Funik

Company honor

1988 Synthesis of Funik's first high-grade cubic boron nitride abrasive
1991 Amber cubic boron nitride has been successfully developed
1997 High strength black cubic boron nitride has been successfully developed
1998 Won the title of "High-tech Enterprise" of Henan Science and Technology Commission
2002 National standard formulation unit of Super Abrasive, Cubic Boron Nitride
2003 Introduced high wear-resistant and impact-resistant polycrystalline cubic boron nitride inserts
2003 Undertook the "National Torch Plan" project of the Ministry of Science and Technology of the People's Republic of China
2005 Funik brand won the title of "Famous Brand Products of Henan Province"
2006 Won the "50 High-Tech and High-growth Enterprises" named by Henan Provincial Government
2006 The first one in the industry was certified by the "three-standard" management system of ISO9001, ISO14001, OHSAS18001
2007 Won the title of "Top Ten Enterprises with Comprehensive Economic Benefits in 2006" by China Machine Tool Industry Association
2008 Super wear-resistant high-speed finishing polycrystalline cubic boron nitride inserts were successfully put on the market
2009 Undertook and implemented the high-tech industrialization project of high-grade cubic boron nitride and high-speed cutting superhard cutting tools of the National Development and Reform Commission
2009 Won the title of "Henan Innovative Enterprise" in Henan Province
2010 Super brazed cubic boron nitride cutting tools was successfully put on the market
2011 Establishment of academician workstation of cubic boron nitride and its products
2012 Ultra-precision cubic boron nitride polycrystalline cutting tools was successfully put on the market
2014 Won the title of "Innovative Enterprise" of China Materials Research Society
2014 The company's shares are listed on the New Three Board, and the securities are referred to as "Funik". The stock code is 831378
2015 Won the national standard-setting unit of Polycrystalline Cubic Boron Nitride for Metal Processing
2015 Won the title of "Demonstration Enterprise of Technological Innovation in Henan Province in 2015"
2015 Won the title of "Top Ten Innovative Enterprises of Henan Economy (2015)"
2016 Won the title of "Intellectual Property Advantage Enterprise in Henan Province"
2016 Won the title of "Top Ten Product Quality" of cubic boron nitride awarded by China Machine Tool Industry Association
2016 Won the title of "Best Service Brand" of the third China Metal Cutting Tool
2017 Won the "Excellence Award of China Patent Award"
2017 Won the "First Prize for Scientific and Technological Progress in Henan Province"
2017 Won the "Top Ten Brands Made in Henan Province in 2017"
2018 Obtained the first batch of demonstration items of robot "Ten Hundred Thousand" demonstration application multiplication project in Henan Province in 2018
2018 Won the "First Prize for Scientific and Technological Progress in Henan Province"
2018 Funik innovative PCD cutting tool was sold more than 200,000 pieces in 3C electronics industry
2018 The Φ63mm PCD blank was successfully put on the market
2018 Won the title of "Henan Intelligent Factory"
2019 Won the title of the first batch of special new "Little Giant" enterprises of the Ministry of Industry and Information Technology of the People's Republic of China
2019 Won the "Henan Science and Technology Progress Award"
2019 Won the "National Intellectual Property Advantage Enterprise"
2020 Passed the evaluation of the "Management System for Integration of Informatization and Industrialization"
2020 Won the recognition of Henan Research Center of Cubic Boron Nitride Micro-nano Materials and Applied Engineering Technology
2021 Funik holds 370 national patents
2021 Premium quality Lab-grown diamond was successfully put on the market
2021 High performance Φ75mm PCD Blank was successfully put on the market

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Funik

CBN/DIA superabrasive

Improve grinding efficiency to a new level

Subverting the tradition Enlightening the future

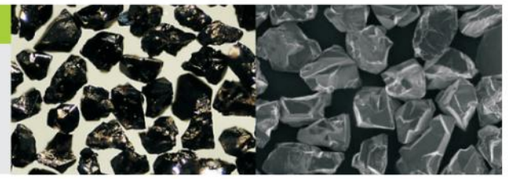
ISO9001/ISO14001/ISO45001 Certified

CBN Series

CBN monocrystal product

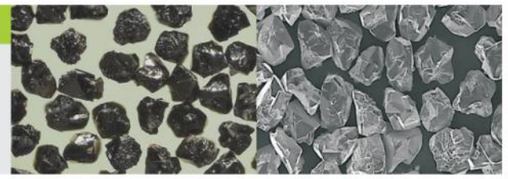
CBN-810 R V

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



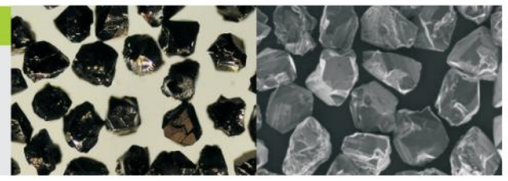
CBN-815 NEW R V

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



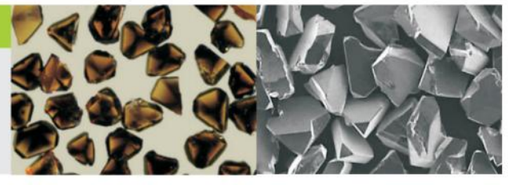
CBN-850 V

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



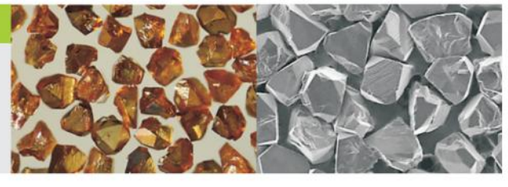
CBN-980 V M R

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.



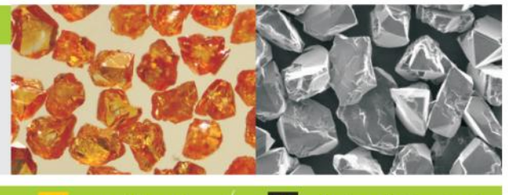
CBN-950 SL M V

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



CBN-901 R

Amber color, medium strength, irregular shape, good self-sharpness, and used in the resin bond system

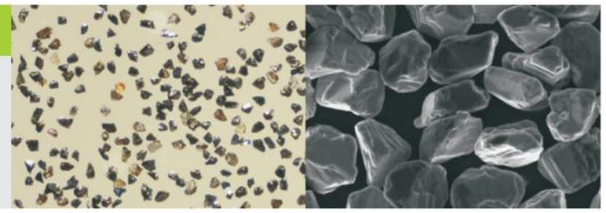


R resin bond / V vitrified bond / M metal bond / SL electroplating tool

CBN micropowder product

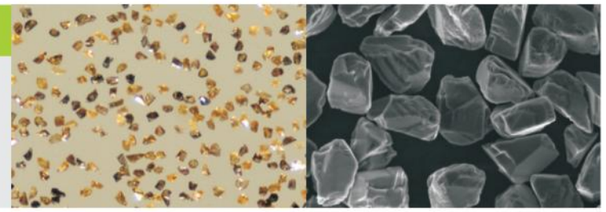
CBN-M850

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



CBN-M990

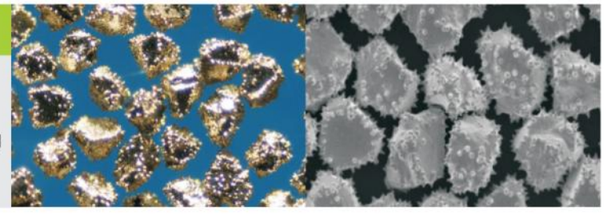
Amber micropowder, high purity, high wear resistance, high thermal stability, and used in making PCBN compact and sintered body of polycrystalline with longer life



CBN coating product

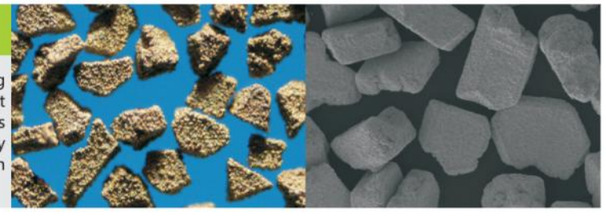
Electroplating coating product

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



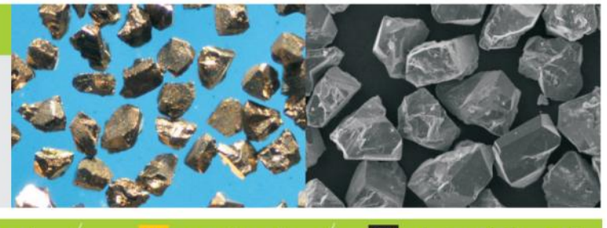
Chemical coating product

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



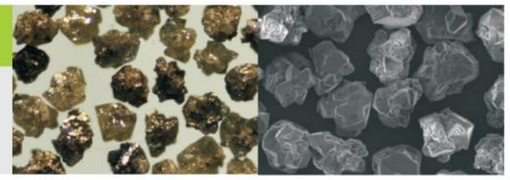
R resin bond / V vitrified bond / M metal bond / SL electroplating tool

Resin Bond Diamond Series

Resin bond diamond product

FVG-200

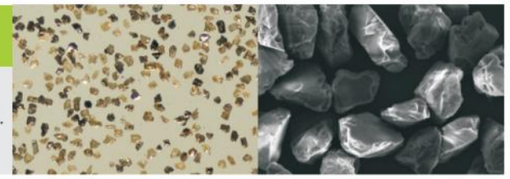
Light green, polycrystalline, rough surface, irregular shape, easy fragile, combination grinding efficiency with service life, and used in the long life and efficient grinding of gemstone, vitrified, glass and carbide tool



Resin bond diamond micropowder product

FVG-M200

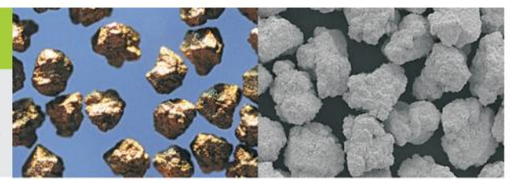
Light green, micropowder, good self-sharpness, and used in high-precision and high-efficiency grinding of ceramic and glass.



Resin bond diamond coating product

FVG-200CN

Adopting chemical processing technology, abrasive is cladded 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.



R resin bond / V vitrified bond / M metal bond / SL electroplating tool

Funik

Available Grain Size for CBN Monocrystal and Resin Bond Diamond

Grain size \ Grade	CBN-810	CBN-815	CBN-850	CBN-980	CBN-950	CBN-901	FVG-200
40/50					✓		
50/60					✓		
60/80	✓	✓	✓	✓	✓	✓	✓
80/100	✓	✓	✓	✓	✓	✓	✓
100/120	✓	✓	✓	✓	✓	✓	✓
120/140	✓	✓	✓	✓	✓	✓	✓
140/170	✓	✓	✓	✓	✓	✓	✓
170/200	✓	✓	✓	✓	✓	✓	✓
200/230	✓	✓	✓	✓	✓	✓	✓
230/270	✓	✓	✓	✓	✓	✓	✓
270/325	✓	✓	✓	✓	✓	✓	✓
325/400	✓	✓	✓	✓	✓	✓	✓

✓=Available

Available Grain Size for CBN Micropowder and Resin Bond Diamond Micropowder

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

✓=Available

Comparison Table of International Grain Size Standard

FUNIK 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	325/400
	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	325/400
	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	325/400
	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.