

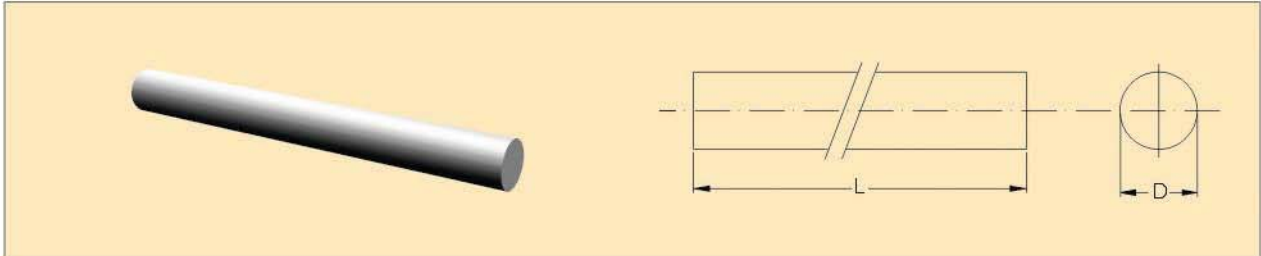
Cemented Carbide Profiles

Rods, tubes, strips, bars and complicated helix milling cutter blanks are produced with the advanced equipments and technique imported from the developed countries.



Specifications of profiles

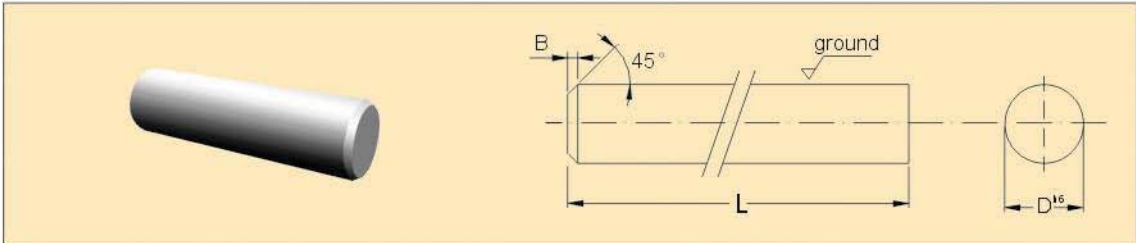
Sintered rods with standard dimension



mm

Dimension & Tolerance					Dimension & Tolerance				
Type	Dia.	Dia. Tol.	Length	L Tol.	Type	Dia.	Dia. Tol.	Length	L Tol.
XCT0L	0.5				XC14L	14.0			
XC01L	1.0				XCT14L	14.5			
XCT1L	1.5				XC15L	15.0			
XC02L	2.0	+0.50			XCT15L	15.5			
XCT2L	2.5	+0.25			XC16L	16.0			
XC03L	3.0				XCT16L	16.5			
XCT3L	3.5				XC17L	17.0			
XC04L	4.0				XC18L	18.0			
XCT4L	4.5				XC19L	19.0			
XC05L	5.0				XC20L	20.0			
XCT5L	5.5				XC21L	21.0			
XC06L	6.0				XC22L	22.0			
XCT6L	6.5	+0.60			XC23L	23.0	+0.70		
XC07L	7.0	+0.25	310/330	+6.0	XC24L	24.0	+0.35	310/330	+6.0
XCT7L	7.5			+0	XC25L	25.0			
XC08L	8.0				XC26L	26.0			
XCT8L	8.5				XC27L	27.0			
XC09L	9.0				XC28L	28.0			
XCT9L	9.5				XC29L	29.0			
XC10L	10.0				XC30L	30.0			
XCT10L	10.5	+0.70			XC31L	31.0			
XC11L	11.0	+0.30			XC32L	32.0			
XCT11L	11.5				XC33L	33.0			
XC12L	12.0				XC34L	34.0			
XCT12L	12.5	+0.70			XC35L	35.0			
XC13L	13.0	+0.35			XC36L	36.0			
XCT13L	13.5								

Finished Short Rods

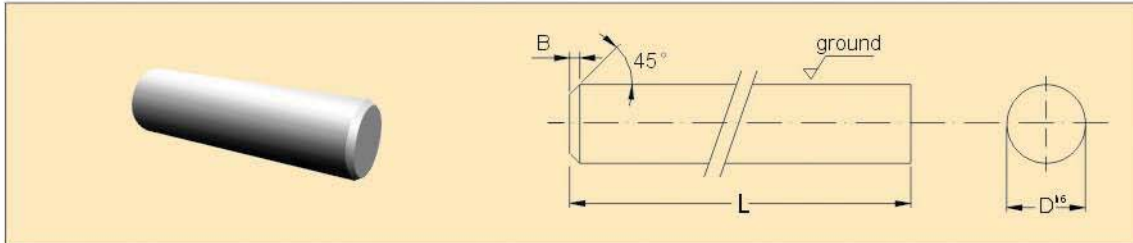


mm

Dia.	Dia. Tol.	Length	L Tol.	Chamfer B
3.00	+0/-0.006	39	+0.50	0.3
4.00		51	+0.50	0.4
5.00	+0/-0.008	51	+0.50	0.4
6.00		51	+0.50	0.4
6.00		55	+0.50	0.4
6.00	+0/-0.008	58	+0.50	0.4
8.00		59	+0.50	0.6
8.00	+0/-0.009	64	+0.50	0.6
10.00		67	+0.50	0.6
10.00	+0/-0.009	73	+0.50	0.8
12.00		73	+0.50	0.8
12.00	+0/-0.011	84	+0.60	0.8
14.00		76	+0.50	0.8
14.00		84	+0.60	0.8
16.00	+0/-0.011	83	+0.60	0.8
16.00		93	+0.60	0.8
18.00		85	+0.60	1.0
18.00	+0/-0.011	93	+0.60	1.0
20.00		93	+0.60	1.0
20.00	+0/-0.013	105	+0.60	1.0

Diameter tolerances according to DIN ISO 286/h6, Surface quality Ra < 0.05 μm polished-ground.

Finished end mill blanks



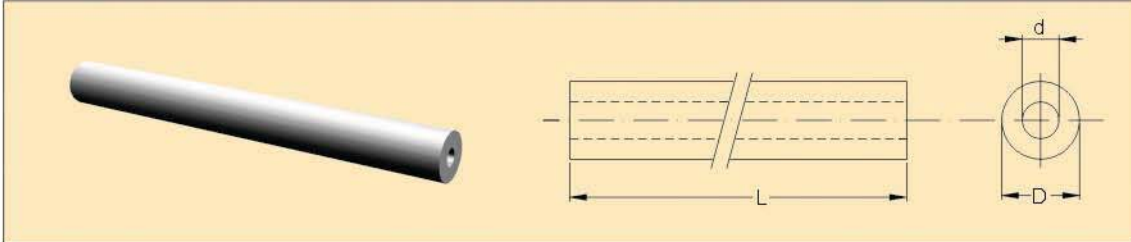
Diameter		Length		Chamfer		code
D inch	D mm	L inch	L mm	B inch	B mm	
1/8	3.175	1½	38.1	0.015	0.381	S
1/8	3.175	2	50.8	0.015	0.381	S
1/8	3.175	3	76.2	0.015	0.381	T
3/16	4.763	1½	38.1	0.015	0.381	S
3/16	4.763	2	50.8	0.015	0.381	S
3/16	4.763	2½	63.5	0.015	0.381	U
3/16	4.763	3	76.2	0.015	0.381	T
1/4	6.350	1½	38.1	0.025	0.635	S
1/4	6.350	2	50.8	0.025	0.635	S
1/4	6.350	2½	63.5	0.025	0.635	U
1/4	6.350	3	76.2	0.025	0.635	T
1/4	6.350	3¼	82.6	0.025	0.635	T
1/4	6.350	3½	88.9	0.025	0.635	T
1/4	6.350	4	101.6	0.025	0.635	T
5/16	7.938	2	50.8	0.025	0.635	S
5/16	7.938	2½	63.5	0.025	0.635	U
5/16	7.938	3	76.2	0.025	0.635	T
5/16	7.938	3½	88.9	0.025	0.635	T
5/16	7.938	4	101.6	0.025	0.635	T
3/8	9.525	2	50.8	0.030	0.762	S
3/8	9.525	2½	63.5	0.030	0.762	U
3/8	9.525	3	76.2	0.030	0.762	T
3/8	9.525	3¼	82.6	0.030	0.762	T
3/8	9.525	3½	88.9	0.030	0.762	T
3/8	9.525	4	101.6	0.030	0.762	T
3/8	9.525	6	152.4	0.030	0.762	T

Diameter		Length		Chamfer		code
D inch	D mm	L inch	L mm	B inch	B mm	
7/16	11.113	2½	63.5	0.030	0.762	U
7/16	11.113	2¾	69.9	0.030	0.762	U
7/16	11.113	4	101.6	0.030	0.762	T
7/16	11.113	4½	114.3	0.030	0.762	T
7/16	11.113	5	127.0	0.030	0.762	T
1/2	12.700	2½	63.5	0.030	0.762	U
1/2	12.700	3	76.2	0.030	0.762	T
1/2	12.700	3¾	79.4	0.030	0.762	T
1/2	12.700	4	101.6	0.030	0.762	T
1/2	12.700	4½	114.3	0.030	0.762	T
1/2	12.700	5	127	0.030	0.762	T
1/2	12.700	6	152.4	0.030	0.762	T
9/16	14.288	3	76.2	0.030	0.762	T
9/16	14.288	3½	88.9	0.030	0.762	T
5/8	15.875	3	76.2	0.030	0.762	T
5/8	15.875	3½	88.9	0.030	0.762	T
5/8	15.875	3¾	95.3	0.030	0.762	T
5/8	15.875	4¾	104.8	0.030	0.762	T
5/8	15.875	5	127	0.030	0.762	T
5/8	15.875	8	203.2	0.030	0.762	T
3/4	19.050	3	76.2	0.040	1.016	T
3/4	19.050	3½	88.9	0.040	1.016	T
3/4	19.050	4	101.6	0.040	1.016	T
3/4	19.050	4 ½	114.3	0.040	1.016	T
3/4	19.050	5	127	0.040	1.016	T
3/4	19.050	6	152.4	0.040	1.016	T
3/4	19.050	6½	165.1	0.040	1.016	T
7/8	22.225	4	101.6	0.040	1.016	T
1	25.400	3	76.2	0.040	1.016	T
1	25.400	3½	88.9	0.040	1.016	T
1	25.400	4	101.6	0.040	1.016	T
1	25.400	5	127	0.040	1.016	T
1	25.400	6	152.4	0.040	1.016	T
1	25.400	7	177.8	0.040	1.016	T
1¼	31.750	4½	114.3	0.040	1.016	T
1¼	31.750	6	152.4	0.040	1.016	T
1¼	31.750	7½	190.5	0.040	1.016	T

Inch standard
 Diameter Tolerance h6
 Chamfered one end

Length:
 S 0/+0.030 inch
 U 0/+0.040 inch
 T 0/+0.050 inch

Rods with central hole



mm

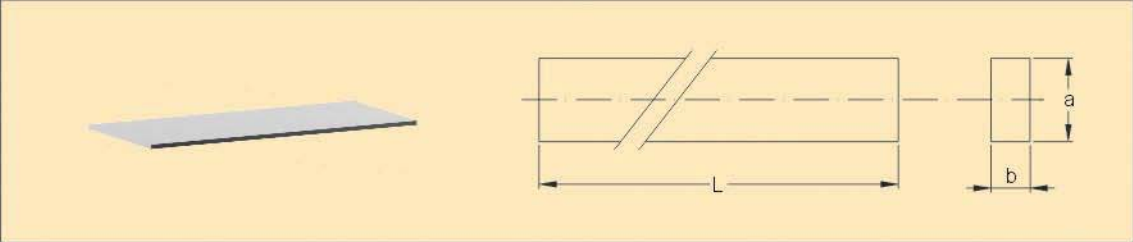
Dia.	d.	Length	Dia.	d.	Length
4.5	0.6	310/330	12.3	2.0	310/330
6.0	1.0	310/330	12.3	3.0	310/330
6.0	1.5	310/330	13.0	2.0	310/330
7.0	1.0	310/330	14.3	2.0	310/330
7.0	1.5	310/330	14.3	3.0	310/330
7.0	2.0	310/330	16.3	2.0	310/330
8.0	1.3	310/330	16.3	2.5	310/330
8.0	2.5	310/330	16.3	4.0	310/330
8.5	1.5	310/330	17.0	2.0	310/330
8.5	2.0	310/330	17.5	2.0	310/330
9.0	1.0	310/330	18.0	3.0	310/330
9.0	1.5	310/330	18.5	3.0	310/330
9.0	2.0	310/330	20.0	3.0	310/330
9.0	2.5	310/330	20.0	3.0	310/330
9.5	1.5	310/330	22.0	3.0	310/330
9.5	2.0	310/330	24.0	4.0	310/330
9.5	2.5	310/330	26.0	4.0	310/330
10.0	2.0	310/330	28.0	4.0	310/330
10.0	3.0	310/330	30.0	5.0	310/330
10.5	1.5	310/330	32.0	5.0	310/330
10.5	2.0	310/330			
10.5	2.5	310/330			

Dimension & Tolerance

mm

Dia.	Tol.	d	Tol.	L	Tol.
D < 5.0	+0.70 +0.30	d < 3.0	±0.20	L < 50	+2.0 -0.0
5.0 ≤ D < 12.0	+1.00 +0.45	3.0 ≤ d < 4.0	±0.25	50 ≤ L < 100	+3.50 -0.0
12.0 ≤ D < 25.0	+1.10 +0.50			100 ≤ L < 200	+4.5 -0.0
D ≥ 25.0	+1.20 +0.50	d ≥ 4.0	±0.30	L ≥ 200	+6.0 -0.0

Standard size board



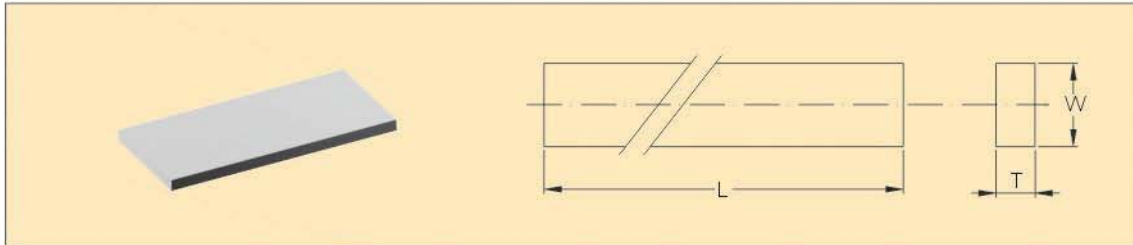
				mm			
Type	a	b	L	Type	a	b	L
XB0101L	1.0	1.0	≤ 330	XB0218L	2.0	18.0	≤ 330
XB01T1L	1.0	1.5		XB0220L	2.0	20.0	
XB0102L	1.0	2.0		XB0222L	2.0	22.0	
XB01T2L	1.0	2.5		XB0225L	2.0	25.0	
XB0103L	1.0	3.0		XB0228L	2.0	28.0	
XB01T3L	1.0	3.5		XB0230L	2.0	30.0	
XB0104L	1.0	4.0		XB0230L	2.0	30.0	
				XBT2T2L	2.5	2.5	
XBT1T1L	1.5	1.5		XB03T2L	3.0	2.5	
XBT102L	1.5	2.0		XB0303L	3.0	3.0	
XBT1T2L	1.5	2.5		XB03T3L	3.0	3.5	
XBT103L	1.5	3.0		XB0304L	3.0	4.0	
XBT104L	1.5	4.0		XB0305L	3.0	5.0	
XBT105L	1.5	5.0	XB0306L	3.0	6.0		
XBT106L	1.5	6.0	XB0307L	3.0	7.0		
XBT108L	1.5	8.0	XB0308L	3.0	8.0		
XBT110L	1.5	10.0	XB0309L	3.0	9.0		
			XB0310L	3.0	10.0		
XB0202L	2.0	2.0	XB0311L	3.0	11.0		
XB0203L	2.0	3.0	XB0312L	3.0	12.0		
XB0204L	2.0	4.0	XB0313L	3.0	13.0		
XB0205L	2.0	5.0	XB0314L	3.0	14.0		
XB0206L	2.0	6.0	XB0315L	3.0	15.0		
XB0207L	2.0	7.0	XB0316L	3.0	16.0		
XB0208L	2.0	8.0	XB0317L	3.0	17.0		
XB0209L	2.0	9.0	XB0318L	3.0	18.0		
XB0210L	2.0	10.0	XB0320L	3.0	20.0		
XB0212L	2.0	12.0	XB0322L	3.0	22.0		
XB0213L	2.0	13.0	XB0325L	3.0	25.0		
XB0214L	2.0	14.0	XB0328L	3.0	28.0		
XB0215L	2.0	15.0	XB0330L	3.0	30.0		
XB0216L	2.0	16.0	XB0332L	3.0	32.0		

				mm			
Type	a	b	L	Type	a	b	L
XB0335L	3.0	35.0	≤ 330	XB0522L	5.0	22.0	≤ 330
XB0335L	3.5	35.0		XB0525L	5.0	25.0	
XB0335L	3.5	9.0		XB0528L	5.0	28.0	
XB04T3L	4.0	3.5		XB0530L	5.0	30.0	
XB0404L	4.0	4.0		XB0532L	5.0	32.0	
XB0405L	4.0	5.0		XB0535L	5.0	35.0	
XB0406L	4.0	6.0		XB0535L	5.5	5.5	
XB0407L	4.0	7.0		XB0606L	6.0	6.0	
XB0408L	4.0	8.0		XB0608L	6.0	8.0	
XB0409L	4.0	9.0		XB0610L	6.0	10.0	
XB0410L	4.0	10.0		XB0612L	6.0	12.0	
XB0412L	4.0	12.0		XB0613L	6.0	13.0	
XB0413L	4.0	13.0		XB0614L	6.0	14.0	
XB04T4L	4.0	14.0		XB0615L	6.0	15.0	
XB0415L	4.0	15.0		XB0616L	6.0	16.0	
XB0418L	4.0	18.0		XB0618L	6.0	18.0	
XB0420L	4.0	20.0		XB0620L	6.0	20.0	
XB0422L	4.0	22.0		XB0625L	6.0	25.0	
XB0425L	4.0	25.0		XB0630L	6.0	30.0	
XB0428L	4.0	28.0		XB0635L	6.0	35.0	
XB0432L	4.0	32.0		XB0635L	6.5	6.5	
XB0435L	4.0	35.0		XB0635L	6.5	10.0	
XB0435L	4.5	4.5		XB0635L	6.5	12.0	
XB05T4L	5.0	4.5		XB0635L	6.5	13.0	
XB0505L	5.0	5.0		XB0707L	7.0	7.0	
XB0506L	5.0	6.0		XB07T7L	7.5	7.5	
XB0508L	5.0	8.0		XB0808L	8.0	8.0	
XB0510L	5.0	10.0		XB08T8L	8.5	8.5	
XB0512L	5.0	12.0		XB0909L	9.0	9.0	
XB0513L	5.0	13.0		XB09T9L	9.5	9.5	
XB0514L	5.0	14.0	XB1010L	10.0	10.0		
XB0515L	5.0	15.0	XB1111L	11.0	11.0		
XB0516L	5.0	16.0	XB1212L	12.0	12.0		
XB0518L	5.0	18.0	XB1414L	14.0	14.0		
XB0520L	5.0	20.0					

Dimension & Tolerance

		mm		
a&b	a&b Tolerance	Length	L Tolerance	L Straightnees
a < 5	+0.70 +0.30	L < 50	+3.00 -0.0	≤ 0.30
5 ≤ a < 10	+0.80 +0.40	50 ≤ L < 100	+3.50 -0.0	≤ 0.30
10 ≤ a < 15	+1.00 +0.40	100 ≤ L < 200		≤ 0.45
15 ≤ a < 20	+1.20 +0.40	200 ≤ L ≤ 310	+(L×3%) -0.0	≤ 0.60
a ≥ 20	+1.40 +0.40	L > 310		≤ 0.65

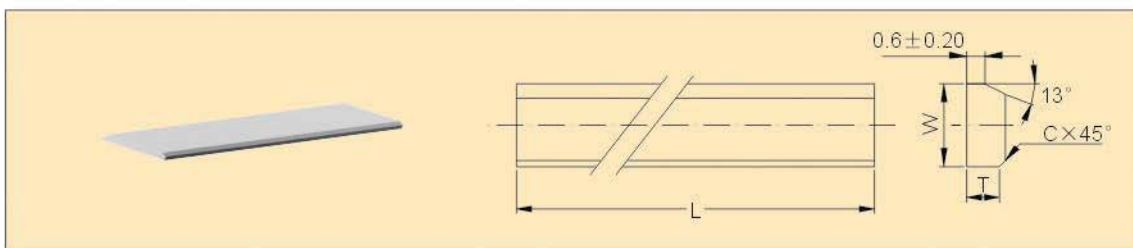
Standard size board



mm

Dimension		
W	T	L
200	25.5	200
150	25.5	200
150	25.5	150
120	25.5	120
105	25.5	105
72	13	240
61	56	71
52	13	160
45	9	210

Strips with angles

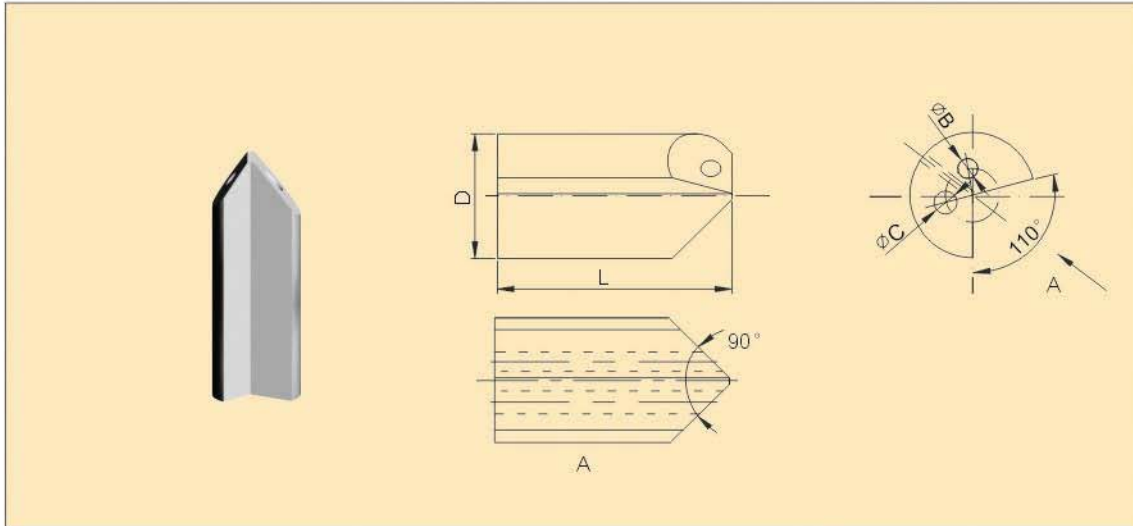


mm

W	T	C	L	L Tol.	L
±0.20	±0.20	±0.10	≤		straightness
3.1	2.0	0.5	330	0~+6.0	
4.0	2.6	0.5	330	0~+6.0	
4.5	2.8	0.6	330	0~+6.0	
5.5	3.3	0.7	330	0~+6.0	
6.5	3.5	0.7	330	0~+6.0	

Gun Drills

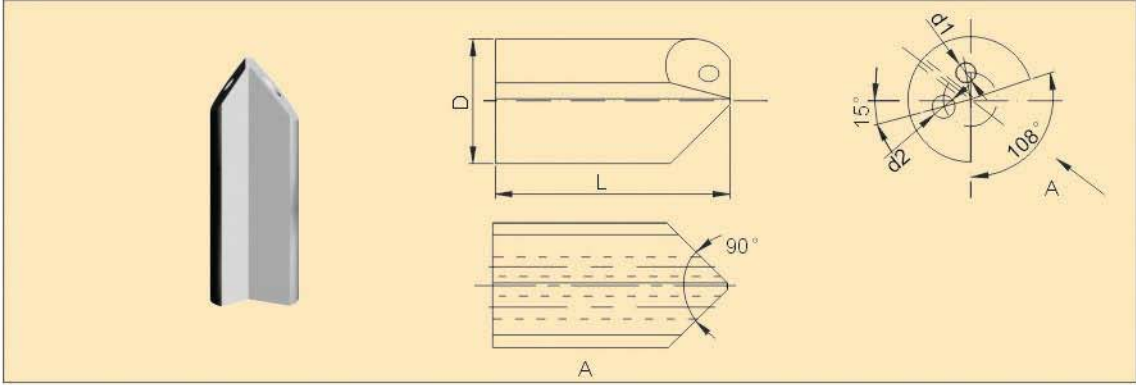
($\Phi 10.5 \sim \Phi 16.5$)
Fluted head for gun drills



mm

Type	D +0.45 -0.10	ΦB ± 0.20	ΦC ± 0.20	L +4.0 0	
XQ02-0063	10.5	1.9	2.3	36.0	L ≤ 250
XQ02-0064	11.0	2.0	2.4	38.0	
XQ02-0065	12.0	2.2	2.5	40.0	
XQ02-0066	13.0	2.4	2.7	40.0	
XQ02-0067	14.0	2.5	2.8	40.0	
XQ02-0068	15.0	2.4	3.3	42.0	
XQ02-0069	16.0	2.5	3.5	45.0	

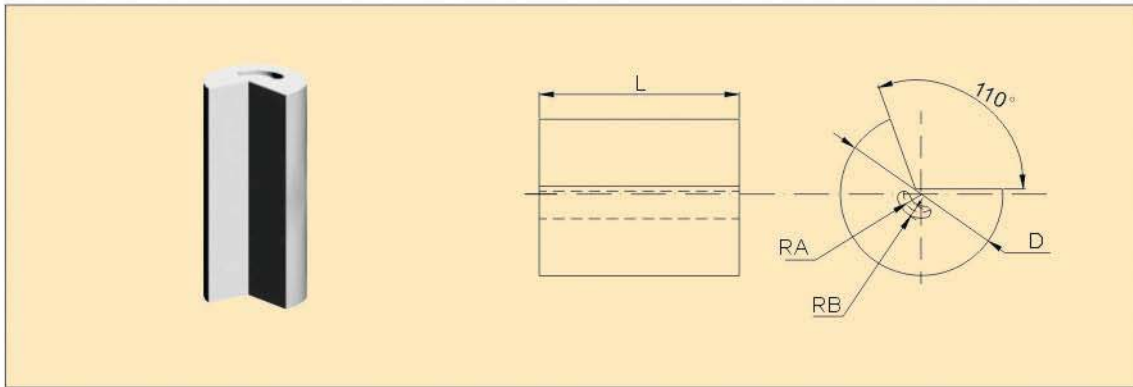
(Φ17~Φ35)
Fluted head for gun drills



mm

Type	D +1.0 +0.3	d1 ±0.35	d2 ±0.35	L +2.5 0
XQ06-0170	17.0	2.6	3.7	45.0
XQ06-0175	18.0	2.6	3.7	45.0
XQ06-0180	18.0	3.2	3.9	51.0
XQ06-0190	19.0	3.2	3.9	51.0
XQ06-0200	20.0	3.5	4.2	55.0
XQ06-0210	21.0	3.5	4.2	55.0
XQ06-0220	22.0	3.5	4.5	58.0
XQ06-0230	23.0	3.5	4.5	58.0
XQ06-0240	24.0	4.0	5.5	58.0
XQ06-0250	25.0	4.0	5.5	61.0
XQ06-0260	26.0	4.0	5.0	61.0
XQ06-0270	27.0	4.5	5.5	61.0
XQ06-0280	28.0	4.5	5.5	63.0
XQ06-0290	29.0	4.5	5.5	63.0
XQ06-0300	30.0	5.0	6.0	65.0
XQ06-0310	31.0	5.0	6.0	65.0
XQ06-0320	32.0	5.0	6.0	65.0
XQ06-0330	33.0	5.0	6.0	65.0
XQ06-0340	34.0	5.5	6.5	65.0
XQ06-0350	35.0	5.5	6.5	65.0

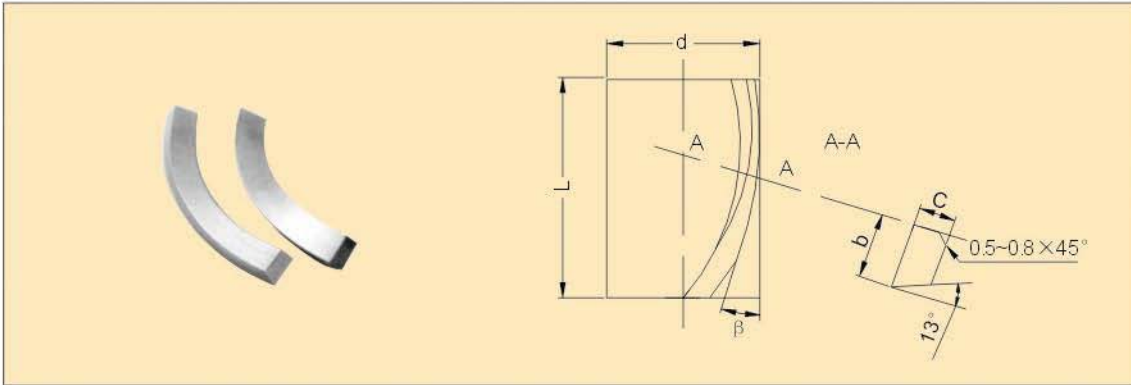
Fluted head for gun drills



						mm
Type	D +0.4 -0.1	RA ±0.15	RB ±0.20	L +4.0 0	Remark	
XQ02-0054	6.9	1.7	1.2	32	L≤200	
XQ02-0055	4.5	1.1	0.7	32		
XQ02-0056	5.5	1.3	0.8	32		
XQ02-0057	6.3	1.6	0.9	32		
XQ02-0058	7.6	1.7	1.2	34		
XQ02-0059	8.0	1.8	1.3	34		
XQ02-0060	8.6	1.9	1.3	36		
XQ02-0061	9.0	2.0	1.4	36		
XQ02-0062	9.7	2.2	1.4	36		

Comments: The general diameter is Φ7 mm—Φ42mm, concrete size parameter offers by users, if customer have special type and special size, welcome Contact us.

Helical milling strips



mm

Type	Helical angle	d	L	b	c
XL251632	25°	16	32	4.0	2.6
XL252038	25°	20	38	4.0	2.6
XL252545	25°	25	45	4.5	2.8
XL302845	30°	28	45	5.5	3.3
XL303053	30°	30	53	5.5	3.3
XL303253	30°	32	53	5.5	3.3
XL303653	30°	36	53	5.5	3.3
XL304038	30°	40	38	6.5	3.5
XL304063	30°	40	63	6.5	3.5
XL304563	30°	45	63	6.5	3.5
XL305075	30°	50	75	6.5	3.5
XL306363	30°	63	63	6.5	3.5
XL306390	30°	63	90	6.5	3.5

Dimension & Tolerance of Helical milling strip

mm

L Length of axis	L Tol.	β° Tol.	b Tol.	C Tol.
L ≤ 40	+2.5~+ 5.5	±1°	-0.10~+0.20	-0.10~+0.20
40 < L ≤ 63	+3.0~+ 6.0	±1°	-0.15~+0.25	-0.15~+0.25
63 < L ≤ 120	+3.5~+ 7.5	±1°	-0.15~+0.25	-0.15~+0.25