
0-2	V	/	V
1-1.5	/	/	V
1-3	/	/	V
2-4	V	✓	V
3-6	V	✓	V
4-8	V	✓	✓
5-10	~	/	V
6-12	V	/	V
8-16	V	✓	V
10-20	V	/	V
12-22	V	✓	V
15-25	/	/	V
20-30	V	/	V
22-36	V	/	✓
30-40	V	✓	V
36-54	V		V

√=Available

Compa	arison	Tab	le o	fInt	ern	atio	onal	Gra	ain S	Size	Sta	nda	rd
MDC GB/T6406-2016	Grain size	40/50	50/60	60/80	80/100	100/120	120/140	140/170	170/200	200/230	230/270	270/325	325/40
	Dimension	425/300	300/250	250/180	180/150	150/125	125/106	106/90	90/75	75/63	63/53	53/45	45/38
ISO -	Grain size	427	301	252	181	151	126	107	91	76	64	54	46
	Dimension	425/300	300/250	250/180	180/150	150/125	125/106	106/90	90/75	75/63	63/53	53/45	45/38
FEPA -	Grain size	B/427	B/301	B/252	B/181	B/151	B/126	B/107	B/91	B/76	B/64	B/54	B/46
	Dimension	425/300	300/250	250/180	180/150	150/125	125/106	106/90	90/75	75/63	63/53	53/45	45/38
U.S.A ANSI B74.16-2002	Grain size	40/50	50/60	60/80	80/100	100/120	120/140	140/170	170/200	200/230	230/270	270/325	325/40
	Dimension	425/300	300/250	250/180	180/150	150/125	125/106	106/90	90/75	75/63	63/53	53/45	45/38
JAPAN JIS4130-1998	Grain size	40/50	50/60	60/80	80/100	100/120	120/140	140/170	170/200	200/230	230/270	270/325	325/40
	Dimension	425/300	300/250	250/180	180/150	150/125	125/106	106/90	90/75	75/63	63/53	53/45	45/38
RUSSIA 9206-80	Grain size	500/400	400/315	250/200	200/160	160/125	125/100	100/80	80/63	63/50	50/40		
	Dimension	500/400	400/315	250/200	200/160	160/125	125/100	100/80	80/63	63/50	50/40		
Theoretical basic size	Inch	0.015	0.011	0.009	0.0069	0.0058	0.0048	0.0041	0.0034	0.0030	0.0026	0.0022	0.0019
	Millimeter	0.378	0.288	0.226	0.174	0.148	0.123	0.103	0.086	0.075	0.066	0.057	0.048

It is recognized that CBN (cubic boron nitride) is second only to diamond in hardness, two times that of diamond in high temperature resistance, four times that of traditional abrasive in wear resistance, and have extraordinary thermal conductivity. There are hundreds of raw materials needed to use CBN to grind in present manufacturing market, from aerospace superalloys and thermal spraying to the hardened steel in automotive bearing and gear industry to improve efficiency and get the shortest processing time. Components and spare parts can get better quality by CBN grinding. Products are optimized to prevent thermal damage during the finishing process. At the same time, the quality consistency of the machined parts is improved. These machining technologies make full use of CBN advantages of increase grinding wheel life and wear reduction. So that the expensive machine can run longer time between the grinding tool replacements and reduce the adjustment time during operation to better meet the requirement of modern automated machine and improve productivity and work efficiency.

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