



Keep improving, keep innovating  
Serve customers with high quality



Zigong Xingyu Cemented Carbide Dies & Tools Co., Ltd

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自贡市兴宇硬质合金模具有限公司  
Zigong Xingyu Cemented Carbide Dies & Tools Co., Ltd





## Company Introduction

Zigong Xingyu Cemented Carbide Dies&Tools Co.,Ltd is a professional supplier of tungsten carbide and all kinds of customized tungsten carbide wear parts.Which integrates Research & Development,Production,Marketing and Services.Our company was founded in 1999 and located in Zigong city,Sichuan province of China.We have more than 20 years experience in researching and manufacturing of tungsten carbide products such as carbide molds&dies,bushings, valve seats,nozzles,inserts&cutting tools,carbide rods and bars,carbide plates&strips and other customized tungsten carbide wear parts etc.

With high-purity cemented carbide raw materials, we can produce various products as per customer special requirements,OEM/ODM are both welcome.With high-tech equipment and strict quality test system,we have won a good reputation of high quality in both domestic and overseas market.Our tungsten carbide products have been exported to many countries around the world.Being reliable and professional is our value of service.Providing customers with high satisfaction services and high quality products is always our mission.

Sincerely welcome the friends all over the world to contact us for a WIN-WIN cooperation!

## Production Process



Raw Material



Wet Mix Milling



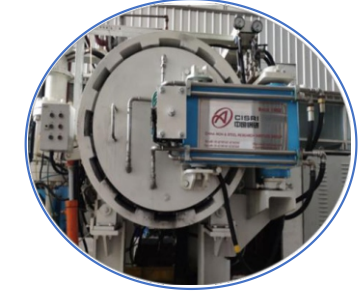
Pressing



Inspection & Testing



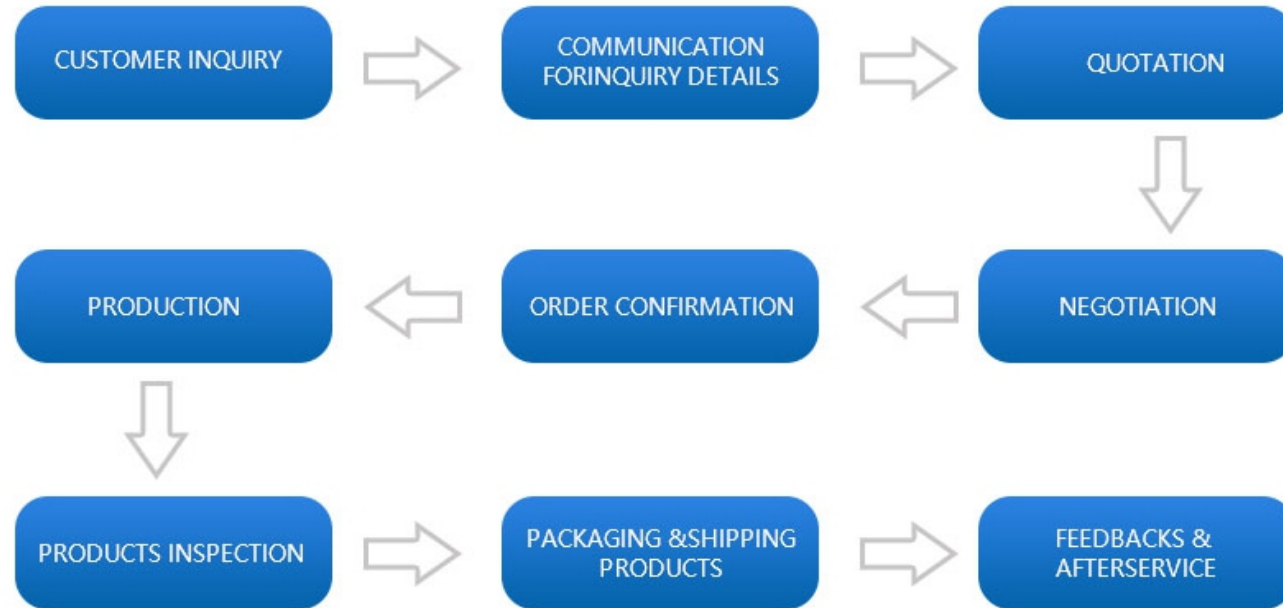
Machining



HIP Sintering



## WORK FLOW



## COMPANY CERTIFICATION



## WIDE APPLICATIONS

### Industry Solutions



## COMPETITIVE ADVANTAGES



## Grade

Chinese Grade	Equal to ISO Category Number	Chemical composition		Physical mechanical properties		
		WC	Co	Density	Bend Strength	Hardness
		%	%	G/Cm <sup>3</sup>	N/mm <sup>2</sup>	HRA
YG3	K01	96.5-97	3	14.9-15.3	≥1180	≥91.0
YG6X	K10	93.5	6	14.8-15.1	≥1420	≥92
YG6	K20	94	6	14.7-15.1	≥1600	≥91
YG8	K20-K30	92	8	14.5-14.9	≥1600	≥90
YG10	K40	90	10	14.3-14.7	≥1900	≥89
YG10X	K40	89	10	14.3-14.7	≥2200	≥89.5
YG15	K30	85	15	13.9-14.2	≥2100	≥87
YG20	K30	80	20	13.4-13.7	≥2500	≥85.5
YG20C	K40	80	20	13.4-13.7	≥2200	≥85.5
YG30	G60	70	30	12.8	≥2750	≥82

## Tungsten Carbide Wear Parts



Due to tungsten carbide's special physical properties, it has a very wide of applications, especially for wear parts. Tungsten products can sustain high temperatures, abrasion and corrosion resistant which makes it highly suited for wear parts, machine parts and dies. Today a very high percentage of tungsten carbide is cemented carbide used for wear parts. The extensive range of products covers from small balls for ball-point pens to big and heavy products, like hot rolls for rolling mills, punches or dies. And also tungsten carbide bush, tungsten carbide pellet, tungsten carbide cutting tools or tungsten carbide button etc.

Features of tungsten carbide:

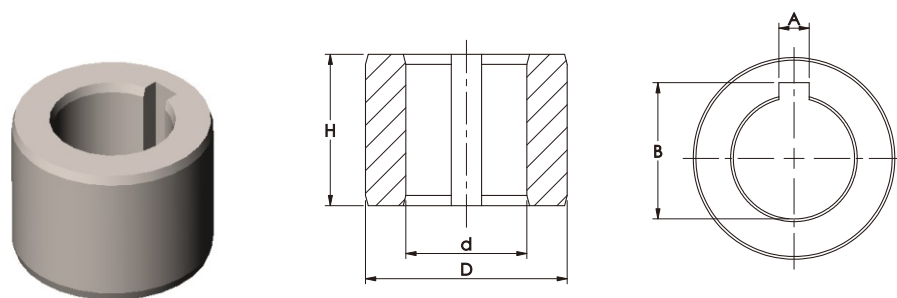
1. High hardness
2. High abrasion and corrosion resistance
3. High pressure resistance
4. High temperature resistance
5. Products with advanced equipment and perfect workmanship



## Tungsten Carbide Bushing



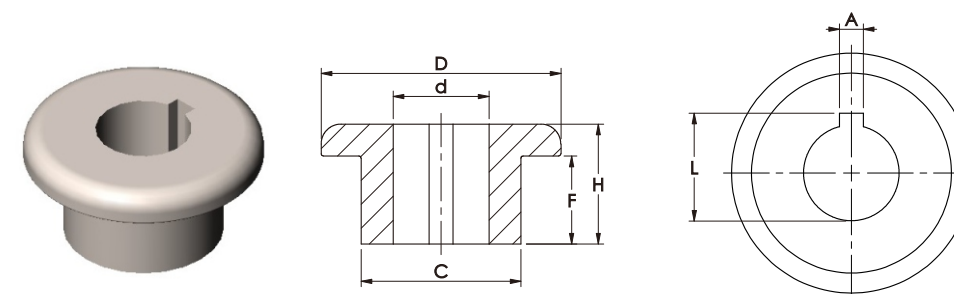
## Straight Sleeves



Dimensions of Straight Sleeves (mm)

D	d	H	d
20.0-40.0	17.0-30.0	10.0-36.0	1.6
41.0-80.0	31.0-70.0	10.0-36.0	3.2

## T Sleeves



Dimensions of T Sleeves (mm)

D	d	C	F	H
13.0-59.0	3.0-51.0	8.0-56.0	22.5	25.5
35.0-51.0	22.0-37.0	28.0-41.0	11.0-13.0	15.0-25.0

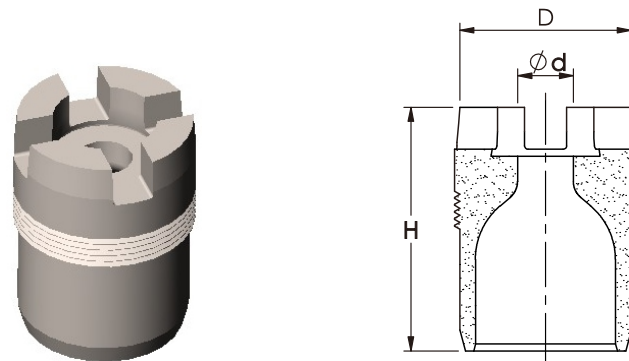
Noted : a=1.6, 3.2

## Tungsten Carbide Nozzle





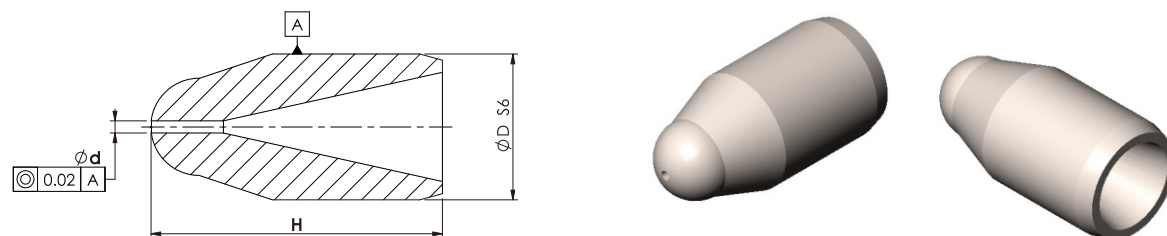
## Oil Nozzle



Dimensions of Oil Nozzle (mm)

D	H	d
25.21	34.8	7.95
25.21	34.8	8.74

## Waterjet Nozzle



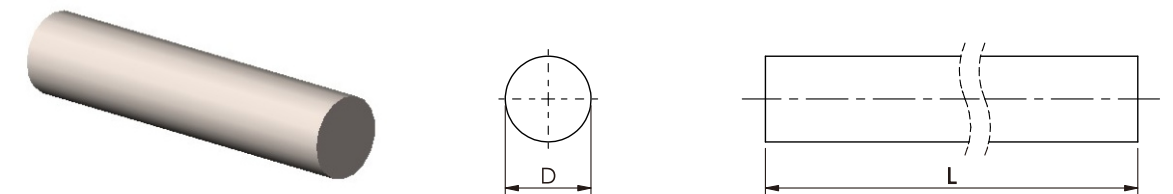
Dimensions of Waterjet Nozzle (mm)

D	H	d
6	12	0.5
6	12	0.3

## Tungsten Carbide Rod & Plate



## Solid Blank Rod



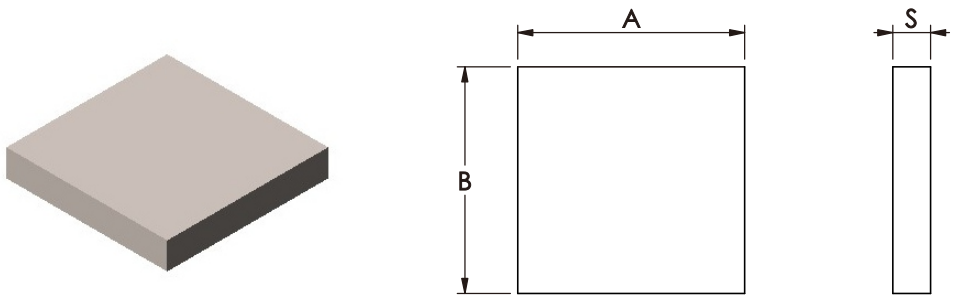
Specification D*L	Diameter Tolerance	Length Tolerance
φ1.0-2.5*330	+ 0.25 + 0.15	+ 7.0 + 3.0
φ3.0-9.5.5*330	+ 0.40 + 0.20	+ 7.0 + 3.0
φ10.0-15.0*330	+ 0.50 + 0.30	+ 7.0 + 3.0
φ15.5-19.5*330	+ 0.60 + 0.30	+ 7.0 + 3.0
φ20.0-29.5*330	+ 0.70 + 0.40	+ 7.0 + 3.0



STB Standard Strips

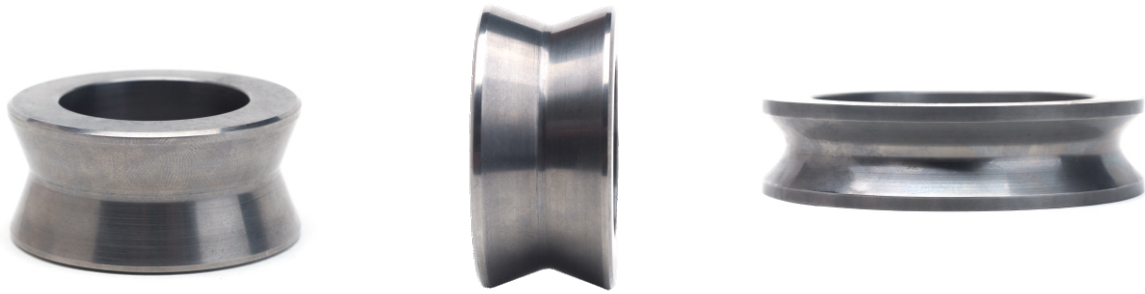
Item Number	Dimension Inch			Item Number	Dimension Inch		
	L	W	L		T	W	L
STB13A	3/64	3/32	1	STB328	3/32	7/8	6
STB13A	3/64	3/32	1	STB332	3/32	1	6
STB24A	1/16	1/8	3	STB336	3/32	11/8	6
STB24B	1/16	1/8	6	STB340	3/32	11/4	6
STB24	1/16	1/8	1	STB344	3/32	13/8	6
STB26A	1/16	3/16	3	STB348	3/32	11/2	6
STB26C	1/16	3/16	6	STB46	1/8	3/16	6
STB26	1/16	3/16	3	STB48A	1/8	1/4	6
STB28D	1/16	1/4	6	STB48E	1/8	5/16	6
STB28D	1/16	1/4	6	STB410	1/8	3/8	6
STB206	1/16	3/16	6	STB412C	1/8	1/2	6
STB208	1/16	1/4	6	STB412	1/8	1/2	11/2
STB210	1/16	5/16	6	STB416A	1/8	1/2	6
STB212	1/16	3/8	6	STB416B	1/8	5/8	6
STB216	1/16	1/2	6	STB416	1/8	3/4	6
STB220	1/16	5/8	6	STB420	1/8	7/8	6
STB224	1/16	3/4	6	STB424	1/8	1	6
STB228	1/16	7/8	6	STB56	5/32	3/16	6
STB34	3/32	1/8	6	STB58E	5/32	1/4	6
STB36	3/32	3/16	11/4	STB510	5/32	5/16	6
STB36A	3/32	3/16	1	STB512	5/32	3/8	6
STB36B	3/32	3/16	1	STB516	1/8	1/2	6
STB38D	3/32	1/4	5	STB520	1/8	5/8	6
STB38E	3/32	1/4	6	STB524	5/32	3/4	6
STB312	3/32	3/8	5	STB528	5/32	7/8	5
STB312L	3/32	3/8	6	STB532	5/32	1	6
STB316	3/32	1/2	6	STB536	5/32	11/8	6
STB320	3/32	5/8	6	STB540	5/32	11/4	6
STB324	3/32	3/4	6	STB544	5/32	13/8	6

Carbide Plate



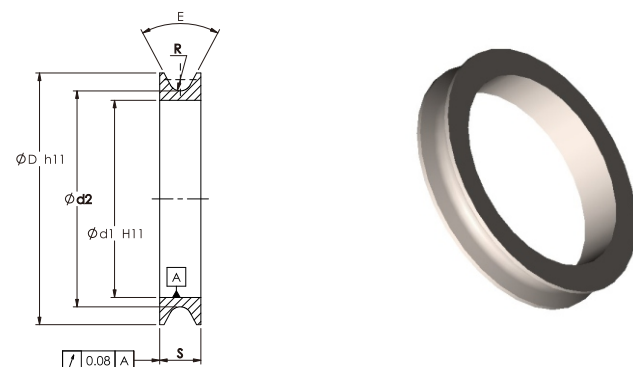
a*b*l Specification a*b*l	Width a(mm)	Width Tolerance a(mm)	Thickness b(mm)	Thickness Tolerance b (mm)	Length L(mm)	Length Tolerance L(mm)
	8~14	+0.4 +0.2	1~3	+0.4 +0.2	330	+3.0 +0.0
	14~34	+0.5 +0.3	2~5	+0.5 +0.3	330	+3.0 +0.0
	3~8	+0.6 +0.4	14~34	+0.6 +0.4	330	+7.0 +3.0

Tungsten Carbide Roller & Ring





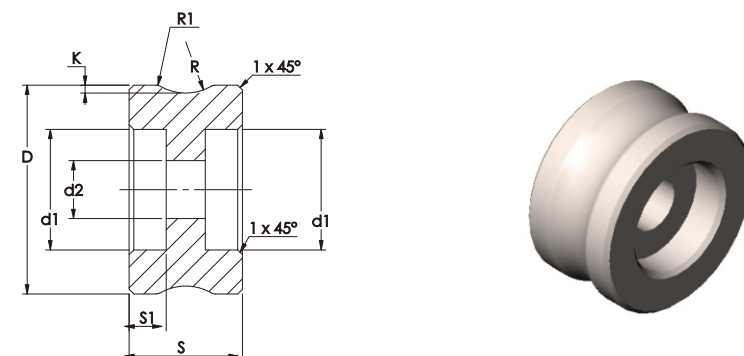
## Carbide Roller Ring



Dimensions of Carbide Roller Ring (mm)

D (h11)	d2	d1 (H11)	S
134	115	105	22
134	115	100	22

## Carbide Roller



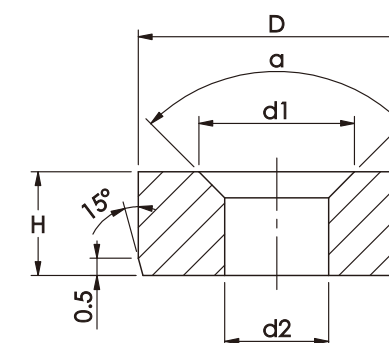
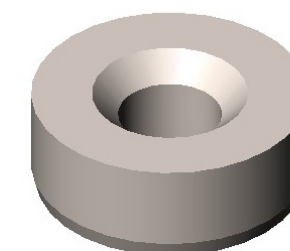
Dimensions of Carbide Roller (mm)

D	d1(H6 )	S	S1	K
45	26	12.5	24.4	1.7
45	26	10.5	24.4	1.7

## Tungsten Carbide Valve Parts



## Carbide Valve Seats

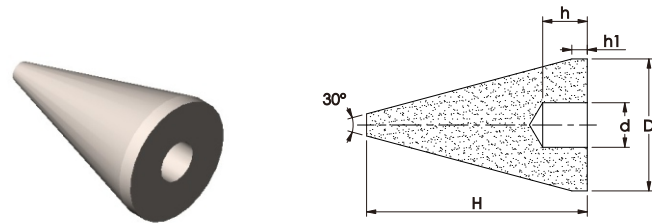


Dimensions of Carbide Valve Seats (mm)

D	d1	d2	S1
8.01	4.5	3	3
8.01	4.5	2	3



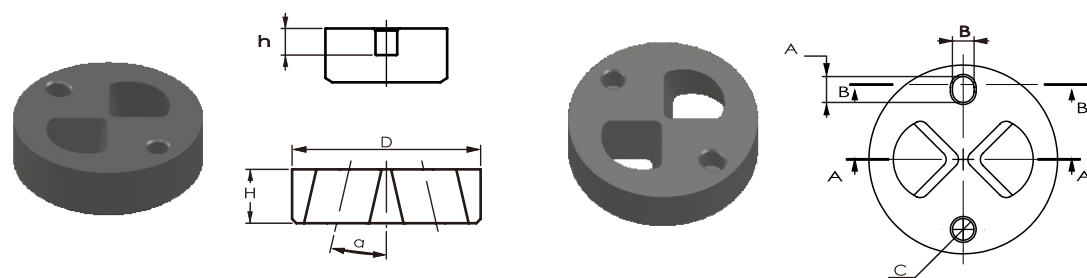
## Carbide Valve Core For Oilfield



Dimensions of Carbide Valve Core For Oilfield (mm)

D	d	H	h	h1
28.6	9.65	47.8	9.65	3.35
28.6	8.9	42.2	8.9	3.2

## Plates For Throttle Valve

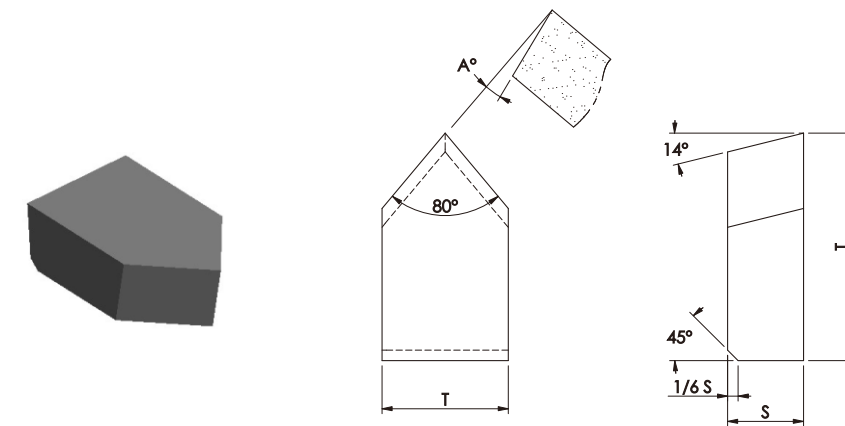
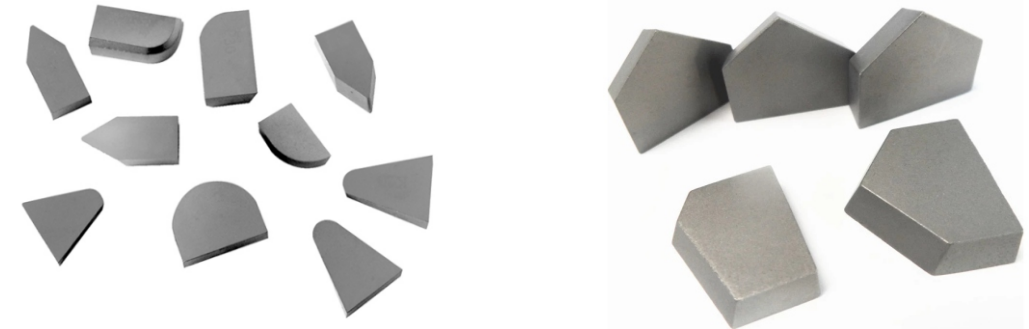


Dimensions of Carbide Valve Core For Oilfield (mm)

D	H	A	B	C	h
44.5	12.5	6	5	5	6

Noted:  $a = 10^\circ - 15^\circ$

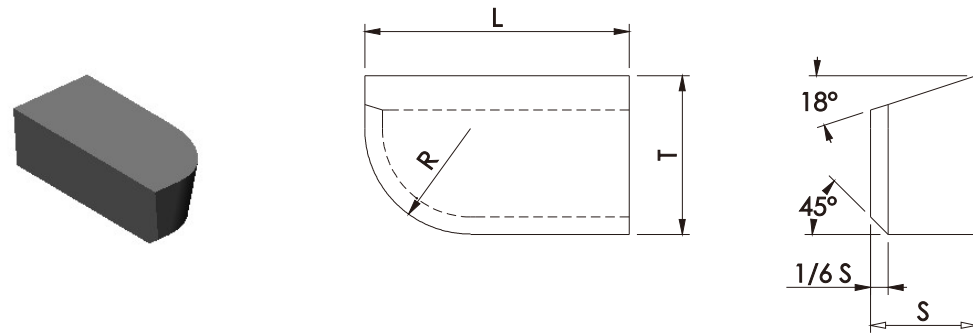
## Tungsten Carbide Brazed Tips



Type	Dimension				Approx per piece weight(g)			
	L	T	S	A	YG6	YG8	YT5	YT15
E4	10.0	4.0	2.5	/	1.3	1.3	1.2	1.0
E5	12.0	5.0	3.0	/	2.4	2.3	2.0	1.8
E6	14.0	6.0	3.5	/	3.8	3.7	3.3	3.0
E8	16.0	8.0	4.0	9°	6.3	6.2	5.4	4.8
E10	18.0	10.0	5.0	9°	10.8	10.5	9.3	8.1
E12	20.0	12.0	6.0	9°	16.9	16.5	14.5	12.7
E16	22.0	16.0	7.0	9°	27.4	26.8	23.5	20.6
E20	25.0	20.0	8.0	9°	43.1	42.2	37.1	32.4
E25	28.0	25.0	9.0	9°	65.2	63.9	56.1	49.2
E32	32.0	32.0	10.0	9°	101.3	99.3	87.1	76.3



## Carbide Brazed Tips



Type	Dimension				Approx per piece weight(g)			
	L	T	S	R	YG6	YG8	YT5	YT15
A6	6.0	4.0	2.5	2.5	0.75	0.73	0.64	0.57
A8	8.0	5.0	3.0	3.0	1.52	1.49	1.3	1.14
A10	10.0	6.0	4.0	4.0	3.0	2.9	2.6	2.28
A20	20.0	12.0	7.0	7.0	21.5	21.1	18.5	16.3
A50	50.0	25.0	14.0	14.0	228.0	223.0	196.0	171.5

## Customized Carbide Cutting Tools



## Tungsten Carbide Special Shape

OEM & ODM are welcome!

1. You are looking for a manufacturing solution and inquire at custom special shape tungsten carbide wear parts.
2. Xingyu cemented carbide will evaluate your drawings or help you create them.
3. Xingyu cemented carbide will provide you a written quotation.
4. Upon acceptance we will produce PI for your approval.
5. Move into production.
6. We communicate with you during the production process,including tracking production process and take pictures for you and so on.
7. Packing and Shipping



## Mining Tools

Tungsten carbide mining insert tips and buttons have their unique working properties, which are widely used in oil drilling and shoveling snow, snow machines and other equipment and used for quarrying, mining, tunnel engineering, and civil buildings.

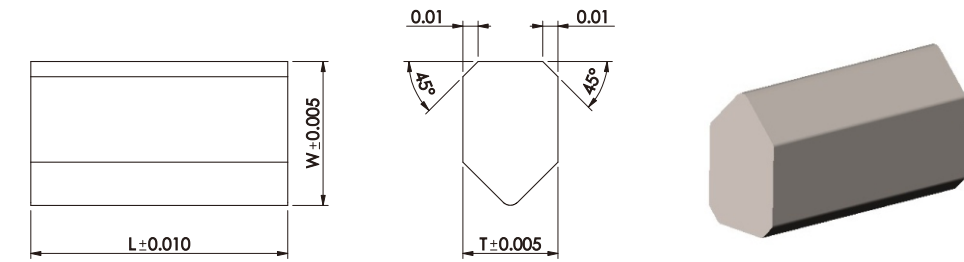
Cemented carbide snowplow inserts or tips are brazed into milled grooves in the wearing edge of the snowplow blade to substantially extend the life of the blades by as much as 20 times over steel alone.

Features of Cemented Carbide Mining Buttons.

1. high strength and high hardness.
2. excellent hardness, wear-resistance, high elastic modulus, high flexural strength.
3. good chemical stability (acid, alkali, high temperature oxidation), impact resistance.
4. good toughness, low coefficient of expansion etc.

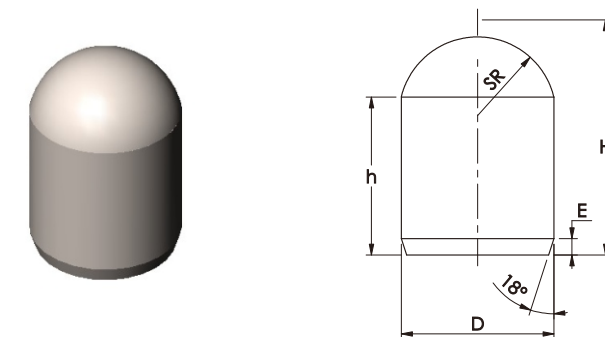


## Snow Plow Insert



Dimension(inch)			
D	d1	d2	S1
8.01	4.5	3	3
8.01	4.5	2	3

## Tungsten Carbide Button



Type	Dimension				
	D	H	h	SR	E
Q0810	8.0	10.0	7.1	4.2	1.5
Q1010	10.0	10.0	6.2	5.2	1.5
Q1012	10.0	12.0	8.2	5.2	1.5
Q1014	10.0	14.0	10.2	5.2	1.5
Q1625	16.0	25.0	18.6	8.2	2.0
Q1825	18.0	25.0	17.7	9.2	2.0



## Tungsten Carbide Dies

We can supply all kinds of tungsten carbide mold and dies such as stamping mould, cold forging dies, wire drawing dies, punch dies and extrusion dies etc.

Advantages of our mould and dies products

1. With 100% virgin raw material.
2. Products with advanced equipment and perfect workmanship.
3. All products go through in-process and final inspection.
4. Stable and continuous production ability.
5. We produce tungsten carbide parts in various size, grades and surface conditions.
6. All products must be inspected strictly and only those with out any damages can be shipped out.
7. Our fine manufacturing management and professionals make sure we can provide you with more competitive product.



## Exhibitions & Customers Visiting



**SINCERELY WELCOME CUSTOMERS  
WORLDWIDE TO COOPERATE WITH US!**