中國 後ま E-BIZ CENTER OF CHINA TUNGSTEN INDUSTRY ASSOCIATION CATALOG OF TUNGSTEN PRODUCTS

CATALOG OF CUSTOM MADE SERIES

Custom Made Series

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Chemical Name: Tungsten Carbide

Chemical Family: Refractory Metal (non-ferrous metal)

Chemical Formula: WC

Manufacturer: E-Biz Center of China Tungsten Industry Association



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Recommend grade for custom made



Recommend grade for custom made

Cemented carbides are the hardest man-made metal-matrix composites. They are used in every major industry worldwide, from ballpoint pens - to mining - to petroleum drilling. The unique properties of carbide in its carious compositions and forms have made process industries and durable goods manufacturers more efficient by reducing machine downtime. The term cemented carbides refers to metallic carbides - fine particles of tungsten carbide bonded or cemented together in a matrix of a metallic element of a lower melting point such as cobalt or nickel. The process of powder metallurgy is skillfully

Grade	Density(g/cm3)	hardness(HRA)	T.R.S(N/mm2)	Application
YG6	14.95	89.5	2580	Universal grades widely
YG8	14.74	89.0	2710	used in machining tools for cast iron, nonferrous metals and their alloys and nonmetal materials, wear parts, and tools for machining other alloys.
YG6A	14.89	91.5	2350	Suitable for the semi-of
YG6X	14.93	91.0	2480	hard cast iron, nonferrous metals and their alloys, and also suitable for the semi-finishing and of common cast iron and high manganese steel work-pieces and for other tools.
YG8C	14.69	87.5	2850	Mainly used for rock drilling
YG11C	14.32	86.5	2940	tools and at the same time

Grade, properties and recommended applications

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				for drilling stone walls, cementin construction and installation work, and for machining stone materials.
YL10.2	14.45	91.5	2880	Mainly used for manufacturing strips and disc cutters and also for other tools.
YM80	14.76	90.5	2590	Mainly for manufacturing strips and also for other tools.
YS2T	14.45	91.5	2380	Mainly used for disc cutters and also for other tools.
YM15.1 YS8	14.05	92.5	2170	Suitable for the rough and of stainless steel, finishing of high strength steel, finishing and semi-finishing of hardened steel, and the machining of iron based heat resistant alloys and glass articles.

Note: Other grades and specifications can be designed according to customer's requirements.

Tungsten carbide disc cutters



Tungsten carbide disc cutters used in PCB and electric fields. We are a professional carbide manufacturer in carbide kingdom.

Types and dimensions of tungsten carbide disc cutters

Specification	0.D.(mm)	I.D.(mm)	Thickness(mm)
Ф11 х Ф5 х 4.3	11	5	4.3
Ф14 х Ф5 х 3.5	14	5	3.5
Ф14 х Ф7.5 х 3.5	14	7.5	3.5
Ф14 х Ф7.5 х 5	14	7.5	5
Ф15.5 х Ф7.8 х 0.8	15.5	7.8	0.8
Ф15.5 х Ф7.8 х 1.0	15.5	7.8	1.0
Ф15 х Ф5.5 х 3.5	15	5.5	3.5
Ф16.5 х Ф6.5 х 5	16.5	6.5	5
Ф17 х Ф5.2 х 1.0	17	5.2	1.0
Ф17 х Ф5.2 х 1.2	17	5.2	1.2

Tolerances of outside diameter, inside diameter and

thickness of tungsten carbide disc cutters

0.D.(mm)	Tolerances of O.D.(mm)	I.D.(mm)	Tolerances of I.D.(mm)
<30	0~+0.5	-0.5~0	-0.1~+0.1
30<0.D.<120	-1.5~+0.5	-0.5~+0.5	-0.1~+0.2
120<0.D.<200	-1.5~+1.0	-1.0~+0.5	-0.2~+0.2
200<0.D.<250	-1.5~+2.0	-1.5~+0.5	-0.3~+0.3
0.D.<250	-2.0~+5.0	-3.0~+1.0	-0.5~+0.5

Recommended grades for tungsten carbide disc

cutters

Grade	Density(g/cm3)	hardness(HRA)	T.R.S(N/mm2)	Application
YS2T	14.45	91.5	2380	An ultra fine cemented carbide with tungsten powder and binder cobalt. Good toughness and wear resistance, suitable for low speed cutting allowing a big rake angle, ensuring the sharpness of the edges, bearing a heavy

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				cutting force and achieving good surface finish.
YL10.2	14.45	91.5	2880	With good transversal rupture strength and wear resistance, it is suitable for low-speed rough turning and milling of heat resistant alloys, titanium alloys and of plastics glass as well.

Notes:

1. The specific size of rods is subject to clients' drawing picture and requirements.

2.Non-standard tungsten carbide prodcts are produced to your own requirements.

Special tungsten carbide products



Special tungsten carbide products

There is a wide assortment of special cemented carbide products with around 30,000 sets of dies & moulds and advanced forming equipment and means, meeting a wide range of requirement for various shapes and applications in various industries. The products can be manufactured based on your drawings and samples. Below are some examples of special cemented carbide products:



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Shaped cemented carbide products



Shaped cemented carbide products

Advanced machining means are used for shaping semi-finished products to manufacture products of various complicated shapes and applications. They can be manufactured as per your drawings and samples based on your requirements. Below are some examples of shape products:

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阀芯、阀座 Valve body ,valve seat 各种长径比的车加工棒及精磨棒 Machined & finished rods with a varied ratio of lengths and diameters

Products of complicated figurations



Products of complicated figurations

- 1, Advanced net shape forming technology
- 2, First choice for making products of complicated figurations
- 3, Little deformation and high precision
- 4, No machining or little machining required

The manufacturing of products of complicated figurations with the advanced net shape forming technology will substantially reduce your cost for obtaining products of complicated figurations. They can be manufactured as per our drawings and samples based on your requirements. Listed below are examples of products of complicated figurations.

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割型产品 Shaped products

Tungsten carbide for hammers



Hammer type crushers are characteristic of advanced structure, excellent performances, big crushing rate. They have become crushing equipment for cement, mining and sand processing industries. The too short lifetime of hammers and quick wear of the metals has become an outstanding problem for such equipment.

The corporation, taking advantage of its superiority in the carbide industry and after many years of tests and practice, has researched and developed cemented carbide for hammers with super performances, rational structure and a high performance-price ratio.

Lifetime of hammers: one set of hammers lasted 70 days and crushed 150,000 tons of clinker form rotary kilns with less than 9 Grams of wear on the hammer per ton of clinker;

Crushing ef carbide hammers have a much higher hardness as compared with high manganese steel and high chrome alloy steel. No lump chipping and breakage occurs with wear resistance increased by more than 15 times, and the using effect has won good appraisal form customers.

We can supply upon customers' requirements mechanical crushing hammers of various shapes.

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