

## Carbide Rods



### Introduction

Toonney Tungsten Carbide Rod Manufacturer can offer tungsten carbide rod, carbide end mills, cemented carbide rod, carbide rods with straight/spiral coolant hole, shaped rods according customer's requirement, T shaped carbide rods, with step etc.

Through materials mixture, extruding, sintering, shape modification producing, tungsten carbide rod will be formed preliminary, and in the end tungsten carbide rod should be sintered in a high pressure (Toonney use 6Mpa [sintering furnace](#)). Toonney tungsten carbide rod manufacturer just make tungsten carbide rod strictly like these steps. With characters of high hardness, high strength, chemical stable, low expansion coefficient, electric and heat conducting, the sintered tungsten carbide rod is widely applied in industrial manufacture area. For example, make micro drill gets applied in PCB industry. Electrode bar gets popular in optical community industry. Drill, drill stock, tip, pusher, wear resistant precision parts, [carbide reamers](#) and blades with coolant hole are also widely used in machining industry. Thanks for its good quality and competitive price, Toonney tungsten carbide rod manufacturer gets more and more popular in tungsten carbide rod industry. Welcome to Toonney tungsten carbide rod manufacturer for more information about tungsten carbide rod. Toonney tungsten carbide rod manufacturer is just here waiting for you!



Carbide end mills: carbide end mills, also named milling cutter, is a kind of carbide cutting tools for milling machining. Toonney carbide end mills factory is famous for its high quality carbide end mills. Carbide end mills has one or several blades, those blades can be rotated and cutting the work piece one by one in sequence and intermittent. Carbide end mills, which produced by carbide end mills factory, are mainly applied to milling machine to machining the plan face, step, groove, forming face and cutting off work piece. The cemented carbide material performs excellent when applied in making carbide end mill. The super high hardness, wear resistance and pressure resistance make the application of carbide end mills expands to a wider area in a short time. Welcome to Toonney carbide end mills factory for more information about carbide end mills. Toonney carbide end mills factory is just here waiting for you!

Cemented carbide rod: Toonney cemented carbide rod plant can offer different sizes of cemented carbide rods for customers. Besides the different shapes and dimension requirement, cemented carbide rod also can be classified by the grain size of tungsten carbide. According to different applications, for example, corner cutting machine V-cut blade and precision machining blade use micro and sub-micro grain size tungsten carbide. In rough machining, the materials usually are medium grain size tungsten carbide. Heavy cutting and heavy chopping use medium grain size tungsten carbide material. When applied to mining tools which the working condition is high impact and pressure, coarse grain size tungsten carbide material is needed. Toonney cemented carbide rod plant is famous for its high quality cemented carbide rod plant at home and abroad. Welcome to Toonney cemented carbide rod manufacturer for more information about cemented carbide rod. Toonney cemented carbide rod plant is just here waiting for you!

Packaging Details: Plastic bag, then protected in foam lay, finally to an outer carton.

Samples Matters: Tungsten carbide rod which can be available from our common regular inventory, can be offered as samples for free. For some carbide end mills and cemented carbide rod with irregular customer special required, will be charged. Of course, customers need to pay for the shipping fee. Usually, the lead time of the samples will be within 7 working days

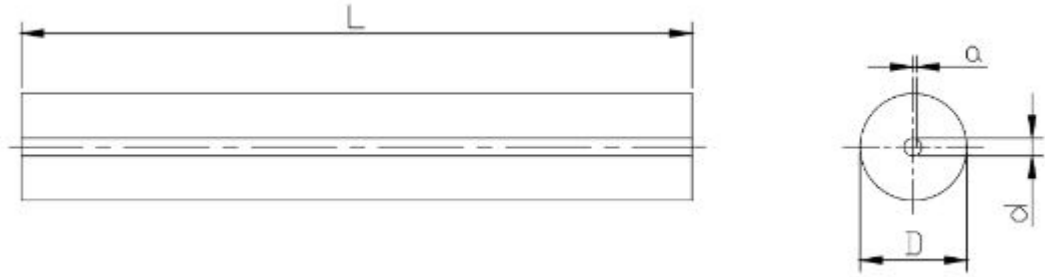
Minimum Order Quantity: There is no minimum order quantity of carbide rods for the first trial order. But on the second order, the total amount of carbide rods should be not less than 1000 USD.

Delivery Time: 7-15 working days

## Specifications

### (1) Carbide rods with one coolant duct

This blank is specially for some CNC blades or drills which needs duct for coolant to cool the increased heat during the high speed cutting or drilling. Standard specification and tolerance table please reference below.

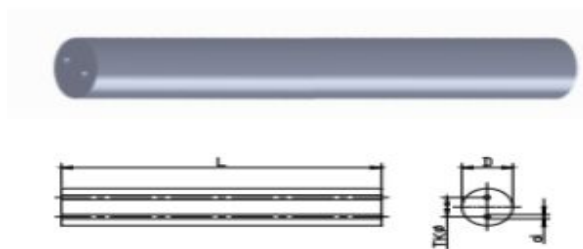


Outer D(mm)	OD Tol.(mm)	Inner Hole d(mm)	ID Tol.(mm)	Hole center deviation value $\alpha$	Length (mm)	L Tol.(mm)
3.0	+0.50/+0.30	0.5	$\pm 0.10$	0.10	330	+1.5
4.0	+0.50/+0.30	0.8	$\pm 0.10$	0.10	330	+1.5
5.0	+0.50/+0.30	0.8	$\pm 0.10$	0.13	330	+1.5
6.0	+0.50/+0.30	1.0	$\pm 0.15$	0.15	330	+1.5
7.0	+0.60/+0.30	1.0	$\pm 0.15$	0.15	330	+1.5
8.0	+0.60/+0.30	1.0	$\pm 0.15$	0.15	330	+1.5
9.0	+0.60/+0.30	1.4	$\pm 0.15$	0.20	330	+1.5
10.0	+0.60/+0.30	1.4	$\pm 0.15$	0.20	330	+1.5
11.0	+0.60/+0.30	1.4	$\pm 0.15$	0.28	330	+1.5
12.0	+0.60/+0.30	1.8	$\pm 0.15$	0.30	330	+1.5
13.0	+0.70/+0.30	1.8	$\pm 0.15$	0.34	330	+1.5
14.0	+0.70/+0.30	1.8	$\pm 0.15$	0.37	330	+1.5
15.0	+0.70/+0.30	2.0	$\pm 0.20$	0.40	330	+1.5
16.0	+0.70/+0.30	2.0	$\pm 0.20$	0.40	330	+1.5
17.0	+0.80/+0.30	2.0	$\pm 0.20$	0.47	330	+1.5
18.0	+0.80/+0.30	2.0	$\pm 0.20$	0.50	330	+1.5
19.0	+0.80/+0.30	2.0	$\pm 0.20$	0.50	330	+1.5

20.0	+0.80/+0.30	2.5	±0.25	0.50	330	+1.5
21.0	+0.80/+0.30	2.5	±0.25	0.50	330	+1.5
22.0	+0.80/+0.30	2.5	±0.25	0.50	330	+1.5
23.0	+0.80/+0.30	3.0	±0.25	0.50	330	+1.5
24.0	+0.80/+0.30	3.0	±0.25	0.50	330	+1.5
25.0	+0.80/+0.30	3.0	±0.25	0.50	330	+1.5
26.0	+0.80/+0.30	3.0	±0.25	0.50	330	+1.5
27.0	+0.80/+0.30	3.0	±0.25	0.50	330	+1.5
28.0	+0.80/+0.30	3.0	±0.25	0.50	330	+1.5
29.0	+0.80/+0.30	3.0	±0.25	0.50	330	+1.5
30.0	+0.80/+0.30	3.0	±0.25	0.50	330	+1.5

## (2) Carbide rods with two coolant ducts, straight

This blank is specially for some CNC blades or drills which needs duct for coolant to cool the increased heat during the high speed cutting or drilling. Standard specification and tolerance table please reference below.



### Standard pitch

Outside Dia. Ø(mm)	OD Tol. (mm)	Inner d(mm)	ID Tol.(mm)	Distance between holds		Hole center diviation value α	L mm	Tol. (mm)
				mm	Tol. (mm)			
6.0	+0.50/+0.30	0.8	±0.10	1.5	+ 0/-0.20	0.15	330	+1.5
7.0	+0.60/+0.30	0.8	±0.10	1.5	+ 0/-0.20	0.15	330	+1.5
8.0	+0.60/+0.30	1.0	±0.15	1.5	+ 0/-0.30	0.15	330	+1.5
9.0	+0.60/+0.30	1.0	±0.15	2.6	+ 0/-0.30	0.20	330	+1.5
10.0	+0.60/+0.30	1.0	±0.15	2.6	+ 0/-0.30	0.20	330	+1.5
11.0	+0.60/+0.30	1.2	±0.15	3.6	+ 0/-0.30	0.28	330	+1.5
12.0	+0.60/+0.30	1.2	±0.15	3.6	+ 0/-0.30	0.30	330	+1.5
13.0	+0.70/+0.30	1.2	±0.15	3.6	+ 0/-0.30	0.34	330	+1.5
14.0	+0.70/+0.30	1.5	±0.15	5.0	+ 0/-0.30	0.37	330	+1.5



15.0	+0.70/+0.30	1.5	±0.15	5.0	+ 0/-0.30	0.40	330	+1.5
16.0	+0.70/+0.30	1.5	±0.15	5.0	+ 0/-0.30	0.40	330	+1.5
17.0	+0.80/+0.30	2.0	±0.20	6.2	+ 0/-0.30	0.47	330	+1.5
18.0	+0.80/+0.30	2.0	±0.20	6.2	+ 0/-0.30	0.50	330	+1.5
19.0	+0.80/+0.30	2.0	±0.20	6.2	+ 0/-0.30	0.50	330	+1.5
20.0	+0.80/+0.30	2.0	±0.20	6.2	+ 0/-0.40	0.50	330	+1.5
21.0	+0.80/+0.30	2.0	±0.20	6.2	+ 0/-0.40	0.50	330	+1.5
22.0	+0.80/+0.30	2.0	±0.20	6.2	+ 0/-0.40	0.50	330	+1.5
23.0	+0.80/+0.30	2.0	±0.20	7.5	+ 0/-0.40	0.50	330	+1.5
24.0	+0.80/+0.30	2.0	±0.20	7.5	+ 0/-0.50	0.50	330	+1.5
25.0	+0.80/+0.30	2.0	±0.20	7.5	+ 0/-0.50	0.50	330	+1.5
26.0	+0.80/+0.30	2.0	±0.20	7.5	+ 0/-0.50	0.50	330	+1.5

### Features:

Product name: Carbide rods

Place of Origin: Fujian, China (Mainland)

Brand Name: Toonney

Model Number: DIN Cut-to-length Rods

Type: Carbide rods

Material: Tungsten carbide

Application: [Carbide end mills](#), drills, shank, reamers

Tolerance: Tol. Of Dia.+0.15 to 0.7mm, and length+1 to +2 depends on the size difference.

Surface treatment: Blank, sand-blasting or polished

Grade: TU06, TF06, TU08, TU40, TU40F, TU44, TU25, TU45

Size: Common dia .ranges from 2 to 40mm,and length within 300mm, other size beyond will be specially customized.

Port: Xiamen

Payment terms: FOB Xiamen, TT



## Application

TU06 [tungsten carbide rod](#): Ultra-fine grain, high hardness, high strength, fit for making PCB micro-drilling, micro milling cutter and kinds of hard metal solid tools. Re-command material to make milling cutter of which Dia. is 1.2mm and above.

TF06 tungsten carbide rod: Fit for cutting aluminum and magnesium alloy, copper base alloy, iron-base alloy, plastic, graphite, carbon fiber etc. Recommended material for making drill and mill cutter for aluminum and magnesium material.

TU08 tungsten carbide rod: High strength and hardness, good for machining acrylic material, recommended material for making PCB drill and big drill of which dia. Is 0.7mm and above.

TU40 tungsten carbide rod: Recommended material for common drill, end mill, specially good to mill and drill the material common die steel, gray iron, Austenit steel,and alloy

TU40F tungsten carbide rod: Recommended material for making drill, milling cutter etc, to mill and drill steel, stainless steel, cast iron and aluminum alloy of which hardness is below 50HRC.

TU44 tungsten carbide rod: Fit for making different specification milling cutters,reamer, carving blades etc. specially performs good in tools cutting in high speed for example in cutting quenched steel, aluminum alloy, titanium alloy etc.

TU25 tungsten carbide rod: The material for mill and drill tools to machining material heat treatment steel, cast iron, stainless steel.

TU45 tungsten carbide rod: Recommended material for all kinds end mill, reamer, carving blade etc., performs good in high speed light cutting area,specially fit for quenched steel, aluminum alloy, titanium alloy etc.

## Advantages:

1. Cemented carbide rod has good straightness, excellent hardness, and strength.
2. Toonney [cemented carbide rod manufacture](#) has good pressing and extruding machines.
3. Carbide rods are sintered by vacuum sintering furnace and HIP machine with excellent specifications without any hole.
4. There are carbide rods, cemented carbide rod, carbide end mills, grinding and polished rods in any tolerances.



5. carbide end mills are mainly used for end mills, reamers, drills, countersinks, engraving tools, routers and other rotary tools.
6. The diameter of carbide end mills varies from 0.3mm to 40mm.
7. There are also many different sizes of carbide rods, cemented carbide rod, carbide end mills upon customers' request and drawing.

