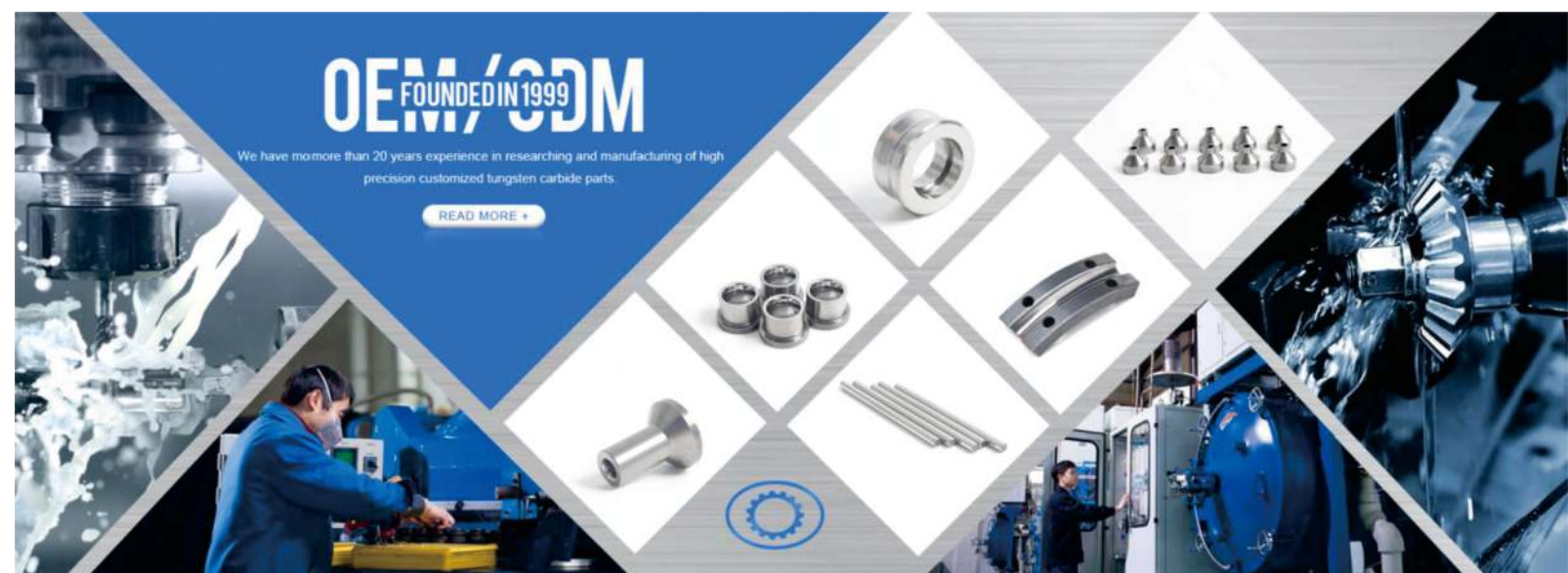




Keep improving, keep innovating
Serve customers with high quality



Zigong Xingyu Cemented Carbide Dies & Tools Co., Ltd

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Telephone: +86-813-5107175

Website: www.zgxymj.com

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

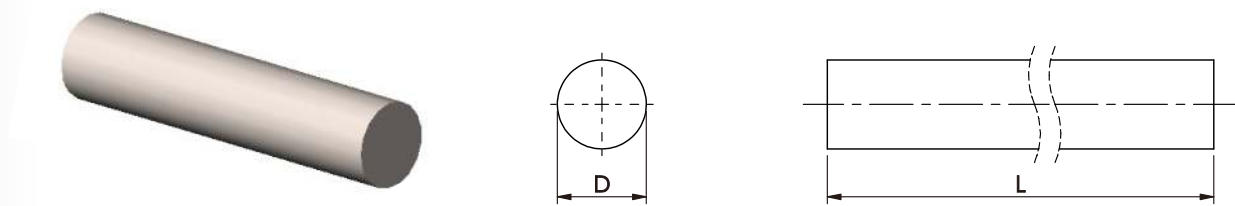


HIP Sintering

Grade

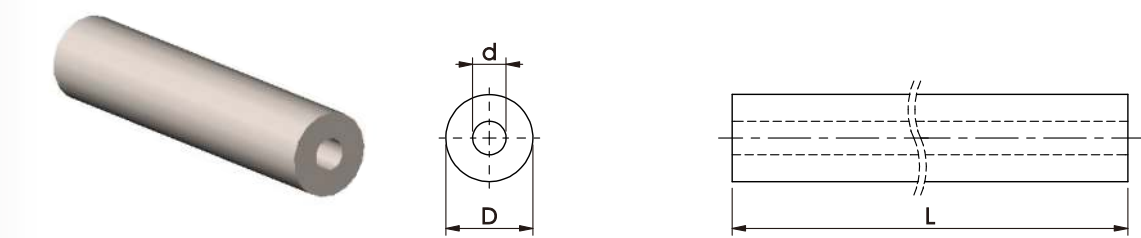
Grade	ISO Grade	Chemical Component		Mechanical Property		
		WC	Co	Density g/cm³	Hardness HRA	TRS ≥N/mm²
YG6	K10	94	6	14.9	91	1420
YG6X	K10	93.5	6	14.9	91.5	1600
YG8	K30	92	8	14.9	90	1600
YG10	K40	90	10	14.7	89	1900
YG10X	K40	89	10	14.7	89.5	2200
YG15	K30	85	15	14.7	87	2100

Solid Blank Rod



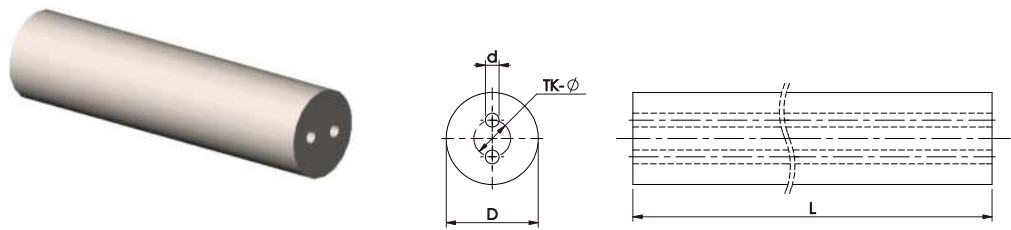
Specification D*L	Diameter Tolerance	Length Tolerance
φ1.0-2.5*330	+ 0.25 + 0.15	+ 7.0 + 3.0
φ3.0-9.5*330	+ 0.40 + 0.20	+ 7.0 + 3.0
φ10.0-15.0*330	+ 0.50 + 0.30	+ 7.0 + 3.0
φ15.5-19.5*330	+ 0.60 + 0.30	+ 7.0 + 3.0
φ20.0-29.5*330	+ 0.70 + 0.40	+ 7.0 + 3.0

Single Straight Hole Rod



Outer Diameter(mm)	Inner Diameter(mm)	Length Diameter(mm)	OD Tolerance(mm)	ID Tolerance(mm)	Length Tolerance(mm)
φ 2-7	φ0.4-3.0	330	+0.6 +0.2	+ 0 - 0.2	+7.0 +3.0
φ8-11	φ 0.4-7.0	330	+0.7 +0.3	+ 0 - 0.2	+7.0 +3.0
φ12-19	φ0.4-10.0	330	+0.9 + 0.4	+ 0 - 0.3	+7.0 +3.0
φ20-30	φ0.4-10.0	330	+1.0 +0.5	+ 0 - 0.3	+7.0 +3.0

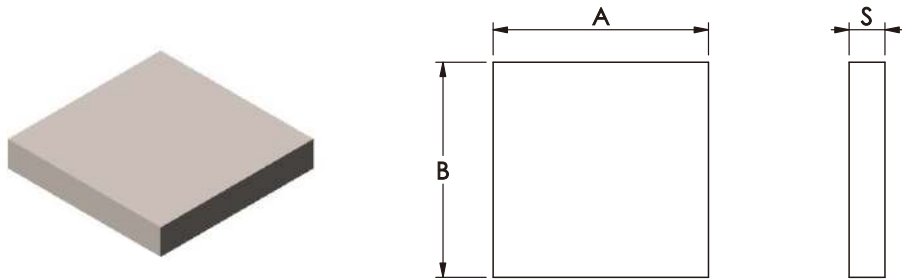
Double Hole Rod



mm

Outer Diameter (mm)	Double Inner Hole Diameter (mm)	Pitch-raw TK(mm)	Length (mm)	OD Tolerance (mm)	ID Tolerance (mm)	Pitch-raw TK(mm)	Length Tolerance (mm)
φ4-11	φ0.8-1.4	1.72-4.85	330	+ 0.4 + 0.3	±0.10	±0.20	+ 7.0 + 3.0
φ12-19	φ1.75-2.0	5.85-8.85	330	+ 0.7 + 0.4	±0.15	±0.25	+ 7.0 + 3.0
φ20-24	φ2.5	9.80-11.75	330	+ 0.8 + 0.5	±0.20	±0.30	+ 7.0 + 3.0
φ25-30	φ3.0	11.75-13.75	330	+ 0.9 + 0.5	±0.25	±0.35	+ 7.0 + 3.0

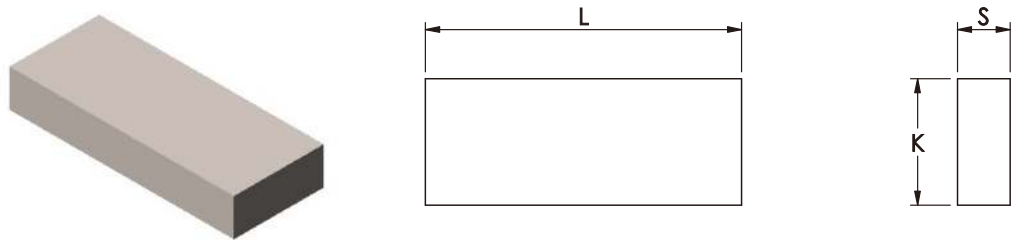
Carbide Plate



mm

a*b* 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)
	3~8	+0.4 +0.2	1~3	+0.35 +0.15	330	+3.0 +0.0
	8~14	+0.5 +0.3	2~5	+0.35 +0.15	330	+3.0 +0.0
	14~34	+0.6 +0.4	14~34	+0.5 +0.2	330	+7.0 +3.0

STB STANDARD SIZE



mm

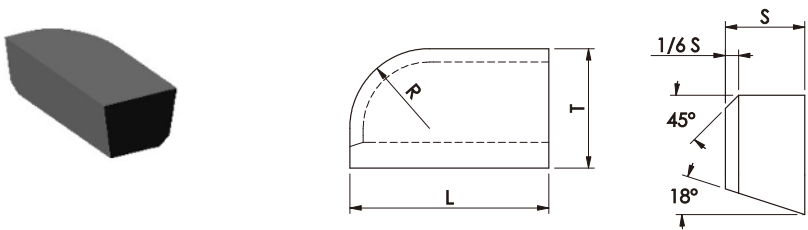
STB STANDARD SIZE							
Style	Thickness (inch)	Width (inch)	Length (inch)	Style	Thickness (inch)	Width (inch)	Length (inch)
STB-12	1/32	1/16	1	STB-416L	1/8	1/2	12
STB-12A	1/32	1/16	11/2	STB-420	1/8	5/8	6
STB-13A	3/64	3/32	13/16	STB-420L	1/8	5/8	12
STB-13	3/64	3/32	1	STB-424	1/8	3/4	6
STB-22L	1/16	1/16	6	STB-424L	1/8	3/4	12
STB-24A	1/16	1/8	1	STB-428	1/8	7/8	6
STB-24C	1/16	1/8	11/4	STB-432	1/8	1	6
STB-24D	1/16	1/8	11/2	STB-432L	1/8	1	6
STB-24B	1/16	1/8	3	STB-436	1/8	11/8	12
STB-24L	1/16	1/8	6	STB-440	1/8	11/4	6
STB-26A	1/16	3/16	1	STB-448	1/8	11/2	6
STB-26C	1/16	3/16	3	STB-456	5/32	13/4	6
STB-16L	1/16	3/16	6	STB-512C	5/32	3/8	6
STB-28A	1/16	1/4	1	STB-516	5/32	1/2	6
STB-28B	1/16	1/4	11/4	STB-520	5/32	5/8	6
STB-28D	1/16	1/4	3	STB-524	5/32	3/4	6
STB-28L	1/16	1/4	6	STB-528	5/32	7/8	6
STB-210L	1/16	5/16	6	STB-532	5/32	1	6
STB-212L	1/16	3/8	6	STB-536	5/32	11/8	6
STB-216L	1/16	1/2	6	STB-540	5/32	11/4	6

Other types of strips may be offered according to customer's requirement

Grade

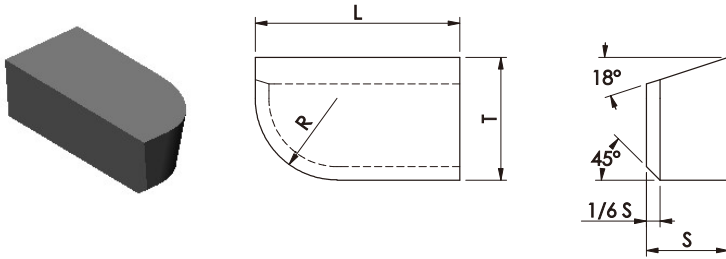
Grade	ISO Grade	Chemical Component		Mechanical Property		
		WC	Co	Density g/cm ³	Hardness HRA	TRS ≥N/mm ²
YT5	P30	85	10	13.20	89.50	1430
YT14	P20	78	8	11.80	90.50	1270
YT15	P10	79	6	11.60	91.00	1180
YT30	P05	66	4	9.70	92.50	890
YG3X	K01	96.5	3	15	91.5	1700
YG6X	K10	93.5	6	14.9	91.5	1600
YG6A	K10	93.5	6	14.9	91.5	1540
YG6	K15-K20	93	6	14.9	91	1420
YG8	K30	92	8	14.9	90	1600

Type A



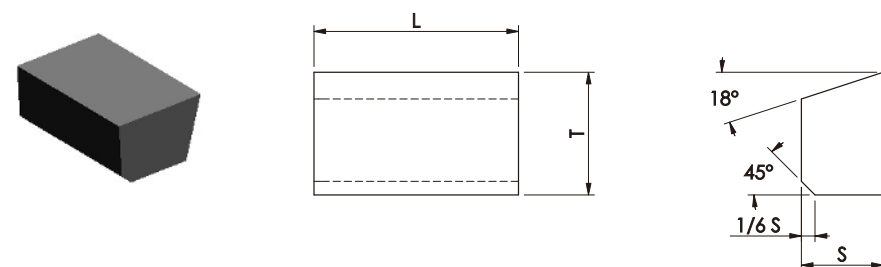
Type	Dimension				Approx per piece weight(g)			
	L	T	S	R	YG6	YG8	YT5	YT15
A5	5.0	3.0	2.0	2.0	0.4	0.36	0.32	0.28
A6	6.0	4.0	2.5	2.5	0.75	0.73	0.64	0.57
A8	8.0	5.0	3.0	3.0	1.52	1.49	1.3	1.14
A10	10.0	6.0	4.0	4.0	3.0	2.9	2.6	2.28
A12	12.0	8.0	5.0	5.0	6.0	5.9	5.2	4.6
A16	16.0	16.0	6.0	6.0	12.2	11.9	10.5	9.2
A20	20.0	12.0	7.0	7.0	21.5	21.1	18.5	16.3

Type B



Type	Dimension				Approx per piece weight(g)			
	L	T	S	R	YG6	YG8	YT5	YT15
B 5	5.0	3.0	2.0	2.0	0.4	0.36	0.32	0.28
B 6	6.0	4.0	2.5	2.5	0.75	0.73	0.64	0.57
B 8	8.0	5.0	3.0	3.0	1.52	1.49	1.30	1.14
B 10	10.0	6.0	4.0	4.0	3.0	2.9	2.6	2.28
B 12	12.0	8.0	5.0	5.0	6.0	5.9	5.2	4.6
B 16	16.0	10.0	6.0	6.0	12.2	11.9	10.5	9.2
B 20	20.0	12.0	7.0	7.0	21.5	21.1	18.5	16.3
B 25	25.0	14.0	8.0	8.0	36.0	35.3	31.0	27.2

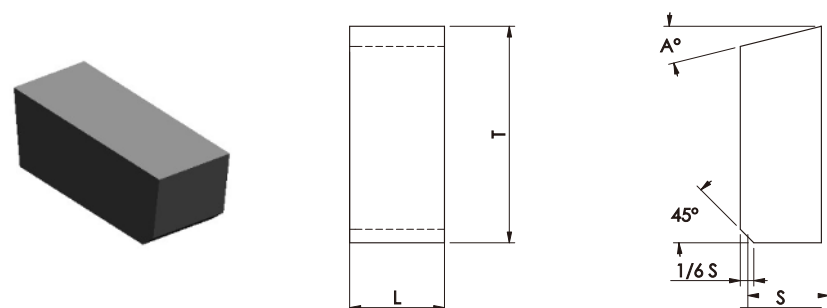
Type C



mm

Type	Dimension			Approx per piece weight(g)			
	L	T	S	YG6	YG8	YT5	YT15
C5	5.0	3.0	2.0	0.4	0.4	0.34	0.3
C6	6.0	4.0	2.5	0.8	0.8	0.7	0.6
C8	8.0	5.0	3.0	1.6	1.6	1.4	1.2
C10	10.0	6.0	4.0	3.2	3.1	2.7	2.4
C12	12.0	8.0	5.0	6.4	6.3	5.5	4.9
C16	16.0	10.0	6.0	12.9	12.6	11.1	9.7
C20	20.0	12.0	7.0	22.7	22.2	19.5	17.1
C25	25.0	14.0	8.0	37.8	37.0	32.5	28.4

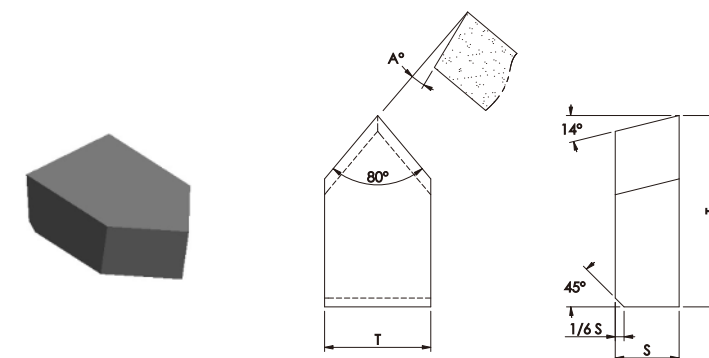
Type D



mm

Type	Dimension				Approx per piece weight(g)			
	L	T	S	A	YG6	YG8	YT5	YT15
D3	3.5	8.0	3.0	/	1.3	1.2	1.1	1.0
D4	4.5	10.0	4.0	14°	2.6	2.5	2.2	1.9
D5	5.5	12.0	5.0	14°	4.7	4.6	4.0	3.6
D6	6.5	14.0	6.0	14°	7.7	7.6	6.6	5.8
D8	8.5	16.0	8.0	14°	15.4	15.1	13.2	11.6
D10	10.5	18.0	10.0	14°	26.2	25.7	22.5	19.7

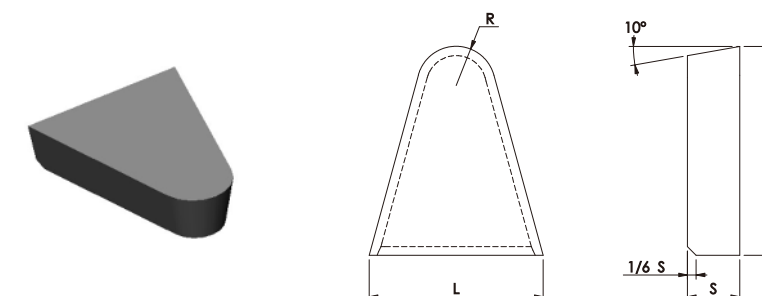
Type E



mm

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
E16	20.0	12.0	6.0	9°	16.96	16.5	14.5	12.7
E12	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

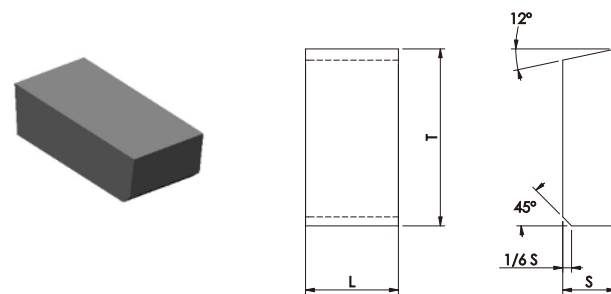
Type G



mm

Type	Dimension				Approx per piece weight(g)			
	L	T	S	R	YG6	YG8	YT5	YT15
G8	8.0	12.0	4.0	1.0	2.9	2.8	2.5	2.2
G10	10.0	14.0	4.0	1.5	4.5	4.4	3.8	3.4
G12	12.0	17.0	5.0	2.5	8.8	8.6	7.6	6.6
G16	16.0	20.0	6.0	3.5	16.8	16.5	14.5	12.7
G20	20.0	24.0	6.0	4.5	25.9	25.4	22.3	19.5
G25	25.0	28.0	8.0	6.0	50.7	45.6	43.7	38.2
G30	30.0	34.0	10.0	8.0	95.2	93.3	81.8	71.7

Type K



mm

Type	Dimension			Approx per piece weight(g)			
	L	T	S	YG6	YG8	YT5	YT15
K2	2.5	15.0	4.0	2.2	2.1	1.9	1.7
K3	3.5	15.0	4.0	3.1	3.0	2.6	2.3
K4	4.5	15.0	4.0	3.9	3.8	3.4	3.0
KJ5	5.5	15.0	4.0	4.8	4.7	4.1	3.6
K6	6.5	15.0	4.0	5.7	5.6	4.9	4.3
K7	7.5	15.0	4.0	6.5	6.4	5.6	5.0
K8	8.5	20.0	6.0	14.8	14.5	12.7	11.1
K9	9.5	20.0	6.0	16.5	16.2	14.2	12.4
K10	10.5	20.0	6.0	18.2	17.9	15.7	13.7
K12	12.8	20.0	6.0	21.7	21.3	18.6	16.4

1.The tolerance of length(L),width(T),thickness(S),radius(R)of the inserts as specified in the following table.

mm

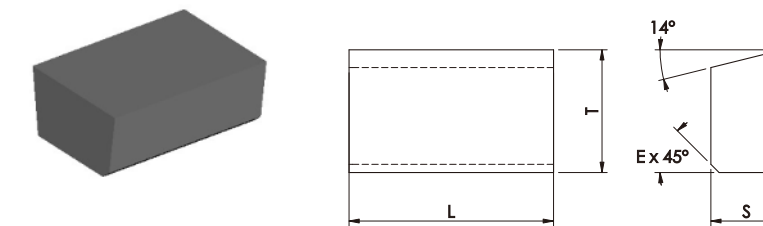
Dimension	≤6	≤6~12	≤12~25	≤25~20	≤50
Tolerance	+ 0.3	+ 0.4	+ 0.6	+ 1.0	+ 2.0
	0.0	0.0	0.0	0.0	0.0

2.The tolerance of flatness as specified in the following table.

mm

Dimension	≤18	≤18~30	> 30
Tolerance	0.12	0.15	0.2

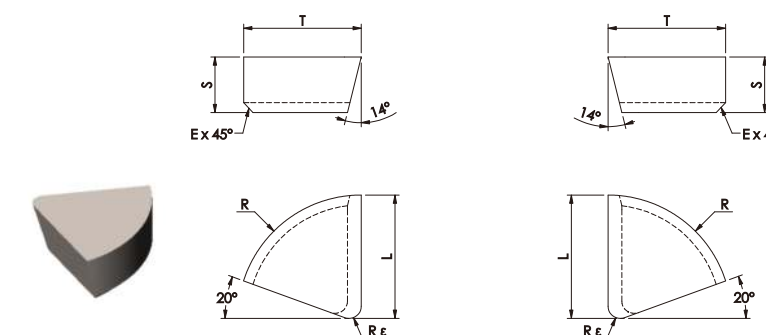
Type A 1



mm

Type	Dimension				Approx per piece weight(g)			
	L	T	S	E	YG6	YG8	YT5	YT15
A106	6.0	5.0	2.5	/	1.1	1.1	1.0	0.9
A108	8.0	7.0	3.0	/	2.6	2.5	2.1	1.9
A110	10.0	6.0	3.5	0.8	2.9	2.8	2.4	2.2
A112	12.0	10.0	4.0	0.8	6.8	6.6	5.7	5.2
A114	14.0	12.0	4.5	0.8	10.7	10.5	8.9	8.1
A116	16.0	10.0	5.5	0.8	12.3	12.0	10.5	9.7

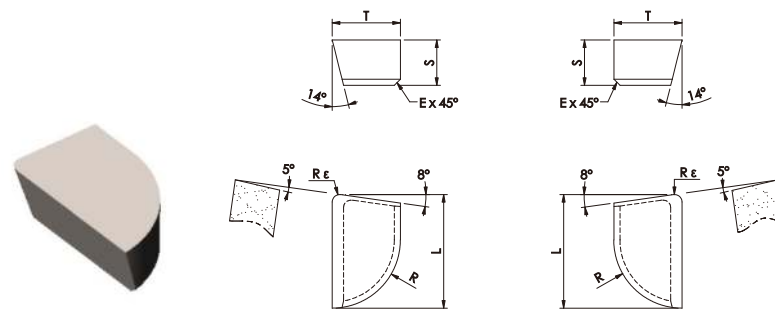
Type A2



mm

Type		Dimension						Approx per piece weight (g)			
Right	Left	L	T	S	R	Rε	E	YG6	YG8	YT5	YT15
A208	/	8.0	7.0	2.5	7.0	0.5	/	1.4	1.4	1.3	1.3
A210	/	10.0	8.0	3.0	8.0	1.0	/	2.8	2.8	2.5	2.2
A212	A212Z	12.0	10.0	4.5	4.5	1.0	1.0	5.4	5.3	4.5	4.2
A216	A216Z	16.0	14.0	6.0	6.0	6.0	0.8	13.0	12.8	11.3	10.4
A220	A220Z	20.0	18.0	7.0	7.0	1.0	0.8	23.7	23.3	20.8	18.7

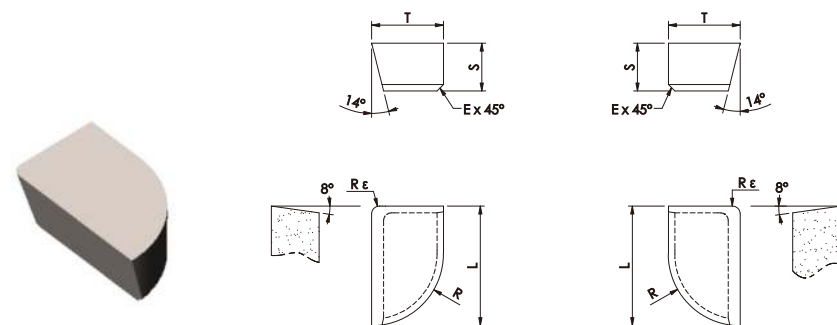
Type A3



mm

Type		Dimension					Approx per piece weight (g)			
Right	Left	L	T	S	R	E	YG6	YG8	YT5	YT15
A310	/	10.0	6.0	3.0	6.0	/	2.4	2.3	2.0	1.8
A312	A312Z	12.0	7.0	4.0	7.0	0.8	3.7	3.7	3.2	2.9
A315	A315Z	15.0	9.0	6.0	9.0	0.8	9.3	9.1	7.6	7.0
A320	A320Z	20.0	11.0	7.0	11.0	12.8	17.5	17.2	14.8	12.9
A325	A325Z	25.0	14.0	8.0	14.0	0.8	32.0	31.5	27.0	24.8

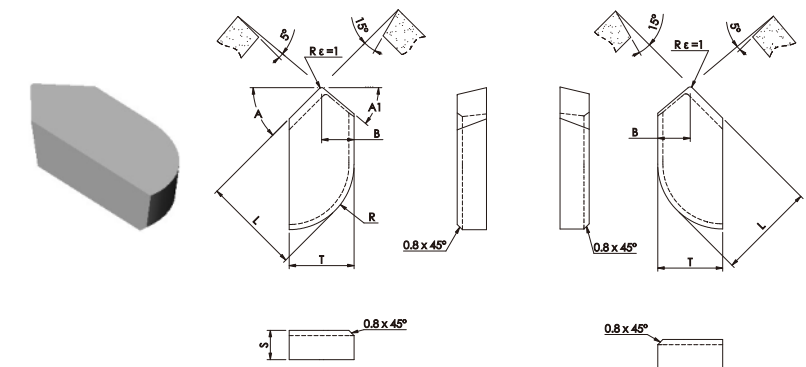
Type A4



mm

Type		Dimension						Approx per piece weight (g)			
Right	Left	L	T	S	R	R _ε	E	YG6	YG8	YT5	YT15
A406	/	6.0	5.0	2.5	5.0	0.5	/	1.0	0.9	0.8	0.7
A408	/	8.0	6.0	3.0	6.0	0.5	/	1.8	1.8	1.4	1.3
A410	A410Z	10.0	6.0	3.5	6.0	1.0	0.8	2.4	2.4	1.8	1.7
A412	A412Z	12.0	8.0	4.5	8.0	1.0	0.8	5.0	4.9	4.2	3.9
A416	A416Z	16.0	10.0	5.5	10.0	1.0	0.8	10.4	10.2	8.6	7.9
A420	A420Z	20.0	12.0	7.0	12.5	1.0	0.8	19.4	19.0	17.0	15.5
A425	A425Z	25.0	15.0	8.5	16.0	1.0	0.8	37.0	36.4	32.5	29.7
A430	A430Z	30.0	16.0	6.0	16.0	1.0	0.8	36.0	35.4	30.0	27.7
A430A	A430AZ	30.0	16.0	9.5	16.0	1.0	0.8	54.2	53.2	47.0	43.3

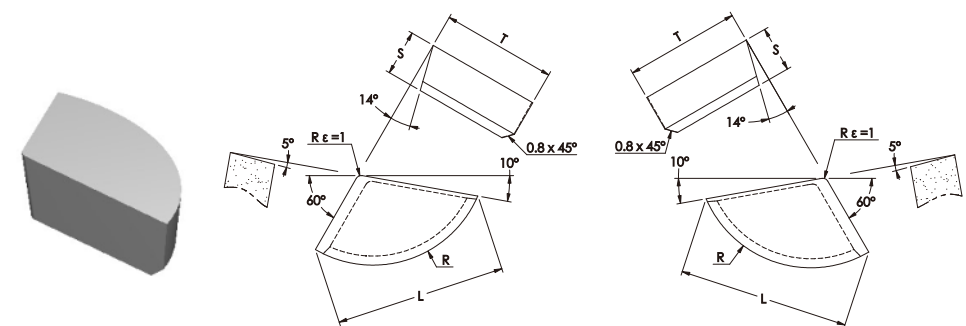
Type A5



mm

Type		Dimension							Approx per piece weight (g)			
Right	Left	L	T	S	B	R	A	A1	YG6	YG8	YT5	YT15
A515	A515Z	15.0	10.0	4.5	5.0	10.0	45°	40°	7.2	7.0	5.9	5.3
A518	A518Z	18.0	12.0	5.5	4.0	12.0	45°	50°	11.4	11.3	9.8	8.6

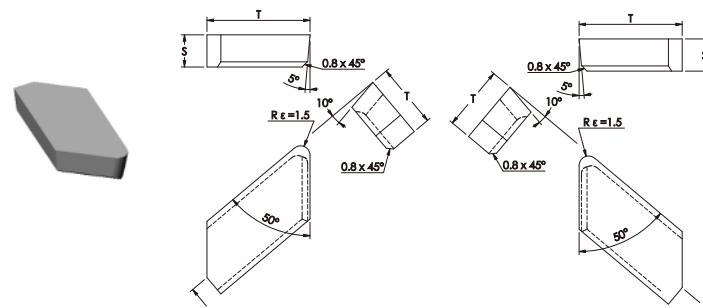
Type A6



mm

Type		Dimension				Approx per piece weight (g)			
Right	Left	L	T	S	R	YG6	YG8	YT5	YT15
A 612	A 612 Z	12.0	8.0	3.0	8.0	3.2	3.1	2.8	2.5
A 615	A 615 Z	15.0	10.0	4.0	10.0	6.1	6.0	5.3	4.7
A 618	A 618 Z	18.0	12.0	4.5	12.0	10.0	9.8	8.6	7.6

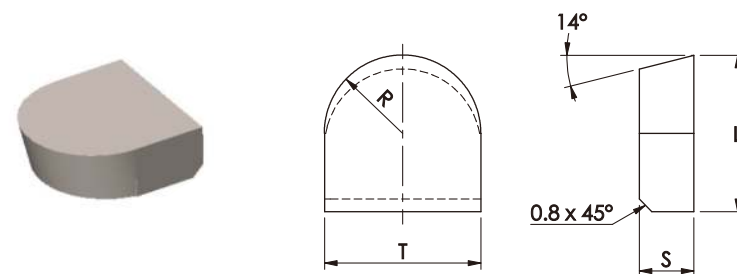
Type B1



mm

Type		Dimension				Approx per piece weight (g)			
Right	Left	L	T	S	E	YG6	YG8	YT5	YT15
B108	/	8.0	6.0	3.0	/	3.5	3.0	2.8	2.5
B112	B112Z	12.0	8.0	4.0	1.0	5.4	5.3	4.7	4.2
A116	A116Z	16.0	10.0	5.0	1.0	12.2	12.0	11.4	9.2
A120	A120Z	20.0	14.0	5.0	1.0	25.8	25.5	22.1	19.4
A120A	A120AZ	20.0	16.0	7.0	1.5	30.9	30.4	26.6	23.4
A125	A125Z	25.0	14.0	5.0	1.5	32.0	31.5	28.2	24.8

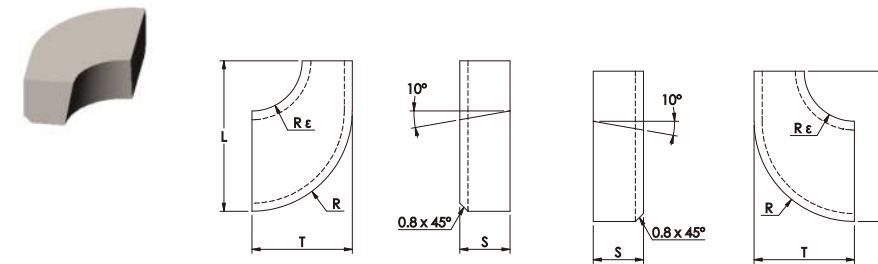
Type B2



mm

Type	Dimension					Approx per piece weight (g)			
	L	T	S	R	E	YG6	YG8	YT5	YT15
B208	8.0	8.0	3.0	4.0	/	2.6	2.6	2.1	2.0
B210	10.0	10.0	3.5	5.0	0.8	4.5	4.4	3.6	3.2
B212	12.0	12.0	4.5	6.0	0.8	8.3	8.1	7.1	6.4
B214	14.0	16.0	5.0	8.0	0.8	16.5	16.2	14.0	12.7
B216	16.0	20.0	6.0	10.0	0.8	26.8	26.3	23.5	21.6
B220	20.0	25.0	7.0	12.5	0.8	47.7	46.8	41.3	38.1

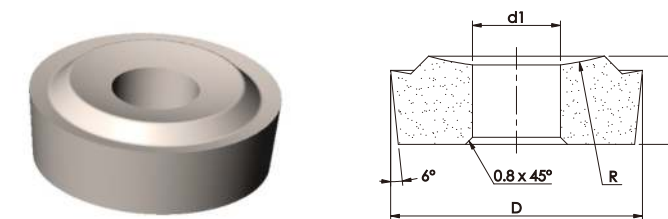
Type B3



mm

Type		Dimension					Approx per piece weight (g)			
Right	Left	L	T	S	R	R1	YG6	YG8	YT5	YT15
B312	B312Z	12.0	8.0	4.0	/	3.0	4.3	4.2	3.6	3.3
B315	B315Z	15.0	10.0	5.0	1.0	5.0	8.0	7.9	6.3	5.8
A318	A315Z	18.0	12.0	6.0	1.0	6.0	13.4	13.3	10.6	10.3
A322	A322Z	22.0	16.0	7.0	1.0	10.0	22.4	22.2	18.4	16.6

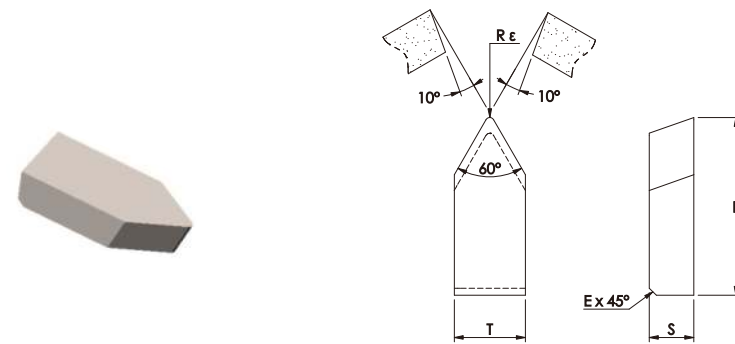
Type B4



mm

Type	Dimension				Approx per piece weight (g)			
	D	d	H	R	YG6	YG8	YT5	YT15
B428	28.6	10.0	10.0	35.0	77.0	76.0	60.9	53.6
B433	33.0	12.0	10.0	35.0	106.0	104.0	82.3	72.4
A446	46.5	15.0	12.0	41.5	248.0	246.0	195.0	171.8

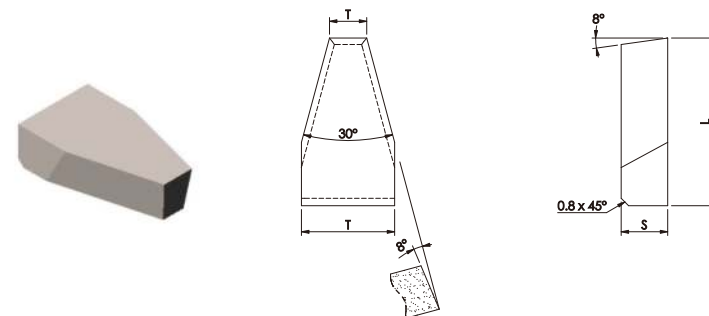
Type C1



mm

Type	Dimension					Approx per piece weight (g)			
	L	T	S	Rε	E	YG6	YG8	YT5	YT15
C110	10.0	4.0	3.0	0.5	/	1.5	1.5	1.3	1.2
C116	16.0	6.0	4.0	0.5	0.8	4.8	4.7	4.0	3.7
C120	20.0	8.0	5.0	0.5	0.8	10.1	9.9	8.2	7.6
C122	22.0	10.0	6.0	0.5	0.8	15.6	15.3	13.7	12.0
C125	25.0	12.0	7.0	0.5	0.8	25.0	24.5	21.3	18.9

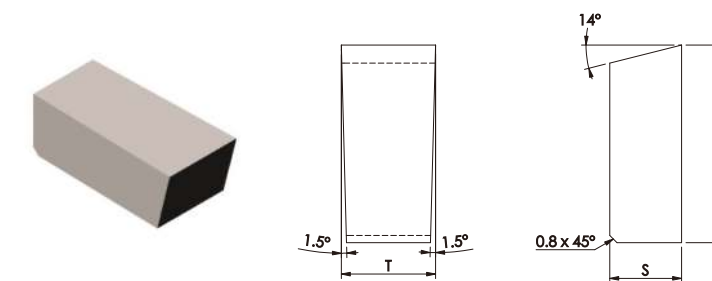
Type C2



mm

Type	Dimension				Approx per piece weight (g)			
	L	T	B	S	YG6	YG8	YT5	YT15
C215	15.0	7.0	1.8	4.0	4.3	4.3	3.6	3.3
C218	18.0	10.0	3.1	5.0	9.3	9.1	7.9	7.2
C223	23.0	14.0	4.9	5.0	17.3	17.0	15.0	13.8
C228	28.0	18.0	7.7	6.0	34.3	33.8	29.5	27.2
C236	36.0	28.0	13.1	7.0	79.4	78.0	67.5	62.1

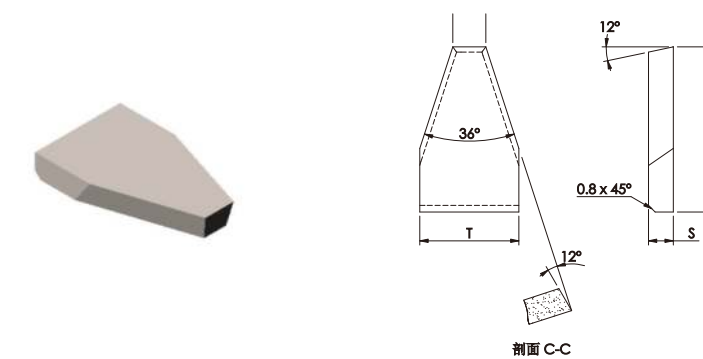
Type C3



mm

Type	Dimension				Approx per piece weight(g)			
	D	T	B	S	YG6	YG8	YT5	YT15
C303	12.0	3.5	3.0	/	1.8	1.7	1.5	1.4
C304	14.0	4.5	4.0	0.8	3.4	3.3	2.9	2.7
C305	17.0	5.5	5.0	0.8	6.4	6.2	5.4	5.0
C306	17.0	6.5	6.0	0.8	9.1	8.8	7.6	6.9
C308	20.0	8.5	7.0	0.8	15.9	15.6	13.7	12.2
C310	22.0	10.5	8.0	0.8	24.4	24.0	21.7	19.8
C312	22.0	12.5	10.0	0.8	36.7	36.0	32.0	29.5
C316	25.0	16.5	11.0	1.2	61.2	60.2	54.0	49.1

Type C4

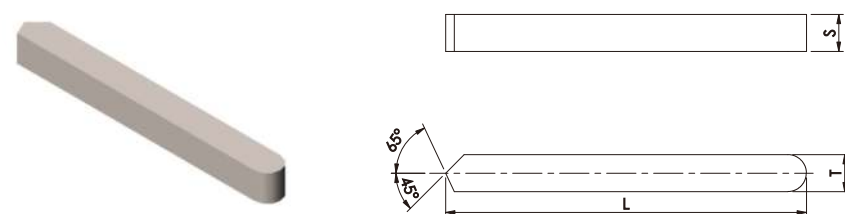


剖面 C-C

mm

Type	Dimension				Approx per piece weight (g)			
	L	T	S	E	YG6	YG8	YT5	YT15
C402	20.0	12.0	3.0	5.0	13.2	13.0	11.7	10.8
C425	25.0	16.0	4.0	5.0	21.1	20.7	17.8	16.4
C430	30.0	20.0	5.5	6.0	38.7	38.0	33.0	30.4
C435	35.0	25.0	7.5	6.0	55.3	54.3	48.0	44.3
C442	42.0	35.0	12.5	8.0	128.0	127.0	110.0	98.1

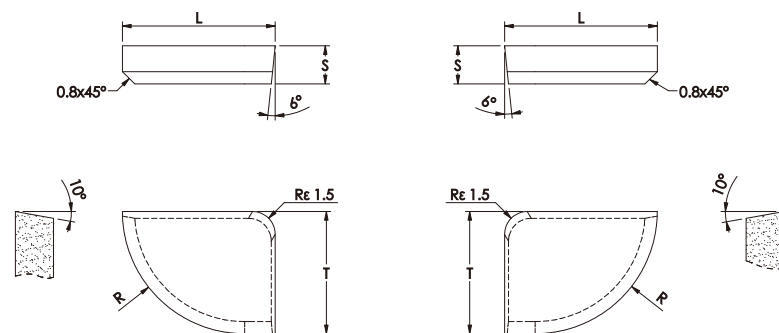
Type C5



mm

Type	Dimension				Approx per piece weight (g)			
	L	T	S	R	YG6	YG8	YT5	YT15
C539	39.0	4.0	4.0	2.0	9.0	8.7	8.4	7.0
C545	45.0	6.0	4.0	3.0	15.7	15.7	13.7	12.0

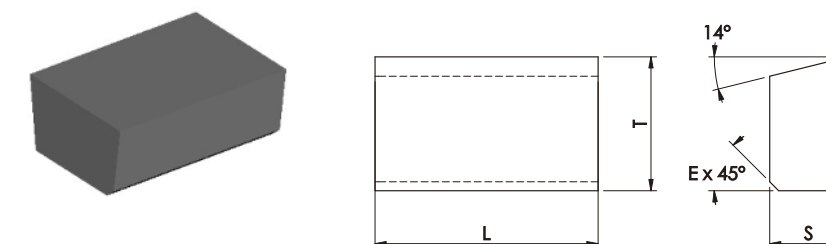
Type D1



mm

Type		Dimension					Approx per piece weight(g)			
Right	Left	L	T	S	R	R1	YG6	YG8	YT5	YT15
D110	/	10.0	8.0	2.5	8.0	0.5	3.2	3.1	2.6	2.4
D112	/	12.0	10.0	3.0	10.0	0.5	4.8	4.7	3.9	3.6
D115	D115Z	15.0	12.0	3.5	12.5	0.5	8.4	8.2	6.7	6.1
D120	D120Z	20.0	16.0	4.0	16.0	1.0	16.8	16.5	14.2	13.1
D125	D125Z	25.0	20.0	5.0	20.0	1.0	29.1	28.5	25.2	22.3
D130	D130Z	30.0	20.0	6.0	20.0	1.0	43.2	42.5	36.8	33.9

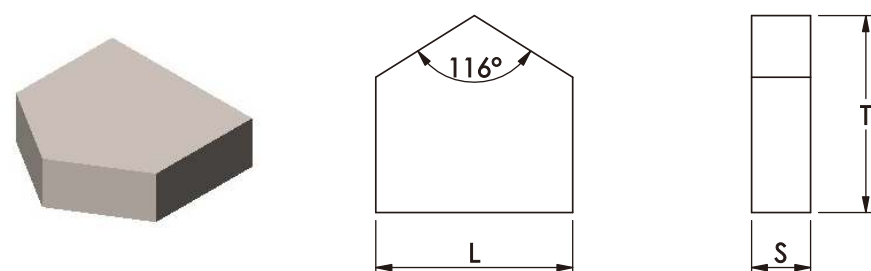
Type D2



mm

Type	Dimension				Approx per piece weight (g)			
	L	T	S	E	YG6	YG8	YT5	YT15
D206	6.0	7.0	3.0	/	1.7	1.6	1.5	1.4
D208	8.0	4.0	3.0	/	1.5	1.4	1.2	1.1
D210	10.0	5.0	3.0	/	2.3	2.2	1.8	1.7
D210A	10.0	10.0	3.0	/	4.5	4.4	3.9	3.6
D212	12.0	6.0	3.0	/	3.3	3.2	2.6	2.4
D212A	12.0	12.0	3.5	0.8	7.2	7.1	6.1	5.6
D214	14.0	7.0	3.5	0.8	4.8	4.7	4.0	3.7
D214A	14.0	12.0	3.5	0.8	8.4	8.3	7.2	6.6
D216	16.0	7.0	3.5	0.8	5.3	5.2	4.6	4.4
D216A	16.0	12.0	3.5	0.8	9.6	9.4	8.2	7.5
D218	18.0	5.0	3.0	/	4.2	4.1	3.5	3.1
D218A	18.0	7.0	3.5	0.8	6.2	6.0	5.2	4.8
D218B	18.0	12.0	3.5	0.8	10.7	10.5	9.5	8.7
D220	20.0	10.0	4.0	0.8	11.3	11.1	9.8	9.0
D222	22.0	6.0	3.0	/	5.9	5.8	5.2	4.6
D222A	22.0	14.0	4.0	0.8	17.6	17.3	15.3	14.3
D224	24.0	14.0	4.0	0.8	18.9	18.7	16.2	14.9
D226	26.0	10.0	5.0	0.8	18.1	17.8	15.5	13.9
D226A	26.0	14.0	5.0	0.8	25.4	25.0	22.5	20.7
D228	28.0	10.0	4.0	0.8	15.7	15.4	13.7	12.0
D228A	28.0	14.0	4.0	0.8	22.5	22.3	20.2	17.3
D230	30.0	14.0	5.0	0.8	30.2	29.6	26.0	24.0
D232	32.0	12.0	5.0	0.8	27.3	27.0	23.7	20.8
D232A	32.0	14.0	4.0	0.8	25.3	25.0	22.5	20.7
D236	36.0	14.0	4.0	0.8	34.0	33.4	29.3	25.8
D238	38.0	12.0	5.0	0.8	32.9	32.5	28.2	24.8

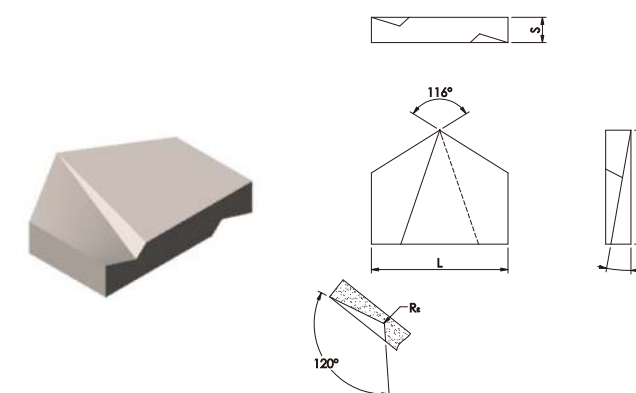
Type E1



mm

Type	Dimension			Approx per piece weight (g)			
	L	T	S	YG6	YG8	YT5	YT15
E105	5.0	5.0	1.5	0.5	0.5	0.5	0.5
E106	6.0	6.0	1.5	0.7	0.7	0.6	0.6
E107	7.0	6.0	1.5	0.8	0.8	0.8	0.7
E108	8.0	7.0	1.8	1.3	1.3	1.1	1.0
E109	9.0	8.0	2.0	1.7	1.7	1.5	1.4
E110	10.0	9.0	2.0	2.3	2.2	1.9	1.7

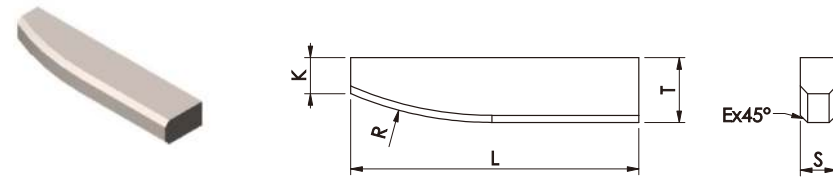
Type E2



mm

Type	Dimension				Approx per piece weight(g)			
	L	T	S	R0	YG6	YG8	YT5	YT15
E210	10.8	9.0	2.0	1.0	2.1	2.0	1.8	1.6
E211	11.8	10.0	2.5	1.0	3.3	3.3	2.6	2.4
E213	13.0	11.0	2.5	1.0	3.8	3.8	3.3	3.0
E214	14.0	12.0	2.5	1.0	4.6	4.5	3.8	3.5
E215	15.0	13.0	2.5	1.0	5.2	5.1	4.4	4.0
E216	16.0	14.0	3.0	1.0	7.3	7.2	6.1	5.5
E217	17.0	15.0	3.0	1.5	8.2	8.1	6.9	6.2
E218	18.0	16.0	3.0	1.5	9.1	9.0	7.8	7.0
E219	19.0	17.0	3.0	1.5	10.3	10.2	8.7	7.8
E220	20.0	18.0	3.5	1.5	13.6	13.4	11.2	10.1
E221	21.0	18.0	3.5	1.5	14.3	14.1	11.7	10.6
E222	22.0	18.0	3.5	1.5	14.7	14.5	11.2	11.0
E223	23.0	18.0	4.0	1.5	17.7	17.5	14.5	13.1
E224	24.0	18.0	4.0	1.5	18.4	18.2	15.0	13.6
E225	25.0	22.0	4.5	2.0	26.2	25.7	19.8	17.8
E226	26.0	22.0	4.5	2.0	26.3	26.0	20.5	18.3
E227	27.5	22.0	4.5	2.0	29.5	29.2	21.5	19.3
E228	28.5	22.0	4.5	2.0	30.0	29.0	22.0	19.8
E229	29.5	24.0	5.0	2.0	38.5	37.5	28.0	25.3
E230	30.5	24.0	5.0	2.0	39.0	38.0	29.0	26.3
E231	31.5	24.0	5.0	2.0	40.0	39.0	29.5	26.8
E233	33.5	26.0	5.0	2.0	46.0	45.5	34.5	30.7
E236	36.5	26.0	5.0	2.0	50.0	49.0	37.0	33.2
E239	39.5	26.0	5.0	2.0	53.0	52.0	39.0	35.2
E242	42.0	28.0	6.0	2.0	72.5	71.0	54.0	49.1
E244	44.0	28.0	6.0	2.0	75.0	74.0	56.0	51.0
E247	47.0	28.0	6.0	2.0	78.0	77.0	59.0	53.5
E250	50.0	30.0	6.0	2.0	89.0	88.0	68.0	61.5
E252	52.0	30.0	6.0	2.0	91.0	90.0	82.5	72.6

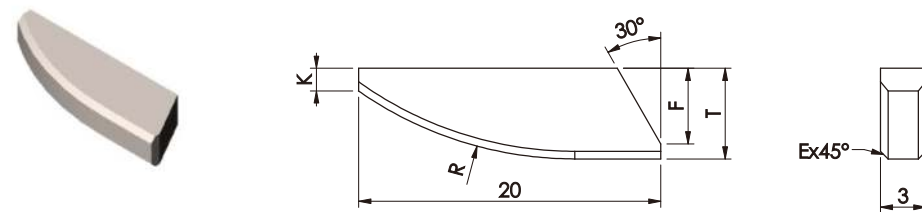
Type E3



mm

Type	Dimension						Approx per piece weight(g)			
	L	T	S	K	R	E	YG6	YG8	YT5	YT15
E312	12.0	6.0	1.5	1.5	20.0	/	1.3	1.3	1.0	0.9
E315	15.0	3.5	2.0	1.5	20.0	/	1.4	1.4	1.2	1.1
E315A	15.0	7.0	2.0	2.5	25.0	/	2.4	2.3	2.1	2.0
E320	20.0	4.5	2.5	2.5	25.0	0.5	2.9	2.8	2.7	2.5
E320A	20.0	6.0	3.5	2.5	25.0	0.5	5.3	5.3	4.2	3.9
E320B	20.0	9.0	2.5	3.5	30.0	0.5	5.6	5.6	4.5	4.1
E325	25.0	8.0	3.0	3.5	30.0	0.5	7.1	7.1	6.9	6.1
E325A	25.0	15.0	3.0	3.5	30.0	0.5	13.1	12.9	11.2	10.0
E330	30.0	10.0	4.0	3.5	30.0	0.5	15.3	15.0	12.9	11.6

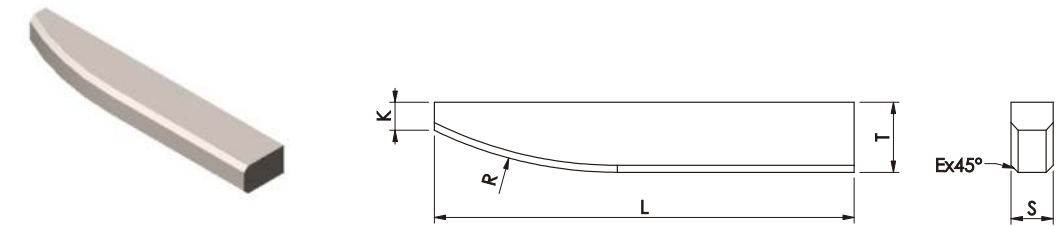
Type E4



mm

Type	Dimension							Approx per piece weight(g)			
	L	T	S	F	R	K	E	YG6	YG8	YT5	YT15
E415	15.0	4.0	2.0	2.5	15.0	1.5	/	1.4	1.4	1.2	1.1
E418	18.0	5.0	2.5	3.5	20.0	1.5	0.5	2.9	2.8	2.2	2.0
E420	20.0	6.0	3.0	5.0	25.0	1.5	0.5	4.1	4.0	3.4	3.0
E425	25.0	8.0	3.5	6.0	25.0	2.0	0.5	8.0	7.9	7.0	6.1
E430	30.0	10.0	4.0	8.0	30.0	2.0	0.5	13.1	12.9	11.4	10.2

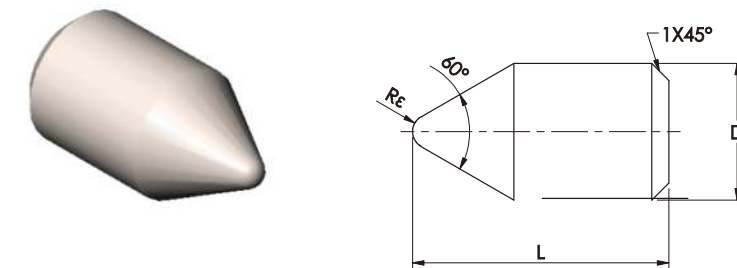
Type E5



mm

Type	Dimension						Approx per piece weight(g)			
	L	T	S	R	K	E	YG6	YG8	YT5	YT15
E515	15.0	2.5	1.3	20.0	1.5	/	0.7	0.7	0.6	0.6
E518	18.0	3.0	1.5	25.0	1.5	/	1.2	1.2	0.9	0.8
E522	22.0	3.5	2.0	25.0	1.5	/	2.0	2.0	1.6	1.5
E525	25.0	4.0	2.5	30.0	2.0	/	3.4	3.3	2.8	2.6
E530	30.0	5.0	3.0	30.0	2.0	0.5	6.0	5.9	5.1	4.6
E540	40.0	6.0	3.5	30.0	2.0	0.5	11.7	11.5	9.5	8.7

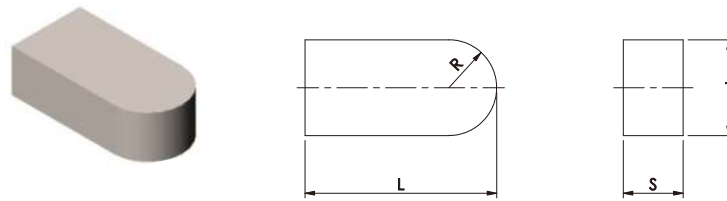
Type F1



mm

Type	Dimension			Approx per piece weight(g)			
	D	L	Rε	YG6	YG8	YT5	YT15
F108	8.0	15.0	1.0	8.0	7.8	7.4	6.5
F112	12.0	20.0	1.5	22.5	22.0	19.4	17.0
F115	15.0	24.0	1.5	41.0	40.2	35.3	31.0
F118	18.0	28.0	2.0	68.5	67.1	58.9	51.8
F124	24.0	35.0	2.0	152.0	149.0	130.7	115.0
F130	30.0	40.0	2.5	255.0	250.0	219.3	193.0
F136	36.0	50.0	2.5	470.0	460.6	404.2	355.7
F140	40.0	60.0	3.0	760.0	744.8	653.6	575.0

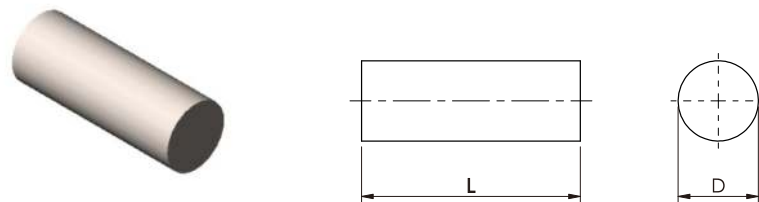
Type F2



mm

Type	Dimension				Approx per piece weight(g)			
	L	T	S	R	YG6	YG8	YT5	YT15
F216	16.0	8.0	5.0	4.0	9.3	9.2	8.0	7.0
F216A	16.0	10.0	5.0	5.0	11.0	10.8	9.9	8.7
F216B	16.0	12.0	6.0	6.0	15.7	15.5	13.6	11.9
F218	18.0	2.5	2.5	1.3	1.8	1.7	1.3	1.2
F220	20.0	3.0	3.0	1.5	2.6	2.5	2.3	2.1
F225	25.0	5.0	4.0	2.5	7.4	7.3	6.2	5.7
F230	30.0	6.0	5.0	3.0	13.5	13.3	10.8	9.9
F230A	30.0	8.0	5.0	4.0	17.4	17.2	16.8	15.3
F230B	30.0	10.0	5.0	5.0	22.0	21.8	24.4	21.8
F230C	30.0	12.0	6.0	6.0	31.4	31.0	39.3	36.4

Type F3



mm

Type	Dimension		Approx per piece weight(g)			
	D	L	YG6	YG8	YT5	YT15
F303	3.5	10.0	1.1	1.1	1.0	0.9
F304	4.5	12.0	3.0	2.9	2.4	2.1
F305	5.5	15.0	5.6	5.5	4.8	4.3
F306	6.5	18.0	9.2	9.0	7.9	6.9
F307	7.5	20.0	13.8	13.6	11.9	10.4
F308	8.5	22.0	20.0	19.7	17.2	15.2

Specifications

1.The tolerance of flatness as specified in the following table.

mm

Dimension	≤18	≥18~30	> 30
Tolerance	0.5	0.20	0.25

2.The length(L),width(T,B),thickness(S),the diameter of in circle(D),e and K as specified in the following table.

mm

Nominal dimensions l,t,b,s,D,e,k	Tolerance(±)	Olerence of t for type E1 and E2
≤2.5	0.20	- 0.10 ~ + 0.30
> 2.5~5.0	0.25	- 0.20 ~ + 0.30
> 5.0~11.0	0.35	- 0.20 ~ + 0.50
> 11.0~11.8	0.50	- 0.40 ~ + 0.60
> 18.0~25.0	0.60	- 0.40 ~ + 0.70
> 25.0~35.0	0.80	- 0.50 ~ + 1.00
> 35.0~45.0	1.00	- 0.50 ~ + 1.30
> 45.0~55.0	1.10	- 0.50 ~ + 1.40
> 55	1.30	

3.The tolerance of the connecting radius between the two supporting sides as specified in the following table.

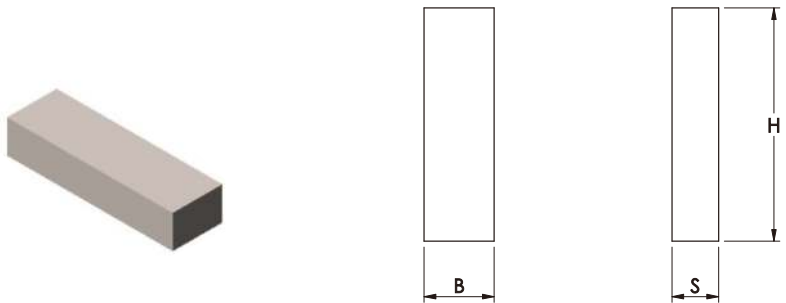
mm

Dimensions(r)	Tolerance	Dimensions (r)	Tolerance
≤6	- 0.50 ~ + 0.00	> 14~18	- 1.00~0.00
> 6~10	- 0.60 ~ + 0.00	> 18~24	- 1.20~0.00
> 10~14	- 0.80 ~ + 0.00	> 24~30	- 0.60~0.00

Grade

Grade	ISO Grade	Chemical Component		Mechanical Property		
		WC	Co	Density g/cm³	Hardness HRA	TRS ≥ N/mm²
YG4C	K01	96	4	15.05	90.8	1790
YG8	K20	92	8	14.68	89.7	2240
YG8C	K20-K30	92	8	14.62	88.1	2350
YG11C	G20	89	11	14.3	87.1	2410
YG13C	G20-G30	87	13	14.15	86.7	2700
YG15	G30	85	15	14.05	88	2300
YG15C	G30-G40	85	15	14	85.7	2700

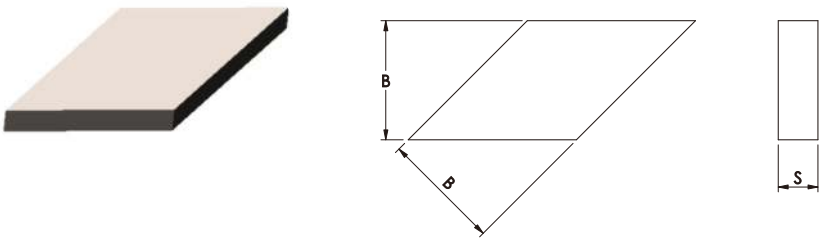
Type T10



mm

Type	Dimension			Application
	B	H	S	
T1003	3.0	15.0	1.5	Used for scraping drill bits of oil well drilling and self-grinding core bits
T1006	6.0	20.0	4.0	
T1008	8.0	20.0	6.0	

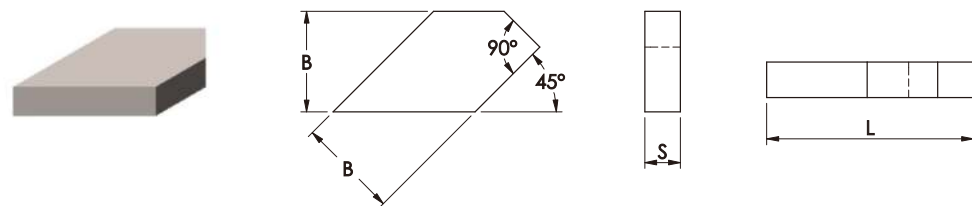
Type T11



mm

Type	Dimension		Application
	B	S	
T1108	8.5	3.0	Used for core bits drilling medium to soft rock
T1112	12.0	4.0	

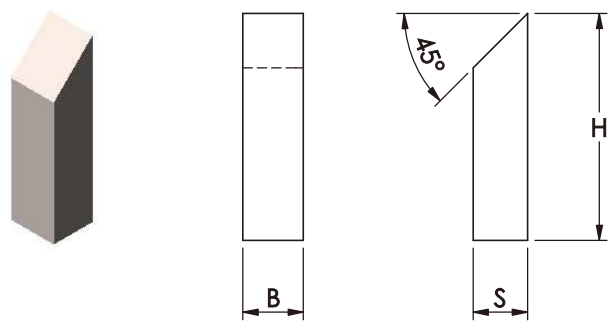
Type T12



mm

Type	Dimension			Application
	B	L	S	
T 1208	8.5	17.5	3.0	Used for core bits drilling medium to soft rock
T 1212	12.0	24.0	4.0	

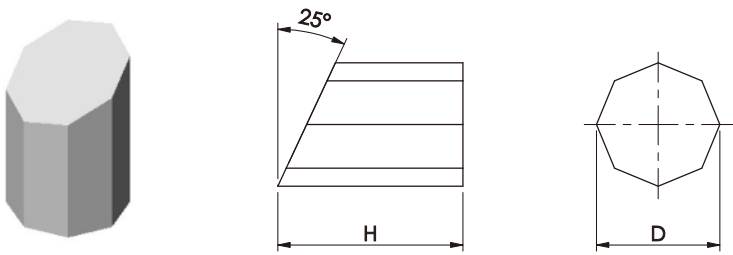
Type T20



mm

Type	Dimension			Application
	B	H	S	
T2004	4.0	15.0	3.6	Used for scraping drill bits of oil well drilling
T2005	5.0	20.0	4.0	
T006	6.0	20.0	6.0	
T2008	8.0	20.0	6.0	
T2010	10.0	20.0	8.0	

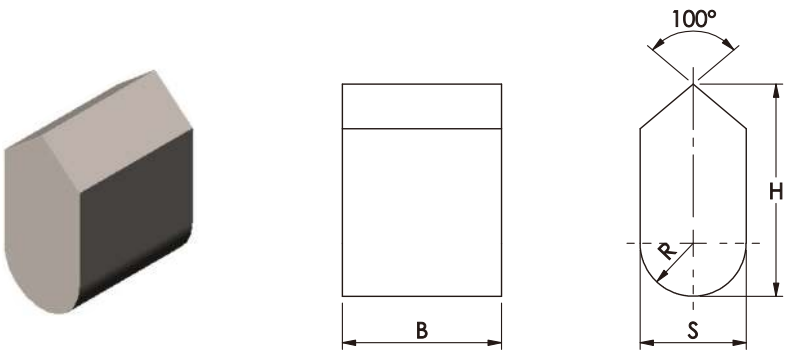
Type T30



mm

Type	Dimension		Application
	D	H	
T3005	5.0	10.0	Used for core drill bits for drilling hard rock formation
T3007	7.0	10.0	
T3007A	7.0	15.0	
T3007B	7.0	20.0	
T3010	10.0	15.0	
T3010A	10.0	20.0	

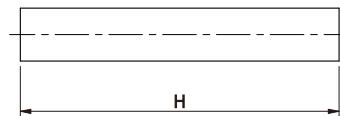
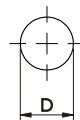
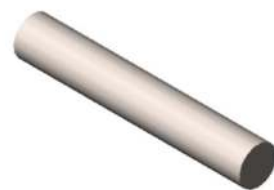
Type T40



mm

Type	Dimension				Application
	B	H	S	R	
T4010	10.0	16.0	8.0	4.0	Used for rotary percusiion drill bits of broken formation
T4012	12.0	16.0	8.0	4.0	
T4014	14.0	16.0	8.0	4.0	

Type T50



mm

Type	Dimension		Application
	H	ϕD	
T5010	10.0	1.8	Used for self-grinding drill bits for drilling medium hard rock formation
T5015	15.0	1.8	
T5020	20.0	2.0	

Technical Requirement

- 1.The tolerance grade,physical and power properties and metallographical structure of products as per relative standards.
- 2.The product's type and demension should be conformity with the item 3.3.
- 3.The tolerance of products as per the following.
 - a.The flatness of supporting surface of products should be not larger than 0.1mm,for T50-type,not l;arger than 0.3mm.the flatness of non-supporting surface should be in conformity with table 1.

Table 1 mm

Thickness	Length		
	< 10	> 10~20	> 20
	Flatness		
0.08	0.10	0.15	0.25
0.08	0.08	0.12	0.25
0.08	0.08	0.12	0.25
> 6.0	0.08	0.10	0.20

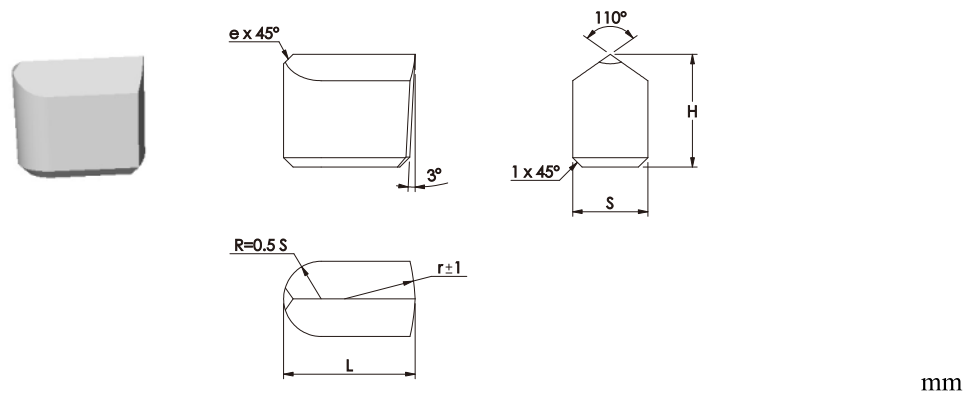
- b.The tolerance of length,width,height,thickness,diameter of carbide products should be in conformity with the table 2

Table 2 mm

Dimension	tolerance	
	Common class	Supior class
≤ 2.5	± 0.20	± 0.15
> 2.5~5.0	± 0.30	± 0.20
> 5.0~11.0	± 0.35	± 0.25
> 11.0~18.0	± 0.50	± 0.35
> 18.0~26.0	± 0.60	± 0.40

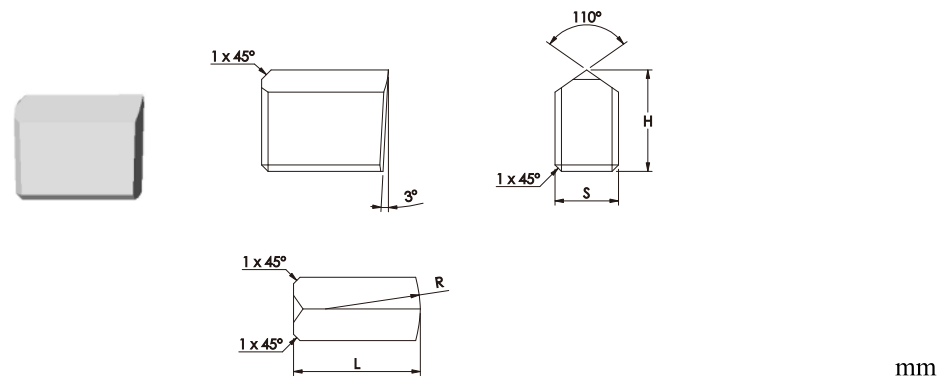
- 4.For product's working face,the depth of flaking edge or corner should not larger than 0.3mm;and for unworking surface , not larger than 0.5mm.
- 5.The tolerance of product's angle is ± 2 .
- 6.The surface should be sand blasted without defects such as scaling,pore,lamination and crack.
- 7.The croess-section should be homogeneous without defects such as lamination ,crack , uncompacted , hole , dirty , balck-ness ,decarbonization.

Type K0



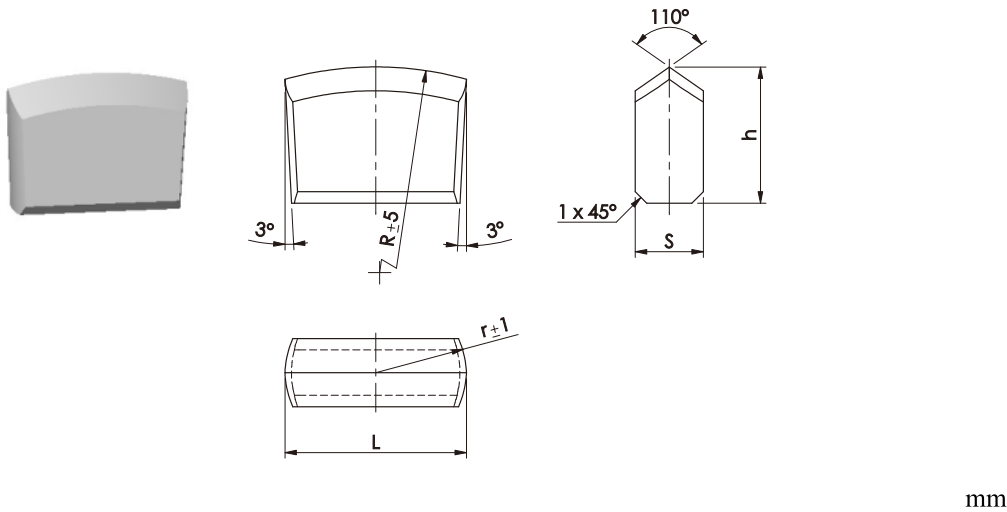
Type	Dimension					
	L	H	S	R	α	β
K026	26.0	18.0	8.0	180.0	110°	3°
K028	28.0	18.0	8.0	180.0	110°	3°
K030	30.0	18.0	8.0	180.0	110°	3°
K032	32.0	18.0	8.0	180.0	110°	3°

Type K1



Type	Dimension			
	L	H	S	r
K113	13.0	12.0	8.0	20.0
K115	15.0	12.0	8.0	20.0
K117	17.0	14.0	8.0	20.0
K119	19.0	14.0	8.0	22.0
K120	20.0	16.0	10.0	23.0
K122	22.0	16.0	10.0	25.0
K124	24.0	16.0	10.0	27.0

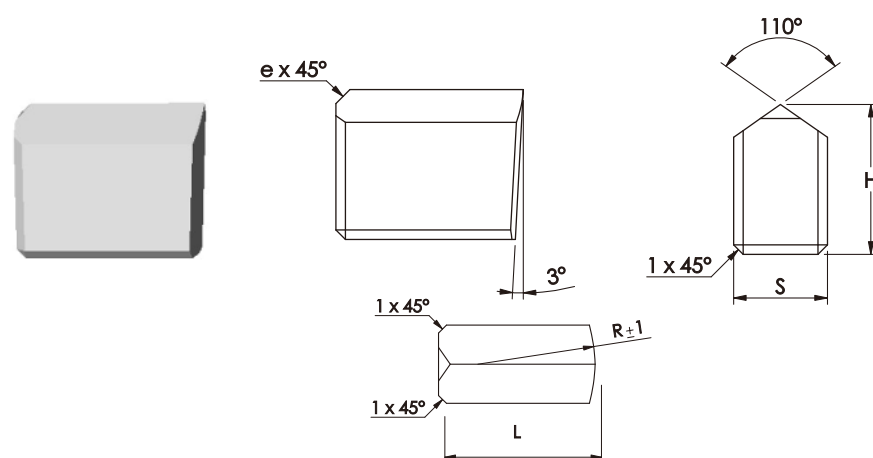
Type K10



Type	Dimension					Application
	L	H	S	R	r	
K1016	16.0	12.0	6.0	30.0	8.0	For making rock-drilling bits of single type and the drill bits with a leading edge.
K1020	20.0	12.0	6.0	40.0	10.0	
K1026	26.0	12.0	6.0	50.0	13.0	
K1030	30.0	15.0	8.0	80.0	15.0	
K1032	32.0	15.0	8.0	80.0	16.0	
K1034	34.0	15.0	8.0	80.0	17.0	
K1036	36.0	15.0	8.0	80.0	18.0	
K1036A	36.0	15.0	10.0	80.0	18.0	
K1038	38.0	15.0	8.0	120.0	19.0	
K1038A	38.0	15.0	10.0	120.0	19.0	
K1040	40.0	15.0	8.0	120.0	20.0	
K1040A	40.0	15.0	10.0	120.0	20.0	
K1040B	40.0	18.0	10.0	120.0	20.0	
K1043	43.0	15.0	10.0	120.0	21.5	
K1043A	43.0	18.0	8.0	120.0	21.5	
K1043B	43.0	18.0	10.0	120.0	21.5	
K1046	46.0	15.0	10.0	160.0	23.0	
K1046A	46.0	18.0	10.0	160.0	23.0	
K1049	49.0	18.0	10.0	160.0	24.5	
K1054	54.0	18.0	10.0	160.0	27.0	

Note: The permitted tolerance is $\pm 0.5\text{mm}$ if the R is less than 50.

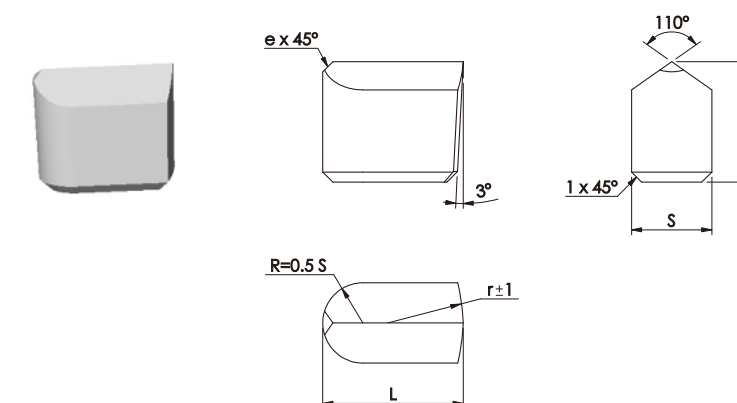
Type K20



mm

Type	Dimension					Application
	L	H	S	R	e	
K2012	12.0	12.0	8.0	16.0	1.0	For making single-type bits, crossbits, three-teeth type and X-type bits and diving bits
K2013	13.0	12.0	8.0	16.0	1.0	
K2014	14.0	12.0	8.0	17.0	1.0	
K2015	15.0	12.0	8.0	20.0	1.0	
K2017	17.0	14.0	8.0	20.0	1.0	
K2019	19.0	14.0	8.0	22.0	1.0	
K2020	20.0	16.0	10.0	23.0	1.5	
K2020A	20.0	18.0	10.0	23.0	1.5	
K2022	22.0	16.0	10.0	25.0	1.5	
K2024	24.0	16.0	10.0	27.0	1.5	
K2026	26.0	16.0	10.0	29.0	1.5	
K2028	28.0	16.0	10.0	31.0	1.5	
K2030	30.0	18.0	12.0	35.0	1.5	
K2032	32.0	18.0	12.0	38.0	2.0	
K2035	35.0	20.0	15.0	45.0	2.0	
K2041	41.0	22.0	17.0	51.0	2.0	
K2045	45.0	25.0	19.0	57.5	2.0	
K2053	53.0	25.0	20.0	59.0	2.0	

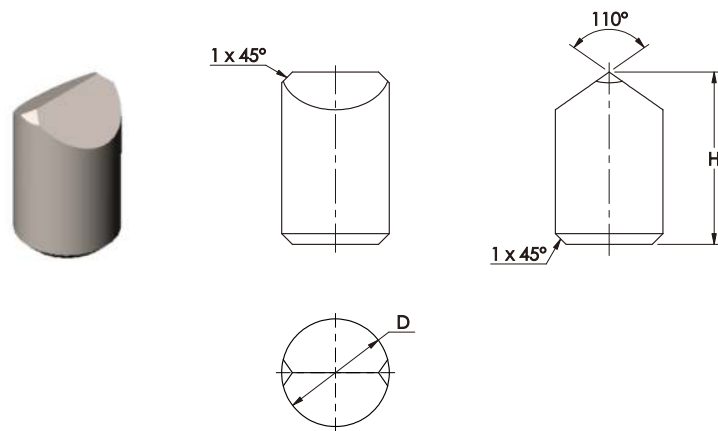
Type K21



mm

Type	Dimension					Application
	L	H	S	r	e	
K2114	14.0	12.0	8.0	20.0	1.0	For making drill bits of cross-type, three-teeth type and X-type, also making diving bits.
K2116	16.0	12.0	8.0	22.0	1.0	
K2118	18.0	14.0	10.0	22.5	1.0	
K2120	20.0	16.0	10.0	28.5	1.0	
K2126	26.0	16.0	10.0	35.0	1.5	
K2126A	26.0	18.0	10.0	35.0	1.5	
K2128	28.0	16.0	10.0	35.0	1.5	
K2128A	28.0	18.0	10.0	35.0	1.5	
K2130	30.0	16.0	12.0	38.0	1.5	
K2130A	30.0	18.0	12.0	38.0	1.5	
K2132	32.0	16.0	12.0	44.5	2.0	
K2132A	32.0	18.0	12.0	44.5	2.0	
K2135	35.0	16.0	12.0	51.0	2.0	
K2135A	35.0	18.0	12.0	51.0	2.0	
K2139	39.0	18.0	14.0	57.5	2.0	
K2143	43.0	20.0	14.0	63.5	2.0	

Type K30



mm

Type	Dimension		Application
	D	H	
K3008	8.0	14.0	For making uncontinuous drill bits of single type, three-teeth type and cross type.
K3010	10.0	16.0	
K3012	12.0	16.0	
K3014	14.0	18.0	
K3016	16.0	20.0	
K3016A	16.0	22.0	
K3018	18.0	20.0	

Technical Requirement

- 1.The chemical compositions, physical and mechanical properties and metallographical structure of carbide bits as per Q/74469685-6 or other relative standards
- 2.The tolerance of carbide bits as specified in the following table.
 - a.The flatness of supporting surface of blank should be no more than 0.1mm, un-supporting surface should be in conformity with table 1.

mm

Thickness	Length		
	10~20	> 20~40	> 40
	Flatness		
≤6	0.12	0.25	0.3
> 6-10	0.1	0.2	0.25
> 10-20	0.08	0.15	0.2

- b.The tolerance of length, height, thickness, diameter of carbide bits should be in conformity with the following table, Among them, the tolerance of length of K0 type is 0~ + 1.0mm, the tolerance of height of K10-type, K20-type, K21-type, K22-type, K23-type is 0.8mm~0mm, and the thickness, 0~ + 1.0mm, the tolerance of height of K0-type is 0.5mm~0.2mm, the thickness is 0.6mm~0mm.

mm

Dimension	Tolerance	
	Common class	Superior class
> 5.0~11.0	±0.35	±0.25
> 11.0~18.0	±0.50	±0.35
> 18.0~26.0	±0.60	±0.40
> 26.0~34.0	±0.80	±0.45
> 34.0~45.0	±1.00	±0.50
> 45.0~55.0	±1.10	±0.60

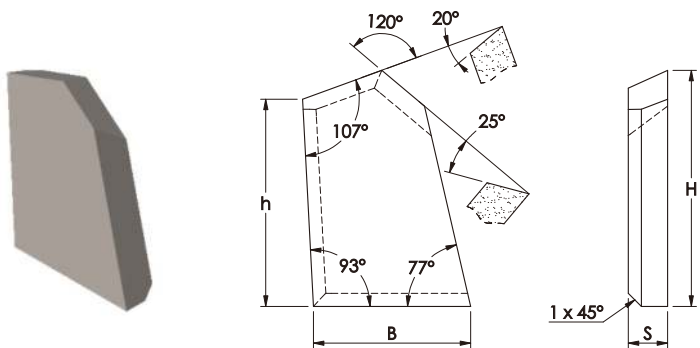
- 3.The tolerance of carbide bit's angle as specified in the following table.

mm

Angle	Angle
≤5°	0°~1°
> 5°~15°	±1°
> 15°	±2°

- 4.For blank's working face, the depth of flaking edge or corner should not larger than 0.3mm; and for unworking face, not larger than 0.5mm
- 5.The surface of the blank should be sand blasted without defects such as scaling, pore, lamination and crack, and passivation treatment should be made if requested
- 6.The cross-section of blank should be homogeneous without defects such as lamination, crack, uncompacted, pore, dirty, blackness, decarbonization
- 7.If changed, not notice.

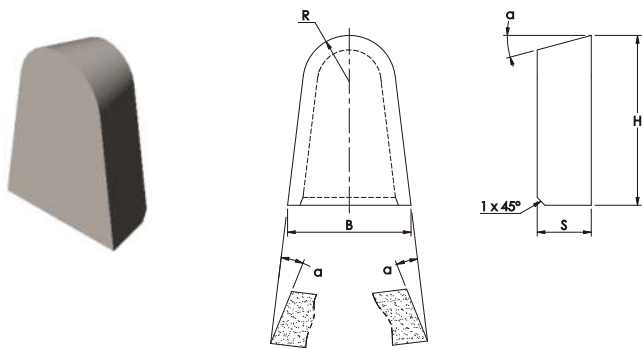
Type M11



mm

Type	Dimension				Application
	B	H	h	b	
M1112	12.0	18.0	15.8	3.0	For making rotary drill bits used to drill coal and soft rock formation
M1113	13.4	26.0	23.8	3.0	

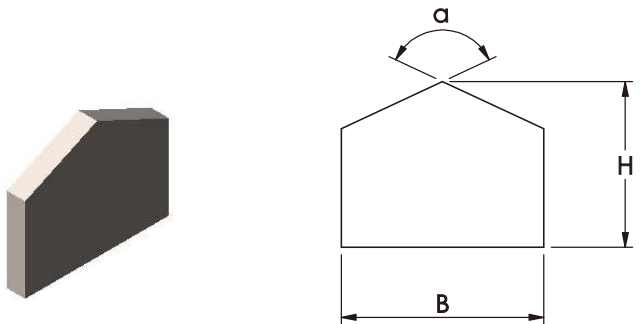
Type M12



mm

Type	Dimension						Application
	B	H	S	R	α	β	
M1216	16.0	22.0	7.0	6.0	15°	1.0	Used as teeth of the equipment for cavation
M1220	20.0	27.0	8.0	7.0	15°	1.0	
M1222	22.0	22.0	7.5	9.0	10°	1.5	
M1230	30.0	35.0	12.0	8.0	8°	1.0	

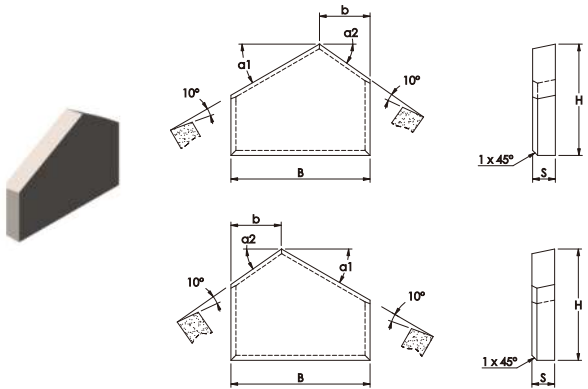
Type M13



mm

Type	Dimension				Application
	B	H	S	α	
M1306	6.0	5.0	1.4	130°	Used for rotary drill bots and as the teeth pf the equipment for cavation.
M1311	11.0	9.0	2.0	130°	
M1313	13.0	10.0	2.5	130°	
M1315	15.0	10.0	2.5	130°	
M1317	17.0	13.0	3.0	130°	
M1319	19.0	13.0	3.0	130°	
M1322	22.0	15.0	3.5	130°	
M1326	26.0	18.0	4.5	130°	
M1333	33.0	22.0	3.0	130°	
M1345	45.0	27.0	9.0	130°	

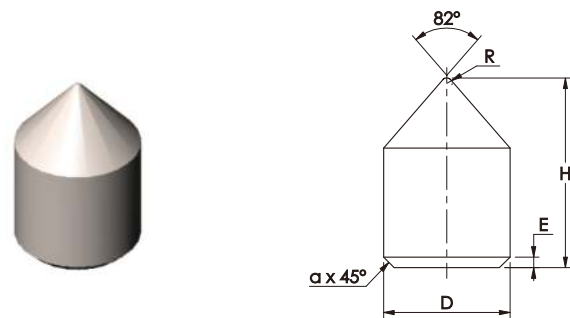
Type M14



mm

Type	Dimension						Application
	B	H	S	b	α ₁	α ₂	
M1427R	27.5	22.0	4.5	10.0	30°	35°	Used as teeth of the equipment for cavation.
M1427L	27.5	22.0	4.5	10.0	35°	30°	
M1445R	45.0	21.0	9.0	15.0	31°	17°	
M1445L	45.0	21.0	9.0	15.0	17°	31°	

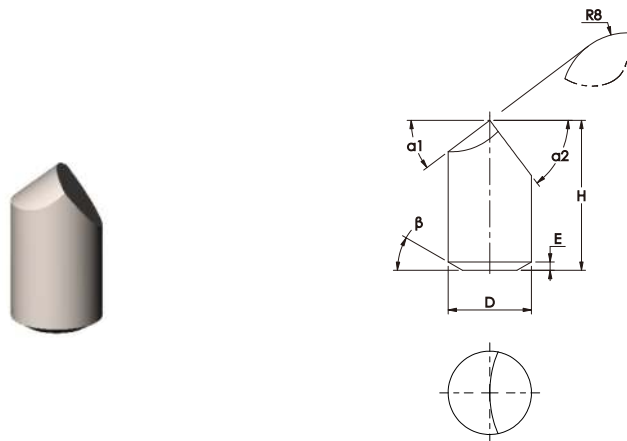
Type M20



mm

Type	Dimension				Application
	B	H	h1	b	
M1112	12.0	18.0	15.8	3.0	For making rotary drill bits used to drill coal and soft rock formation
M1113	13.4	26.0	23.8	3.0	

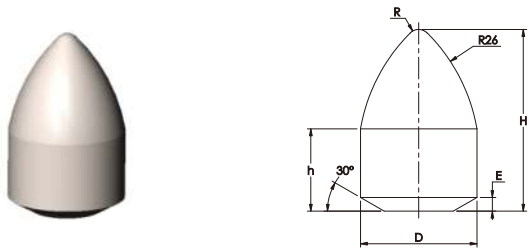
Type M21



mm

Type	Dimension							Application
	D	H	R	α 1	α 2	E	β	
M2110A	10.0	18.0	8.0	53°	53°	1.0	30°	Used as teeth of the equipment for cavation and single corn bits.
M2110B	10.0	20.0	5.5	50°	58°	1.0	45°	
M2112A	12.0	20.0	6.5	32°	40°	1.0	45°	
M2112B	12.5	25.0	10.0	46°	46°	1.0	30°	
M2115	15.0	22.0	11.0	45°	45°	2.5	30°	
M2118	18.0	20.0	14.4	37°	37°	1.5	45°	

Type M24



mm

Type	Dimension					Application
	D	H	h	R	r	
M2417A	17.0	26.5	12.0	26.0	1.75	Used as teeth of the equipment for cavation
M2417B	17.0	29.5	15.0	26.0	1.75	

Note: Value h is only for reference, not for checking

Technical Requirement

1. The carbide grade, physical and mechanical properties and metallographical structure of products as per relative standards.
2. The dimensions of carbide products used for coal drilling should be in conformity with this standard.
3. The tolerance of the dimensions of carbide products used for coal drilling should be in conformity with the follows.
 - a. The tolerance of the width, height, thickness and e of carbide products should be in conformity with table 1.

Table1

mm

Dimension	Tolerance	
	Common class	Superior class
< 3	±0.20	±0.15
≥ 3~8	±0.30	±0.20
> 8~12	±0.35	±0.25
> 12~18	±0.50	±0.30
> 18~25	±0.50	±0.35
> 25~35	±0.50	±0.45
> 35~50	±1.00	±0.60

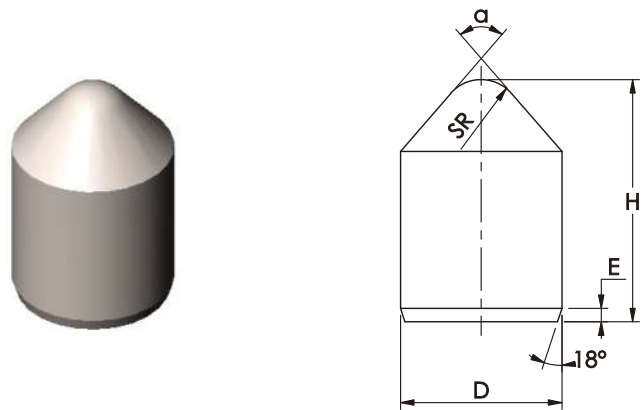
Table2

mm

Dimension	Tolerance	
	Common class	Superior class
> 8~12	±0.30	±0.25
> 12~18	±0.40	±0.30

- b. The linearity of non-supporting face should be in conformity with the follows.
 - b.1. The linearity of supporting face should be not larger than 0.1mm; and M10 and M11, not larger than 0.15mm.

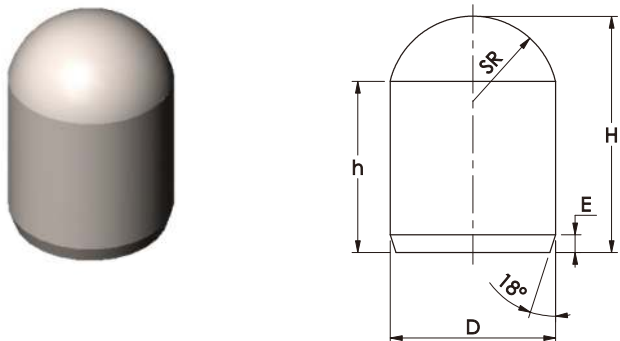
Type Q



mm

Type	Dimension				
	D	H	h	SR	E
Q0810	8.0	10.0	7.1	4.2	1.5
Q0812	8.0	12.0	9.1	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
Q1214	12.0	14.0	9.4	6.2	1.5
Q1216	12.0	16.0	11.4	6.2	1.5
Q1218	12.0	18.0	13.4	6.2	1.5
Q1313	13.0	13.5	8.4	6.7	1.5
Q1315	13.0	13.5	10.4	6.7	1.5
Q1416	14.0	16.0	10.5	7.2	1.5
Q1417	14.0	17.0	11.1	7.6	1.5
Q1420	14.0	20.0	14.5	7.2	1.5
Q1422	14.0	22.0	16.5	7.2	1.5
Q1517	15.0	17.0	11.1	7.6	2.0
Q1618	16.0	18.0	11.6	8.2	2.0
Q1623	16.0	23.0	16.6	8.2	2.0
Q1625	16.0	25.0	18.6	8.2	2.0
Q1825	18.0	25.0	17.7	9.2	2.0
Q1827	18.0	27.0	19.7	9.2	2.0
Q2030	20.0	30.0	20.0	10.2	2.0
Q2540	25.0	40.0	29.8	12.7	2.0

Type Z



mm

Type	Dimension					
	D	H	h	SR	E	α
Z0810	8.0	10.0	6.5	3.0	1.5	70°
Z0812	8.0	12.0	8.5	3.0	1.5	70°
Z1011	10.0	11.0	7.1	4.4	1.5	70°
Z1013	10.0	13.0	9.1	4.4	1.5	70°
Z1015	10.0	15.0	9.9	4.0	1.5	70°
Z1215	12.0	15.0	10.2	5.1	1.5	70°
Z1218	12.0	18.0	13.0	4.8	1.5	70°
Z1416	14.0	16.0	9.5	4.7	1.5	70°
Z1418	14.0	18.0	12.5	6.0	1.5	70°
Z1420	14.0	20.0	13.7	5.0	1.5	70°
Z1422	14.0	22.0	15.7	5.0	1.5	70°
Z1625	16.0	25.0	17.3	5.0	2.0	70°

Note: Value α in the table is only for reference ,not for the checking of finished products.

Technical Requirement

- 1.The chemical,physical and mechanical properties and metallographicl structure of the blank of carbide drill bits as per Q/74469685-6 or relative standards.
- 2.The tolerance of the diameter and height shouldbe in conformity with table 1.

Table1 mm

Class	D		H	
	Dimension	Tolerance	Dimension	Tolerance
Common Class	≤13.0	+ 0.35	≤10	±0.25
		+ 0.10	> 10.0~18.0	±0.30
	> 13.0~22.0	+ 0.45	> 18.0~25.0	±0.35
		+ 0.10		
	> 22.0	+ 0.55	> 25.0	±0.45
		+ 0.10		
Superior Class	≤18.0	+ 0.25	≤11.0	±0.15
		+ 0.05	> 11.0~18.0	±0.20
	> 18.0~25.0	+ 0.30	> 18.0~25.0	±0.25
		+ 0.05	> 25.0	±0.30

- 3.The tolerance of radius of the drill bits blank is 0~ + 0.5mm,and e is + 0.2~ + 0.4mm.

Table2 mm

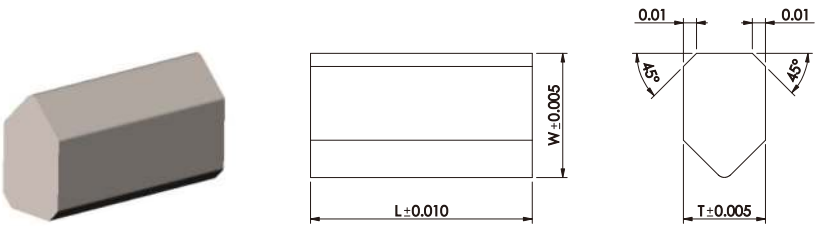
Angle	Tolerance
≤5°	±1°
> 5° ~15°	±2°
> 15°	±3°

- 4.For blank's working face,the depth of flaking edge or corner shold not larger than 0.3mm;and for unworking surface,not larger than 0.5mm.
- 5.The surface of the blank should be sand blasted without defects shuch as scaling,pore,lamination and crack,and passivation treatment should be made if the diameter is larger than 12mm.
- 6.The cross-section of blank should be honogeneous without defects such as lamination , crack , uncompacted , hole , dirty,blackness,decarbonization.
- 7.The form and dimensions of the pore will ot be checked,what will only be checked is if it is present or not.
- 8.If changed,no notice.

Main products series

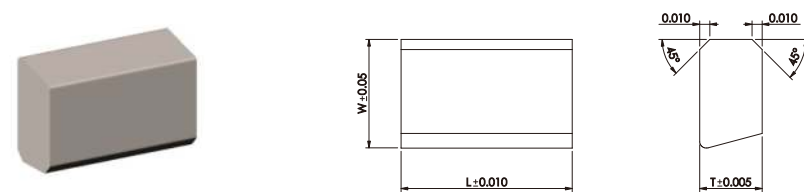
Type	ModelNumber		Grade
NA	Chamfered	Not Chamfered	YG10CB
	NA-08501C		
	NA-08501CL		
NC	NC-08504	NC-97501	YG10CB
	NC-08506	NC-97501-1.125	
	NC-08503	NC-93504	
NF	NF-12501C	NF-14502	YG10CB
	NF-12501CL	NF-14502L	
NR	NR-07502	NR-93501	YG10CB
	NR-03501C	NR-03501	
		NR-13502	

Type NA



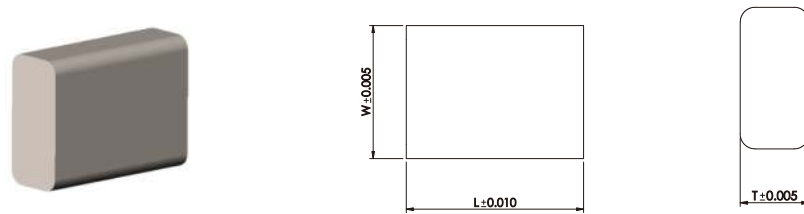
Type	Dimension (inch)		
	L	T	W
NA-08501C	1.000	0.370	0.560
NA-08501CL	1.125	0.370	0.560

Type NC



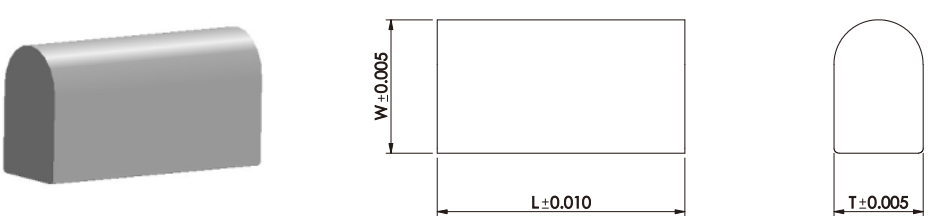
Type	Dimension (inch)		
	L	T	W
NC-08504	1.000	0.365	0.635
NC-08506	1.125	0.365	0.635
NC-08503	1.000	0.365	0.750
NC-97501	1.000	0.365	0.635
NC-97501-1.125	1.125	0.365	0.635
NC-93504	1.000	0.365	0.810

Type NF



Type	Dimension (inch)		
	L	T	W
NF-12501C	1.000	0.365	0.750
NF-12501CL	1.125	0.365	0.750
NF-14502	1.000	0.365	0.562
NF-14502L	1.125	0.365	0.562

Type NR



Type	Dimension (inch)		
	L	T	W
NR-07502	1.000	0.360	0.538
NR-03501C	1.000	0.360	0.750
NR-93501	1.000	0.360	0.538
NR-03501	1.000	0.360	0.750
NR-13502	1.000	0.365	0.810