

柘城县鸿祥超硬材料有限公司

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ZHECHENG HONGXIANG SUPERHARD MATERIAL CO.,LTD.

人造金刚石

SYNTHETIC DIAMOND



企业简介

鸿祥超硬是一家专业生产、销售金刚石微粉、金刚石工具的工厂，位于中国金刚石之乡河南柘城县。

鸿祥超硬成立于1990年，致力于人造金刚石，金刚石微粉主要用于工具的生产，或其他制品的研磨和抛光。

2000年鸿祥超硬 着力打造金刚石工具的生产，主要包括金刚石锯片，金刚石砂轮，金刚石钻头，碗磨，软磨片等。金刚石工具广泛应用于玻璃、石材行业。

鸿祥超硬成立以来，获得19项各领域专利，产品销往全球163个国家和地区，目前金刚石微粉月产品达100.000.000克拉，金刚石微粉粒度最细可大0.1 μm。

因为专注所以专业，30年专注于提高金刚石品质



About US

Hongxiang was founded in 1990, located in the hometown of China diamond, mainly engaged in the production of diamond powder and diamond tools. Mainly product: Synthetic diamond diamond micron powder. Synthetic diamond grit range:30/35-500/600: mainly used to kinds of diamond tools for cutting, drilling, grinding etc different field.

Micron powder grit from 0.1 um - 50um, used to surface polishing in different field. Total output is 100 million carats per month. Diamond tools, including diamond drill bit, diamond wheel diamond saw blade etc for glass, stone, ceramic, carbide etc industrial.

Hongxiang focus on diamond industry over 30 years, insist on the quality development, integrity management . Now has 19 patents and ISO, GSG and other qualification certificates, customers spread all over the 162 countries.

SPECIFIC&FOCUSED PROFESSIONAL Concentration makes profession ,focus on improung the quality of synthetic diamond for 30 years.



金刚石微粉 Synthetic Diamond Powder

Description:

Synthetic diamond micron powder is made of the high quality synthetic diamond as raw material, through many different and strict production processes. Our diamond micron powder can be processed and applied to different industrial for cutting, grinding and polishing etc, in order to match the different requirement.

产品简介

金刚石微粉选用优质的人造金刚石作为微粉原料，经过层层筛选等多道工序，加工成应用于不同领域不同行业的切割、研磨、抛光等，满足客户的不同需求。

人造金刚石微粉 Diamond micron powder			
粒度 Grit	筛网号 Mesh	粒度 Grit	筛网号 Mesh
0-0.25	60000	5-10	2000
0-0.5	30000	6-12	1800
0-1	15000	8-12	1600
0-2	13000	7-14	1500
1-2	12000	8-16	1300
1-3	10000	10-20	1200
2-3	7000	12-22	1000
2-4	6500	15-25	800
2-4	6000	20-30	700
2-5	5000	22-36	600
3-6	4000	20-40	500
4-6	3500	30-40	450
4-8	3000	35-45	400
4-9	2500	36-54	

可定制化

These above diamond micron powder grades are normal types and based on the market demand. If you have any other demand beyond these types, our diamond micron powder also can be customized according to your detailed requirements.

以上金刚石微粉型号都是根据市场需求生产的常用型号，如果以上金刚石微粉型号无法满足客户需求可根据客户要求定制金刚石微粉。

HDG

Economical grade, good self-sharpening. Through the Strict Control material cost to guarantee customers' benefit.

- 1.Lower strength
- 2.Fine Self-sharpening
- 3.Suits for processing resin bond and vitrified bond etc diamond tools

按照行业的标准原料进行生产加工，确保各项指标满足客户需求，纯度和粒度良好保持一致性。

经济适用，满足客户锋利度要求，并严格控制物料成本，让客户利益得到保障。

- 1.强度较低
- 2.具有良好的自锐性
- 3.适用于树脂陶瓷结合剂工具加工

HDYZ

Manufactured on the basis of the sharp diamond raw material and undergoing several producing processes. Through the sharpening reprocessing, filtering out the slice and strip particles, to ensure the great crystal form, and meet the requirements about the high precision sawing, lapping and polishing.

选用普通锋利型物料作为基础运用多道产品生产工序，对产品再加工整形，筛选掉产品中的片形物料和长形物料，确保产品晶型好，来满足客户的高精度的切、磨、抛的要求。

HDYM

High grade diamond as raw material. Selected the particles which are less than 0.5um, in order to maintain good granularity consistency, to ensure that the products will not scratch the surface under the fine polishing process. Thereby reduce the defective rate of customers' products.

以高等级原料为基础，筛选出0.5微米以下的颗粒，保持良好的粒度一致性，确保产品在精细抛光使用过程中不会深度划伤，降低客户产品的次品率。

HDY

Manufactured on the basis of the industry standard diamond raw material. Ensure that the indicators meet customers' requirements.

- 1.Fine purity and particle size distribution
- 2.Increased grinding life
- 3.Less Impurities and lower magnetic

按照行业的标准原料进行生产加工，确保各项指标满足客户需求

- 1.纯度和粒度分布良好保持一致性。
- 2.磨削寿命周期提高
- 3.杂质、磁性较低
- 4.多用于切割、研磨、抛光等金刚石工具。

HDYH

Specifically for the hard and brittle materials. After several deep sharpening reprocessing, ensure that the product sharp is more round without edges and corners, in order to avoid the chipping and scratches under the processing.

专门针对硬脆物料的特点，对产品进行多次深加工处理，深度整形确保产品无棱角更圆更规整，避免产品在加工工件过程中出现崩边、划伤等情况。

HDYX

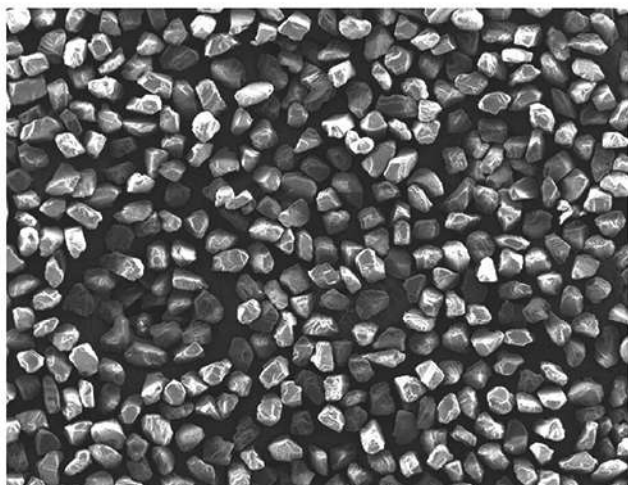
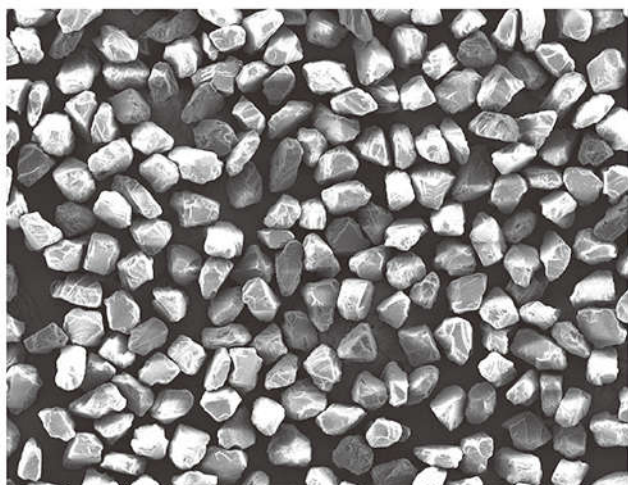
Designed for producing diamond wire to cut silicon wafer and sapphire. Through the rigorous control of particle size, removal the the inappropriate particles in order to reduce the material consumption of cutting loss, improve quality and working efficiency of diamond wire.

专门针对硅片、蓝宝石切割金刚石线锯。通过严格控制粒度、去除产品中的小颗粒和大颗粒,减少切割材料损耗，提高客户产品的产品质量和加工效率。

HDHC

Reprocessed and removed the impurity on the basis of the high grade and high strength diamond micron powder, in order to keep the high purity. Mainly designed for producing polycrystalline diamond compact (PDC cutter).

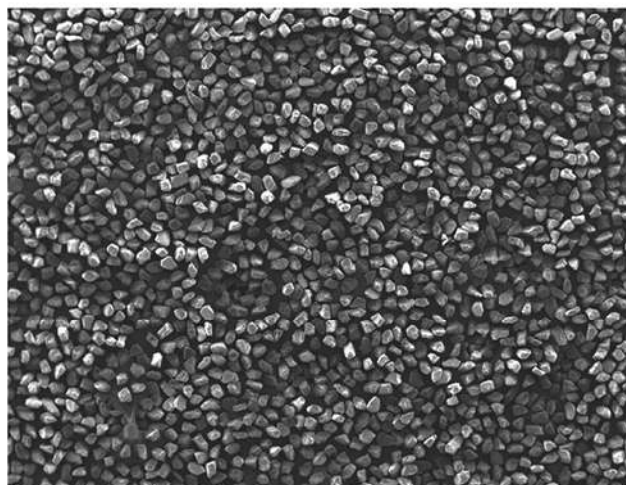
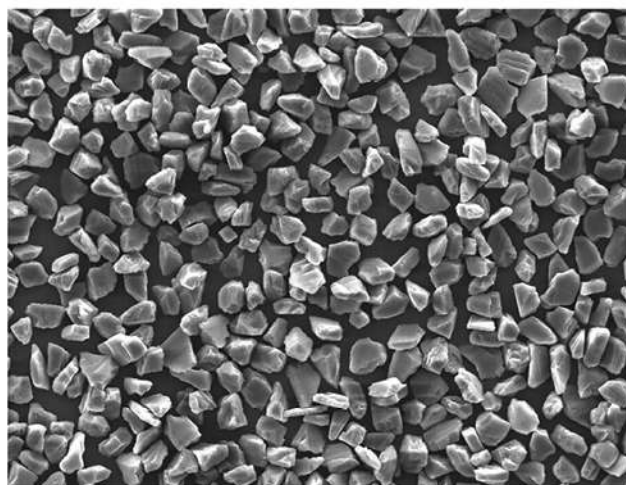
在高等级耐磨高效型的基础上进行再加工处理，去除产品中的杂质，保持产品的纯度，主要运用于聚晶金刚石复合片生产。



HDH

High strength diamond as raw material, collection of many advantages about raw material. High strength and impact resistance, long working life, less in impurity. Therefore the product is wear-resistance and high efficient.

选用高强度等级物料作为该型号物料，集合了原材料的诸多优点，高强度、长寿命、抗冲击性强、杂质少等，使产品既耐磨且高效。



RVD破碎料 RVD Synthetic diamond

RVG

Description:

Irregular, slender and sharp crystal form, rough surface with a few impurities and lower strength.

Fragile and good self-sharpening. Suitable for making diamond grinding wheel or diamond flexible fickert.

产品简介

- 1.晶体形状不规则，细长尖锐，表面粗糙有少量杂质，强度较低。
- 2.易碎且有良好的自锐性。适合用于制作金刚石砂轮或者弹性磨块等。

RVD

Description:

1. Irregular and sharp crystal form with rough surface
2. Fine brittleness and self-sharpening
3. Fine cutting efficiency
4. Less impurities, lower magnetic
5. Fine working life and wear resistance.
6. Suits for resin bond and ceramic bond diamond tools.

Application:

1. Diamond, jade, crystal and other jewelry etc grinding.
2. Commonly used in resin, ceramic bond abrasive,
3. Electroplating products and drilling and dressing tools
4. polishing pad, diamond fickert etc stone processing tools.
5. High thermal conductivity & good electrical insulation, suits for semiconductor device heat sink;
6. Excellent transparency and corrosion resistance, in the electronics industry has also been widely used.

产品简介

- 1.晶体为不规则尖锐状，晶体表面粗糙。
- 2.优越脆性和自锐性。
- 3.较高的切割磨削效率。
- 4.杂质较少，低磁。
- 5.寿命和耐磨度有所提高。
6. RVD适用于树脂及陶瓷结合剂金刚石工具

产品用途

1. 钻石、玉石、水晶等珠宝的研磨。
2. 普遍用于树脂，陶瓷结合剂磨具。
3. 电镀制品和钻探及修正工具等。
4. 软磨片，金刚石模块等的石材陶瓷加工。
5. 由于导热率高、电绝缘性好，可作为半导体装置的散热板。
6. 它有优良的透光性和耐腐蚀性，在电子工业中也得到广泛应用。

RVD Synthetic diamond			
Grit	Mesh	Grit	Mesh
80/100	80#	230/270	230#
100/120	100#	270/325	270#
120/140	120#	325/400	325#
140/170	140#	400/500	400#
170/200	170#	500/600	500#
200/230	200#		

MBD2

Crystal form is complete and crystal surface is smooth relatively, low compressive strength.

Generally, it is used for cutting & polishing soft stone and brittle materials, and also can be used for diamond dressing knives.

晶体相对规则，晶面相对光滑，抗压强度低。

一般用于切割研磨软石和脆性材料，也可用于金刚石修正刀。



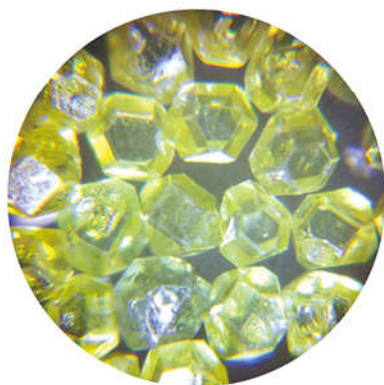
MBD6

Crystal complete, crystal surface smooth, moderate compressive strength.

Generally used for soft and brittle marble and other stone cutting drilling, concrete drilling, Making diamond dressing tool etc.

晶体规则，晶面光滑，抗压强度中等。

一般用于软性和脆性大理石等石材的切割钻孔，混凝土钻孔，制作金刚石修正刀工具等。



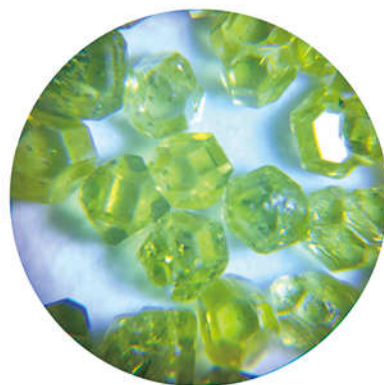
MBD4

Crystal complete, crystal surface smooth, low compressive strength.

It is generally used for cutting & polishing soft stone and brittle materials, and also can be used for diamond dressing knives.

晶体规则，晶面光滑，抗压强度低。

一般用于切割研磨软石和脆性材料，也可用于金刚石修正刀。



MBD8

Crystal complete, high purity, medium toughness and thermal stability, high impact resistance. Generally used for cutting medium hardness stone, (e.g.) granite, marble, concrete drilling & cutting, and making dressing tool etc.

晶型完整，纯度高，中等韧性和热稳定性，高耐冲击性。

一般用于切割中等硬度的花岗岩，大理石等石材，混凝土钻孔，制作金刚石修正刀工具等。



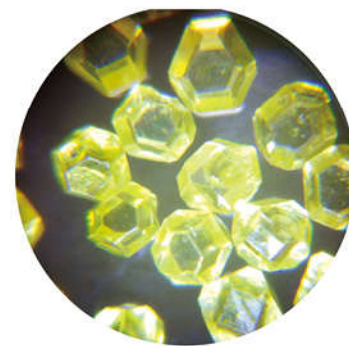
MBD10

Crystal complete, high purity, medium toughness and thermal stability, high impact resistance.

Generally used for cutting high hardness stone materials, (e.g.) granite, marble, concrete drilling & cutting, and making dressing tool etc.

晶型完整，纯度高，中等韧性和热稳定性，高耐冲击性。

一般用于切割中高等硬度的花岗岩，大理石等石材，无钢筋混凝土的钻孔，制作金刚石修正刀工具等。



SMD25

Highly complete crystal form, Regular octahedron with eight-side, high purity, high compressive strength, toughness and thermal stability, high impact resistance.

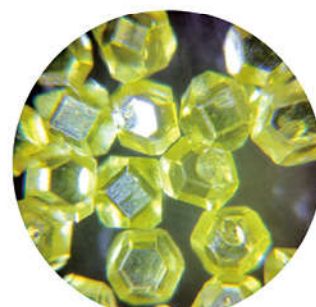
Generally used for produce very high hardness diamond tools for cutting, such as diamond cutting wire saws, large stone diamond saw blade.

Used for kinds reinforced concrete & geological materials drilling, various types of diamond repair knife etc.

晶型高度完整，为规则八面体，高纯度，高抗压强度，韧性和热稳定性，高耐冲击性。

一般用于制造切割超硬度的金刚石工具，例如金刚石切割线锯，大石材金刚石锯片等，

用于各种钢筋混凝土和工程地质材料的钻孔，各种类型的金刚石修整刀等。



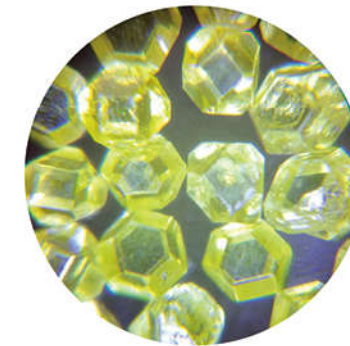
MBD12

Crystal complete, high purity, high toughness and thermal stability, high impact resistance.

Generally used for produce high hardness diamond tools, (e.g.) reinforced concrete saw blade, geological drilling bits, diamond dressing tools etc.

晶型完整，高纯度，高韧性和热稳定性，高耐冲击性。

一般用于制造锯切高硬度石材的金刚石工具，例如钢筋混凝土锯片，地质钻孔钻头，金刚石修正工具等。



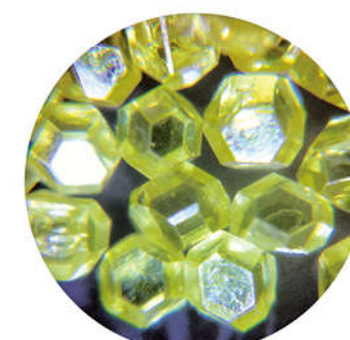
SMD30

The crystal form is very highly complete octahedron with eight-side, high purity, ultra high compressive strength, toughness and thermal stability and impact resistance, and high TI & TTI.

Generally used for very high hardness stone and reinforced concrete diamond tools, electroplated diamond tools, diamond dressing knife & geological drill bit etc.

晶型高度完整，为规则八面体，高纯度，超高抗压强度，韧性和热稳定性和耐冲击性，和高的TI & TTI.

一般用于制造切割高硬度石材和钢筋混凝土的金刚石工具，电镀金刚石工具，金刚石修正刀和工程地质钻头，



镀覆 Coated diamond

Description:

Plated diamond, also known as diamond coated or plated diamond, means the diamond surface is coated with a layer of metal diamond gives many new features, in order to improve the diamond and matrix interfacial bonding ability, holding force and strength, reduce the thermal shock, protection against oxidation and graphitization of diamond, reduce the degree of thermal damage of diamond. To extend the service life of the product. The metal is nickel and titanium and alloy plating method commonly used ordinary plating and electroless plating two, weight method is usually 30% and 56%, in addition, can also according to the actual situation and the requirements of customers customized. General for nickel plated diamond and diamond coated diamond.

Ti coated diamond is mainly used in the manufacture of metal bond tools, diamond cutter head, such as stone tools of the saw blade, drill etc.

Application area:

In the industry, widely used in the manufacture of metal bonding agent and resin binder tools, such as the head, grinding wheel, saw blade and drill bit.

With the development of science and technology, the use of nickel-plated diamond wire saws to cut sapphire silicon and so on more and more widely.

产品简介

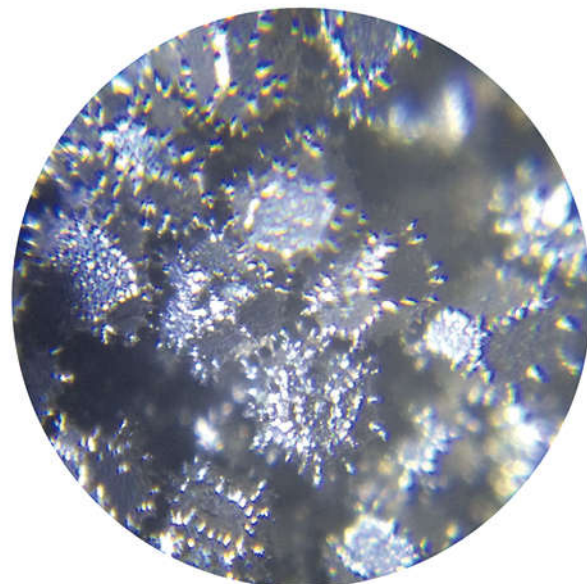
镀覆金刚石，又称镀衣金刚石或电镀金刚石，指在金刚石表面镀覆一层金属能赋予金刚石许多新的特性，以提高金刚石与基体的界面结合能力、把持力及强度，减缓热冲击，保护金刚石免受氧化、石墨化，减轻金刚石的热损伤程度,延长制品的使用寿命。所镀金属一般为镍、钛等以及合金，镀覆方法一般采用普通镀和化学镀两种，增重方法一般为30% 和 56%， 除此之外，还可根据客户的实际情况及要求定制。一般镀覆金刚石为镀镍金刚石和镀钛金刚石。

应用范围：

在工业中，广泛应用于制造金属结合剂和树脂结合剂工具，如刀头，砂轮，锯片和钻头等。

随着科技的发展，使用镀镍金刚石制造金刚石线锯来切割蓝宝石硅片等越来越广泛。

镀镍 Ni coated diamond



镀镍 Ni coated diamond

Nickel-plated diamonds are generally divided into two categories: ordinary nickel plating and electroless nickel plating, according to the weight of nickel plating distinction, can be divided into 30% weight gain and 56% weight gain.

Application:

1. Ni coated diamond is mainly used in the manufacture of resin binder tools, such as used in cemented carbide, glass and ceramic grinding wheel,
2. Ni coated diamond can also be used in the manufacture of electroplated diamond grinding head, jewelry and other crafts for the carving and so on,
3. Ni coated diamond powder is mainly used in the manufacture of diamond cutting wire saws and grinding tools for plastic, silicon and glass processing,
4. Ni coated diamond can also be used in the electrical and electronic industry in the graphite, carbon material cutting and other materials.

镀钛 Ti coated diamond

Through forming a dense layer of titanium, the coating is able to avert the the erosion by metal powder and take effect of isolation protection at high temperature during the manufacture of diamond tools, avoid the diamond oxidation. Protect and maintain the diamond performance, prevent the diamond peeling off, prolong the tools` work life. Ti-coated diamond is mainly designed for manufacturing the metal bond sintered diamond tools.

Application:

Ti coated Diamond is mainly used in the manufacture of metal bonding tools, such as stone tools,diamond bits, saw blades, drill bits.

增重 weight (CT)	普通镀镍		化学镀镍(N)	
	General coated		Chemical coated(N)	
	镀之前 Before	镀之后 After	镀之前 Before	镀之后 After
30%(N)	1	1.3	1	1.42
56%(N)	1	1.66	1	2.27

镀镍金刚石

镀镍金刚石一般分为两类：普通镀镍和化学镀镍,按照镀覆镍的增重区分，还可分为30%增重 和56%增重。

主要用途：

- 1.镀镍金刚石主要用于制造树脂结合剂工具，如应用于硬质合金，玻璃和陶瓷的砂轮等。
- 2.镀镍金刚石还可用于制造电镀金刚石磨头，用于珠宝石等工艺品的雕刻磨花等
- 3.镀镍金刚石微粉主要用于制造金刚石切割线锯和磨削工具，用于塑料，硅片和玻璃等的加工。
- 4.镀镍金刚石还可用于电气电子工业中石墨，碳精材料的切割成型等。

通过在金刚石表面形成一层致密的钛镀层，在高温烧结和高温研磨中，镀层对金刚石起隔离保护作用，防止金刚石氧化，保护金刚石性能，减少金刚石从基体中上脱落，延长工具使用寿命。镀钛金刚石主要用于制造金属结合剂烧结工艺用工具。

主要用途：

镀钛金刚石主要用于制造金属结合剂工具，如石材工具的金刚石刀头，锯片，钻头等。

