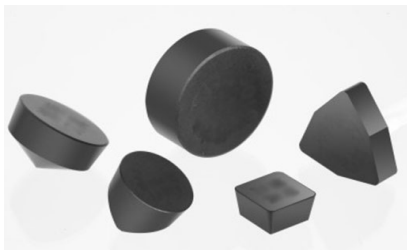


SINAMASTER® Cutting Tools



Company Profile

Our company developed and manufactured PCD Insert, CBN Insert, and Ceramic Insert over 10 years. We supply our products to worldwide market with good reputation in quality and technical support service.

We can produce ISO standard sizes inserts and non-standard customized dimension as per customer demand.

Our Cutting Tools applied on industries of Metallurgical Roll, Automobile Brake Disc and Drum, Engine Cylinder Block and Cover, Transmission Shaft, Rail Wheel and Axle, Impeller, Bearing, Slewing Ring, Gear, Slurry Pump, Mining Machinery, and other metal work-pieces.

Content of Pages

	Page.No.
Product Application.....	3 - 4
Insert Grade Table.....	5 - 7
1. Solid CBN Insert.....	8 -11
2. CBN Milling Insert.....	12 - 13
3. Dimpled Solid CBN Insert.....	14 -16
4. Center Hole Solid CBN Insert.....	16 - 18
5. Coated CBN Insert.....	18
6. Brazed CBN Insert.....	19 - 20
7. Fulltop CBN Insert.....	21 - 22
8. CBN Grooving Insert.....	23 - 24
9. Ceramic Insert.....	25 - 29
10. Tipped PCD Insert.....	30 - 32
11. Toolholders.....	33 - 39
12. Milling Cutter.....	40-44

Applications



Roll

CBN insert: RNGN, SNGN, RCGX



Engine Cylinder

CBN insert: RNGN, SNGA



Brake disk

CBN insert: SCGN090408, CNGN120412



Clutch Pressure Plate

CBN insert: CNGN120408



Brake Drum

CBN Insert: CNGN120416



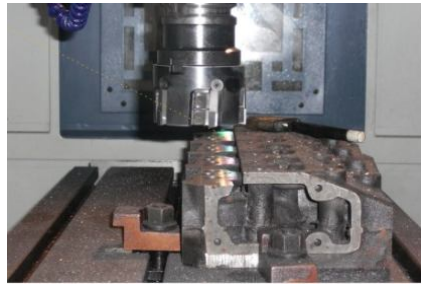
Bearing

Ceramic insert: RCGX; CBN insert: RNGN

Applications



Engine Block Front and Back
Milling-CBN Insert: SNFN090412



Engine Block Top and Bottom
Milling-CBN Insert: SNFN090412



Gearbox
Milling-CBN Insert: SNFN120412



Gear
CBN insert: CNGA



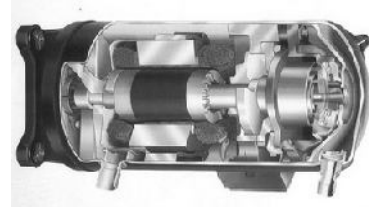
Pumps
CBN insert: RNGN, CNGN



Hi-Manganese Steel
CBN insert: SNGN



Ball screw
CBN insert: Milling Insert



Air Compressor
CBN insert: WNGA080408

Grade Table

1. Solid CBN Insert

Grade	Application	Apply Material	Applied Industry
SCBN120	Finishing & Semi-finishing	Cast Irons	Apply for cutting grey cast iron, graphite cast iron and high carbon semi-steel
SCBN130	Roughing & Semi-finishing	Cast Irons	Apply for cutting grey cast iron, graphite cast iron and high carbon semi-steel
SCBN200	Finishing	Hardened Steels	Apply for cutting hard nickel chrome, high chrome steel, high speed steel, quenching steel
SCBN250	Roughing & Semi-finishing	Hardened Steels	Apply for cutting hard nickel chrome, high chrome steel, high speed steel, quenching steel

2. Fulltop, Brazed and Tipped CBN Insert

Grade	Application	Apply Material	Applied Industry
SCBN120	Finishing & Semi-finishing	Cast Irons	Apply for cutting grey cast iron, graphite cast iron and high carbon semi-steel
SCBN200	Finishing & Semi-finishing	Hardened Steels	Apply for cutting hard nickel chrome, high chrome steel, high speed steel, quenching steel

3. PCD Tipped Insert

Grade	Application	Apply Material	Applied Industry
SPCD100	Finishing & Semi-finishing	Aluminum	Apply for cutting Aluminum Alloy work-pieces

4. Ceramic Insert

Grade	Application	Apply Material	Applied Industry
SK100	Roughing & Semi-finishing	Cast Irons and Hardened Steels	Apply for cutting alloy cast iron, graphite cast iron and alloy steels
SK150	Finishing & Semi-finishing	Cast Irons and Hardened Steels	Apply for cutting alloy cast iron, graphite cast iron and alloy steels

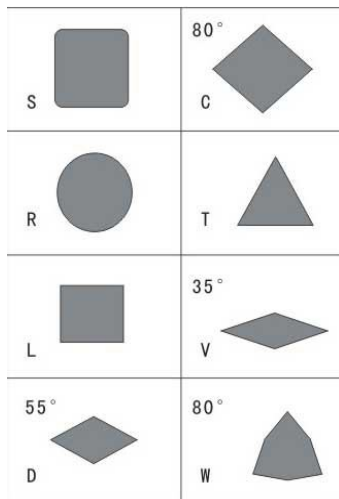
Indexable Insert - ISO code key

C	N	M	N
1	2	3	4

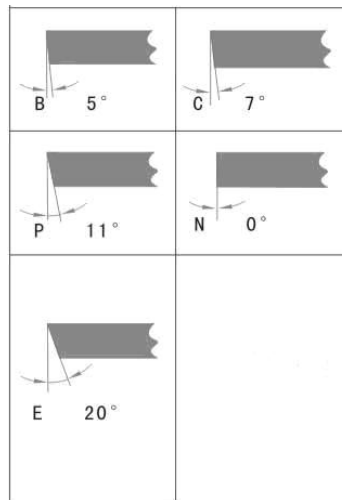
12	04	04
5	6	7

T	010	20
8	9	10

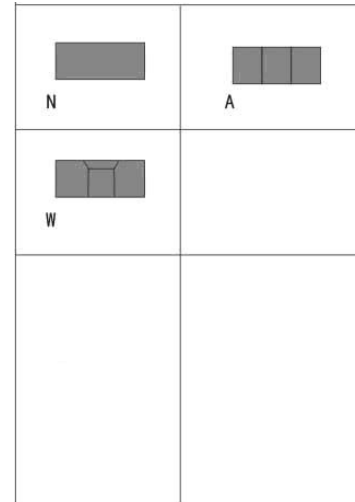
1. Insert shape



2. Insert clearance angle



4. Insert Type



3. Tolerance grade

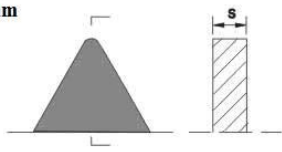
Grade Symbol	Tolerance		
	m	s	i c
E	± 0.025	± 0.025	± 0.025
G	± 0.025	± 0.13	± 0.025
M	± 0.08	± 0.13	± 0.05
U	± 0.13	± 0.13	± 0.08

5. Cutting edge length (mm)


i c mm	C	D	R	S	T	V	W	L
9.525	09	11	09	09	16	16	06	
12.7	12	15	12	12	22	22	08	
14				14				
15.875	16		15	15	27			
16.58								16.58
18.75								18.75
19.05	19		19	19	33			
20.0			20	20				
25.0			25					

Indexable Insert - ISO code key

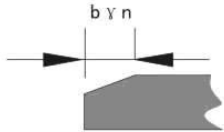
6. Thickness (mm)

<p>Unit: mm</p> 	03=3.18	06=6.35	08=8.0
	T3=3.97	T6=6.80	10=10.0
	04=4.76	07=7.94	






7. Nose radius

	00 r =Round Insert
	04 r =0.4
	08 r =0.8
	12 r =1.2
	16 r =1.6
	20 r =2.0
	24 r =2.4

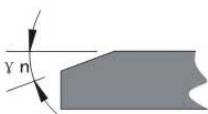
9. Chamfer width

	010 $b \ \gamma \ n$ =0.10
	020 $b \ \gamma \ n$ =0.20
	050 $b \ \gamma \ n$ =0.50
	080 $b \ \gamma \ n$ =0.80
	200 $b \ \gamma \ n$ =2.00

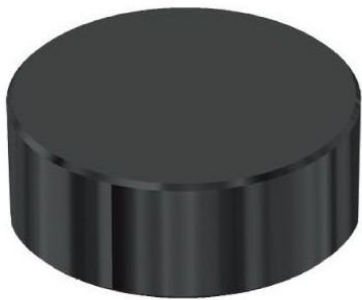
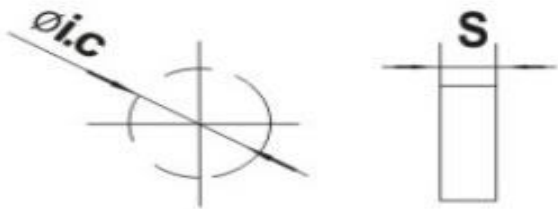
8. Edge Geometry


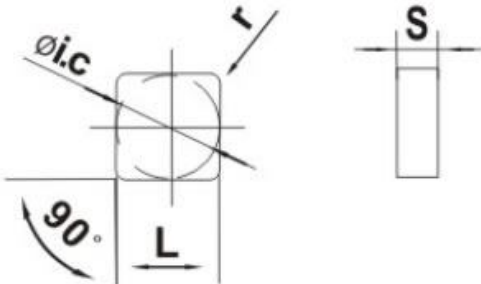
F		Sharp	E		Hone
T		Chamfer	K		Double Chamfer
S		Hone & Chamfer			

10. Chamfer angle


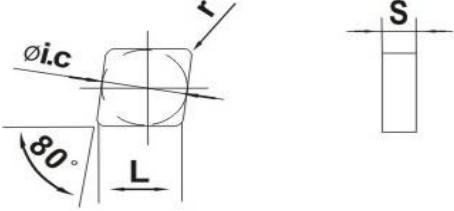
	15 $\gamma \ n$ =15°
	20 $\gamma \ n$ =20°
	30 $\gamma \ n$ =30°


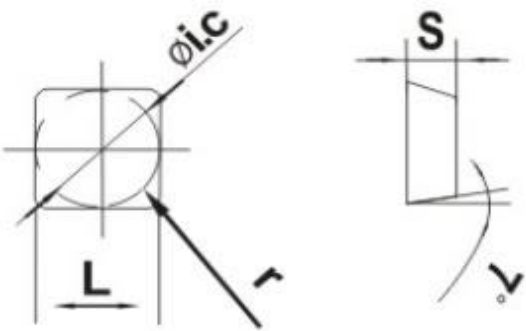
1. SOLID CBN INSERT

				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
RNGN090300	9.525	9.525	3.18	0
RNGN090400	9.525	9.525	4.76	0
RNGN120400	12.7	12.7	4.76	0
RNGN120700	12.7	12.7	7.94	0
RNGN160800	16	12	8	0
RNGN200800	20	20	8	0
RNGN201000	20	20	10	0
RNGN251000	25.4	25.4	10	0


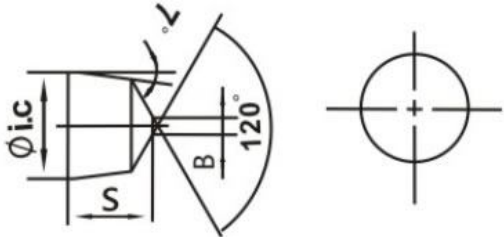
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
SNGN090304	9.525	9.525	3.18	0.4
SNGN090404	9.525	9.525	4.76	0.4
SNGN120408	12.7	12.7	4.76	0.8
SNGN160812	16	16	8	1.2
SNGN201020	20	20	10	2.0


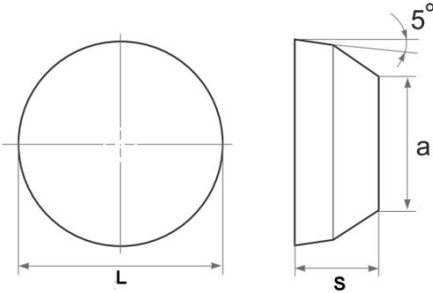
SINAMASTER
Cutting Tool

				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
CNGN090304	9.525	9.525	3.18	0.4
CNGN090408	9.525	9.525	4.76	0.8
CNGN120412	12.9	12.7	4.76	1.2
CNGN120416	12.9	12.7	4.76	1.6
CNGN120708	12.9	12.7	7.94	0.8
CNGN120712	12.9	12.7	7.94	1.2


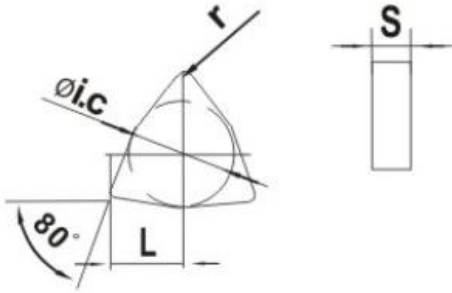
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
SCGN090408	9.525	9.525	4.76	0.8
SCGN090412	9.525	9.525	4.76	1.2
SCGN120408	12.7	12.7	4.76	0.8
SCGN120412	12.7	12.7	4.76	1.2


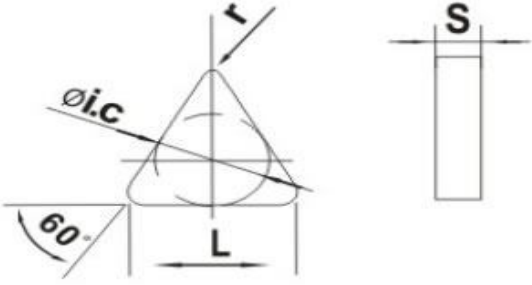
SINAMASTER
Cutting Tool

				
ISO Code	Dimension (mm)			
	L	i.c.	S	V-bottom
RCGX060400	6.35	6.35	4.76	120°
RCGX090700	9.525	9.525	7.94	120°
RCGX120700	12.7	12.7	7.94	120°
RCGX151000	15.875	15.875	10.0	120°
RCGX191000	19.05	19.05	10.0	120°
RCGX251200	25.4	25.4	12	140°


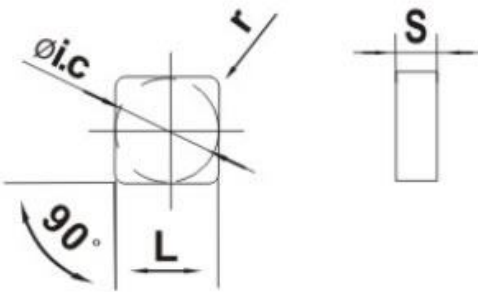
				
ISO Code	Dimension (mm)			
	L	i.c.	S	a
RBGN160800	16.0	16.0	8.0	9.2
RBGN200800	20.0	20.0	8.0	13.2
RBGN250800	25.0	25.0	8.0	18.2

SINAMASTER
Cutting Tool


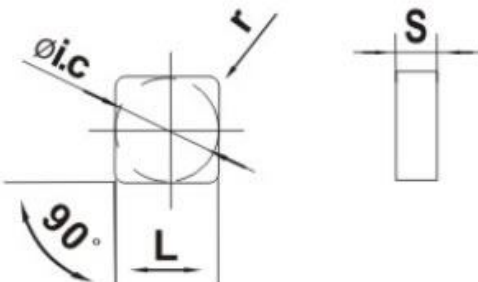
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
WNGN080404	8.7	12.7	4.76	0.4
WNGN080408	8.7	12.7	4.76	0.8
WNGN080412	8.7	12.7	4.76	1.2

				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
TNGN160408	16.5	9.525	4.76	0.8
TNGN160412	16.5	9.525	4.76	1.2
TNGN160416	16.5	9.525	4.76	1.6


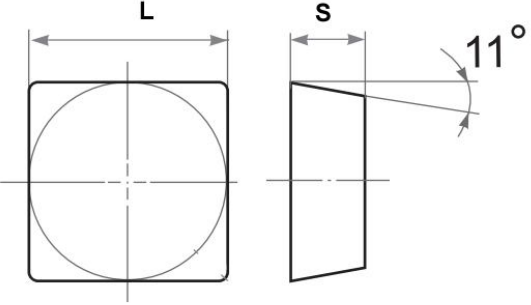
2. CBN Milling Insert


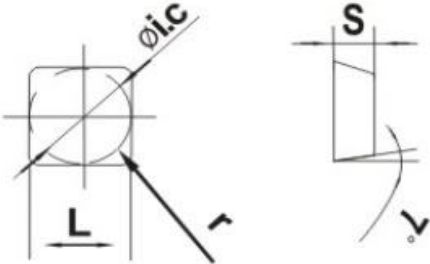
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
SNEN090408	9.525	9.525	4.76	0.8
SNEN120412	12.7	12.7	4.76	1.2
SNEN120612	12.7	12.7	6.35	1.2

Wiper Insert

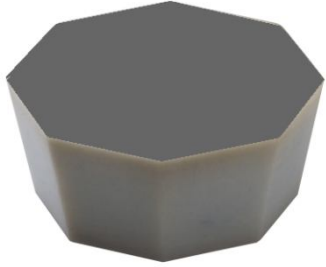
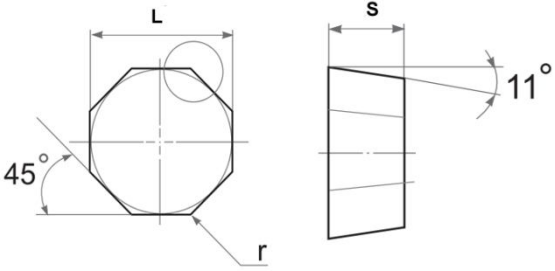
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
SNEN1204ZZ	12.7	12.7	4.76	wiper
SCGN090408ZZ	9.525	9.525	4.76	wiper

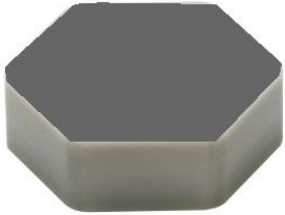
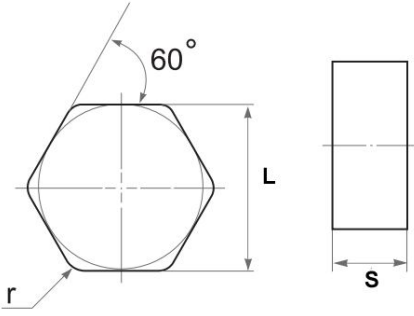
SINAMASTER
Cutting Tool

					
<p>ISO Code</p>	<p>Dimension (mm)</p>				
	<table border="1"> <thead> <tr> <th data-bbox="724 678 887 723">L</th> <th data-bbox="887 678 1046 723">i.c.</th> <th data-bbox="1046 678 1206 723">S</th> <th data-bbox="1206 678 1361 723">r</th> </tr> </thead> </table>	L	i.c.	S	r
L	i.c.	S	r		
<p>SPEN090408</p>	<table border="1"> <tbody> <tr> <td data-bbox="724 723 887 768">9.525</td> <td data-bbox="887 723 1046 768">9.525</td> <td data-bbox="1046 723 1206 768">4.76</td> <td data-bbox="1206 723 1361 768">0.8</td> </tr> </tbody> </table>	9.525	9.525	4.76	0.8
9.525	9.525	4.76	0.8		
<p>SPEN120412</p>	<table border="1"> <tbody> <tr> <td data-bbox="724 768 887 813">12.7</td> <td data-bbox="887 768 1046 813">12.7</td> <td data-bbox="1046 768 1206 813">4.76</td> <td data-bbox="1206 768 1361 813">1.2</td> </tr> </tbody> </table>	12.7	12.7	4.76	1.2
12.7	12.7	4.76	1.2		


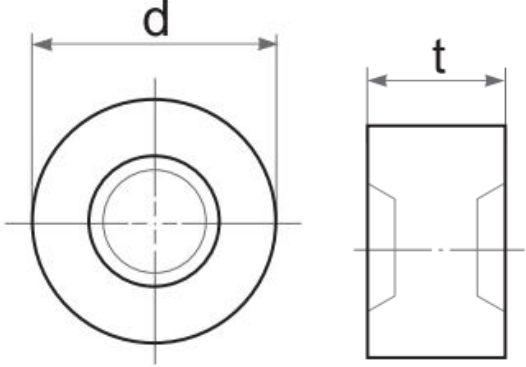
					
<p>ISO Code</p>	<p>Dimension (mm)</p>				
	<table border="1"> <thead> <tr> <th data-bbox="724 1366 887 1411">L</th> <th data-bbox="887 1366 1046 1411">i.c.</th> <th data-bbox="1046 1366 1206 1411">S</th> <th data-bbox="1206 1366 1361 1411">r</th> </tr> </thead> </table>	L	i.c.	S	r
L	i.c.	S	r		
<p>SCGN090408</p>	<table border="1"> <tbody> <tr> <td data-bbox="724 1411 887 1456">9.525</td> <td data-bbox="887 1411 1046 1456">9.525</td> <td data-bbox="1046 1411 1206 1456">4.76</td> <td data-bbox="1206 1411 1361 1456">0.8</td> </tr> </tbody> </table>	9.525	9.525	4.76	0.8
9.525	9.525	4.76	0.8		
<p>SCGN120412</p>	<table border="1"> <tbody> <tr> <td data-bbox="724 1456 887 1500">12.7</td> <td data-bbox="887 1456 1046 1500">12.7</td> <td data-bbox="1046 1456 1206 1500">4.76</td> <td data-bbox="1206 1456 1361 1500">1.2</td> </tr> </tbody> </table>	12.7	12.7	4.76	1.2
12.7	12.7	4.76	1.2		
<p>SCGN090408ZZ</p>	<table border="1"> <tbody> <tr> <td data-bbox="724 1500 887 1543">9.525</td> <td data-bbox="887 1500 1046 1543">9.525</td> <td data-bbox="1046 1500 1206 1543">4.76</td> <td data-bbox="1206 1500 1361 1543">Wiper</td> </tr> </tbody> </table>	9.525	9.525	4.76	Wiper
9.525	9.525	4.76	Wiper		


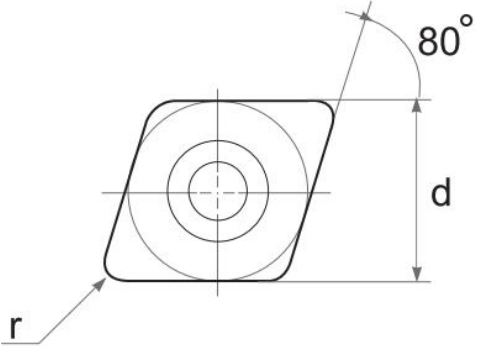
SINAMASTER
Cutting Tool

				
<p>ISO Code</p>	<p>Dimension (mm)</p>			
	<p>L</p>	<p>i.c.</p>	<p>S</p>	<p>r</p>
<p>OPEN050404</p>	<p>12.7</p>	<p>12.7</p>	<p>4.76</p>	<p>0.4</p>

				
<p>ISO Code</p>	<p>Dimension (mm)</p>			
	<p>L</p>	<p>i.c.</p>	<p>S</p>	<p>r</p>
<p>HNEN090504</p>	<p>15.875</p>	<p>15.875</p>	<p>5.56</p>	<p>0.4</p>


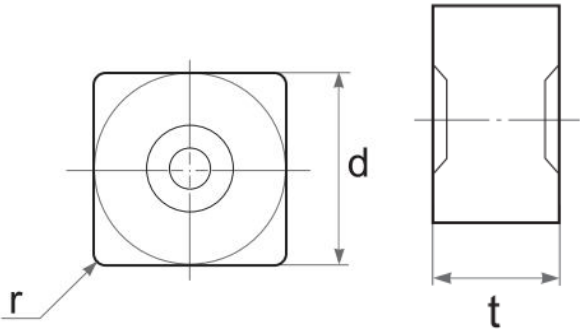
3. Dimpled Solid CBN Insert


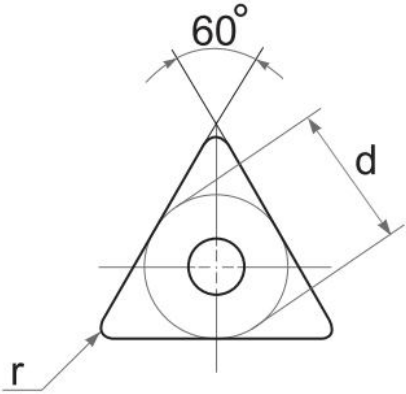
				
ISO Code	Dimension (mm)			
	L	d	t	r
RNGX120400	12.7	12.7	4.76	0

				
ISO Code	Dimension (mm)			
	L	d	t	r
CNGX120408	12.9	12.7	4.76	0.8
CNGX120412	12.9	12.7	4.76	1.2

Note: Dimple style can be produce as round dimple, square dimple and oval dimple types.

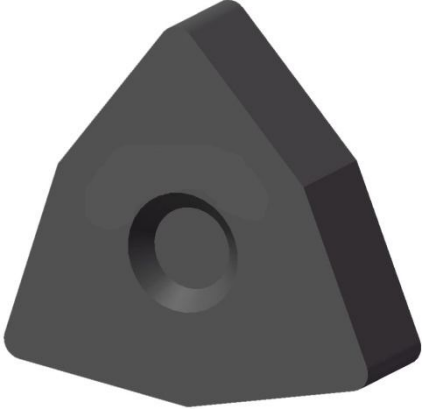
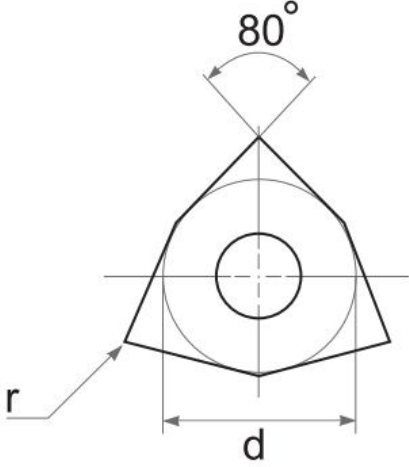
SINAMASTER
Cutting Tool

													
<p>ISO Code</p>	<p>Dimension (mm)</p>												
	<table border="1"> <thead> <tr> <th>d</th> <th>i.c.</th> <th>S</th> <th>r</th> </tr> </thead> <tbody> <tr> <td data-bbox="788 808 842 842">12.7</td> <td data-bbox="948 808 1002 842">12.7</td> <td data-bbox="1107 808 1161 842">4.76</td> <td data-bbox="1267 808 1305 842">0.8</td> </tr> <tr> <td data-bbox="788 853 842 887">12.7</td> <td data-bbox="948 853 1002 887">12.7</td> <td data-bbox="1107 853 1161 887">4.76</td> <td data-bbox="1267 853 1305 887">1.6</td> </tr> </tbody> </table>	d	i.c.	S	r	12.7	12.7	4.76	0.8	12.7	12.7	4.76	1.6
d	i.c.	S	r										
12.7	12.7	4.76	0.8										
12.7	12.7	4.76	1.6										
<p>SNGX120408</p>													
<p>SNGX120416</p>													

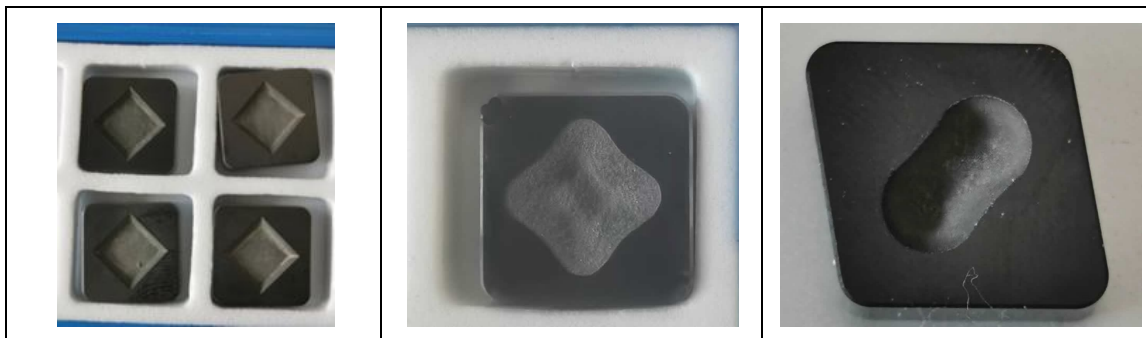
													
<p>ISO Code</p>	<p>Dimension (mm)</p>												
	<table border="1"> <thead> <tr> <th>L</th> <th>d</th> <th>t</th> <th>r</th> </tr> </thead> <tbody> <tr> <td data-bbox="788 1541 842 1574">16.5</td> <td data-bbox="948 1541 1018 1574">9.525</td> <td data-bbox="1107 1541 1161 1574">4.76</td> <td data-bbox="1267 1541 1305 1574">0.8</td> </tr> <tr> <td data-bbox="788 1585 842 1619">16.5</td> <td data-bbox="948 1585 1018 1619">9.525</td> <td data-bbox="1107 1585 1161 1619">4.76</td> <td data-bbox="1267 1585 1305 1619">1.6</td> </tr> </tbody> </table>	L	d	t	r	16.5	9.525	4.76	0.8	16.5	9.525	4.76	1.6
L	d	t	r										
16.5	9.525	4.76	0.8										
16.5	9.525	4.76	1.6										
<p>TNGX160408</p>													
<p>TNGX160416</p>													

Note: Dimple style can be produce as round dimple, square dimple and oval dimple types.

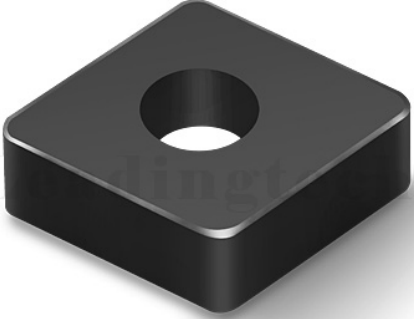
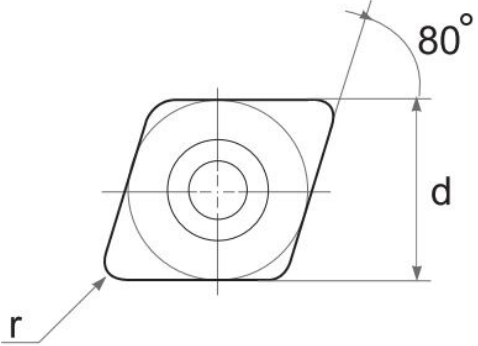
SINAMASTER
Cutting Tool


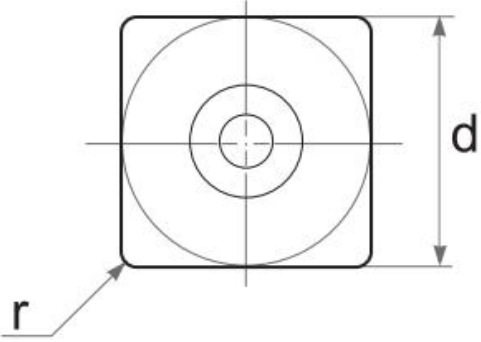
				
ISO Code	Dimension (mm)			
	L	d	t	r
WNGX080404	8.7	12.7	4.76	0.4
WNGX080408	8.7	12.7	4.76	0.8


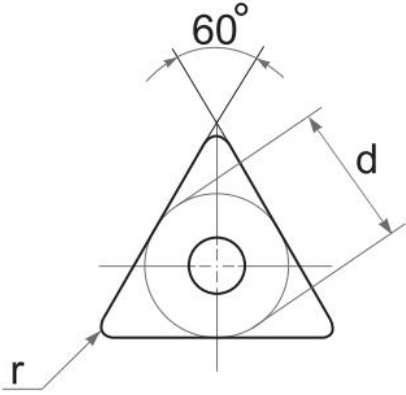
Note: Dimple style can be also produce as round dimple, square dimple and oval dimple types as requested order.



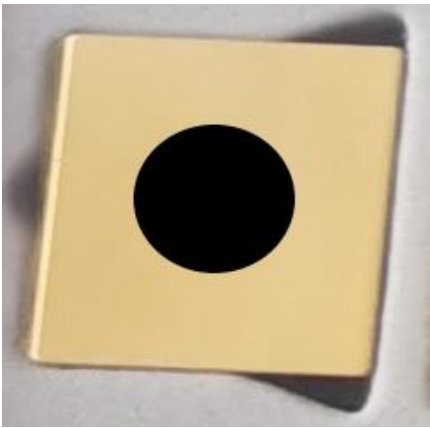
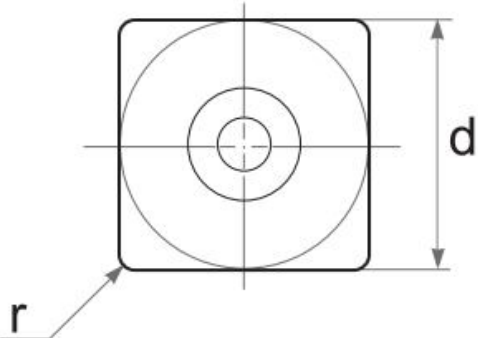
4. Center Hole Solid CBN Insert

				
ISO Code	Dimension (mm)			
	L	d	t	r
CNGA120408	12.9	12.7	4.76	0.8
CNGA120412	12.9	12.7	4.76	1.2

				
ISO Code	Dimension (mm)			
	d	i.c.	S	r
SNGA120408	12.7	12.7	4.76	0.8
SNGA120416	12.7	12.7	4.76	1.6


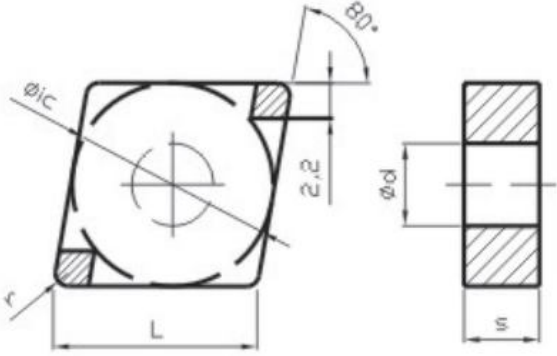
				
ISO Code	Dimension (mm)			
	L	d	t	r
TNGA160408	16.5	9.525	4.76	0.8
TNGA160416	16.5	9.525	4.76	1.6

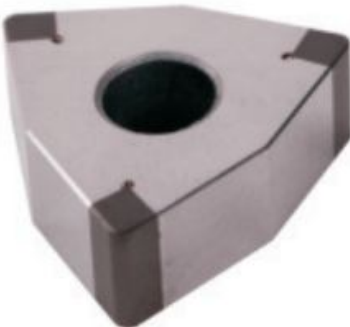
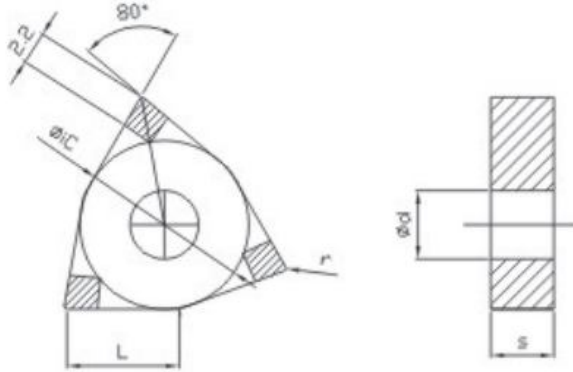
5. Coated Solid CBN Insert

				
ISO Code	Dimension (mm)			
	d	i.c.	S	r
SNGA120408-C	12.7	12.7	4.76	0.8
SNGA120416-C	12.7	12.7	4.76	1.6

Note: other types of Solid CBN insert can also be produce as coated inserts.

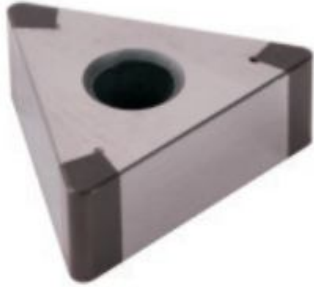
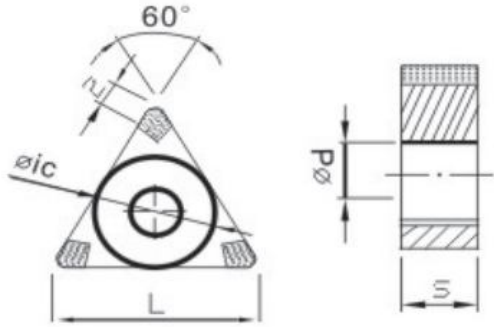
6. Brazed CBN INSERT

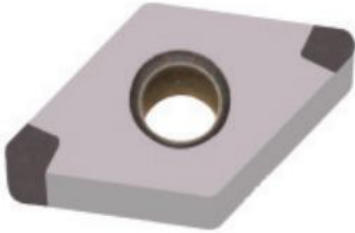
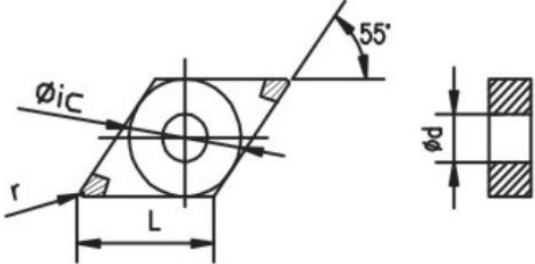
					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
S4-CNGA120404	12.9	12.7	4.76	5.16	0.4
S4-CNGA120408	12.9	12.7	4.76	5.16	0.8
S4-CNGA120412	12.9	12.7	4.76	5.16	1.2


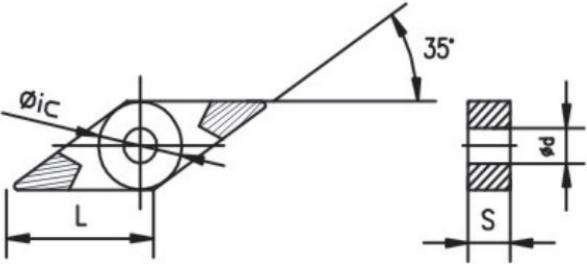
					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
S6-WNGA080404	8.7	12.7	4.76	5.16	0.4
S6-WNGA080408	8.7	12.7	4.76	5.16	0.8
S6-WNGA080412	8.7	12.7	4.76	5.16	1.2

SINAMASTER

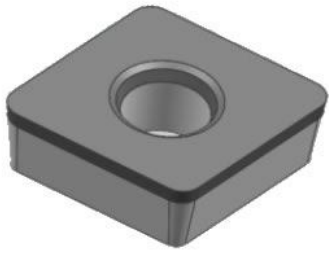
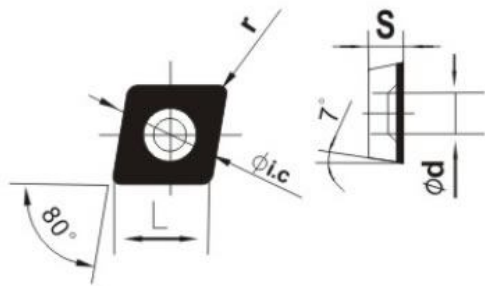
Cutting Tool

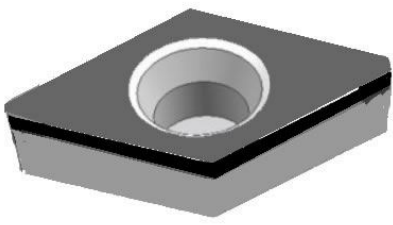
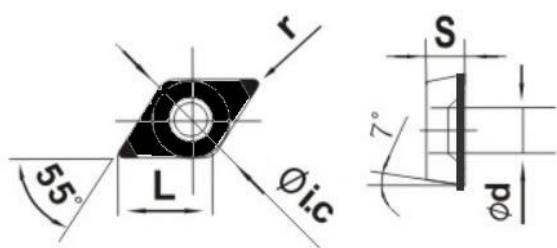
					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
S6-TNGA160404	16.5	9.525	4.76	3.81	0.4
S6-TNGA160408	16.5	9.525	4.76	3.81	0.8
S6-TNGA160412	16.5	9.525	4.76	3.81	1.2

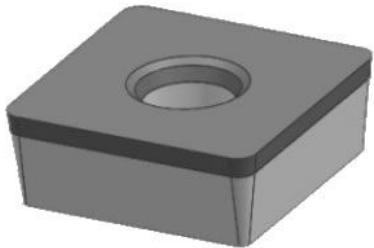
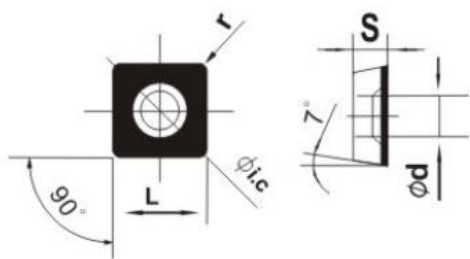
					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
S4-DNGA150404	15.5	12.7	4.76	5.16	0.4
S4-DNGA150408	15.5	12.7	4.76	5.16	0.8
S4-DNGA150604	15.5	12.7	6.8	5.16	0.4
S4-DNGA150608	15.5	12.7	6.8	5.16	0.8

					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
S4-VNGA160404	16.6	9.525	4.76	3.81	0.4
S4-VNGA160408	16.6	9.525	4.76	3.81	0.8
S4-VNGA160412	16.6	9.525	4.76	3.81	1.2

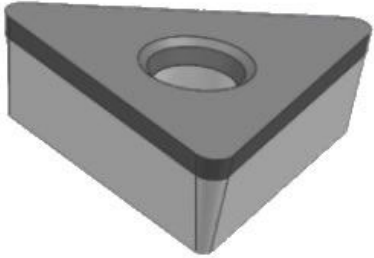
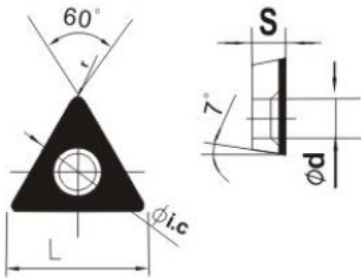
7. Fulltop CBN INSERT

				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
FT-CCGW09T304	9.7	9.525	3.97	0.4
FT-CCGW09T308	9.7	9.525	3.97	0.8


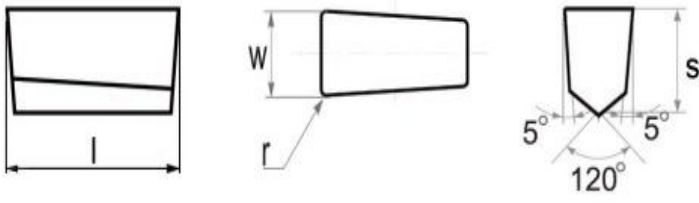
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
FT-DCGW11T304	11.6	9.525	3.97	0.4
FT-DCGW11T308	11.6	9.525	3.97	0.8


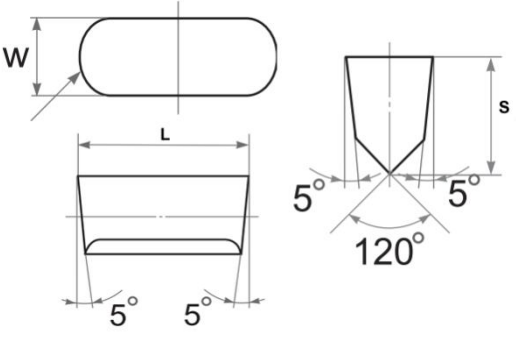
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
FT-SCGW09T304	9.525	9.525	3.97	0.4
FT-SCGW09T308	9.525	9.525	3.97	0.8

SINAMASTER
Cutting Tool

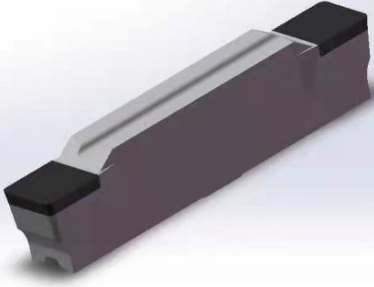
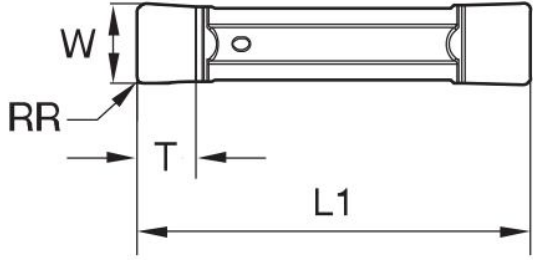
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
FT-TCGW090204	9.6	5.56	2.38	0.4
FT-TCGW110304	11	6.35	3.18	0.4


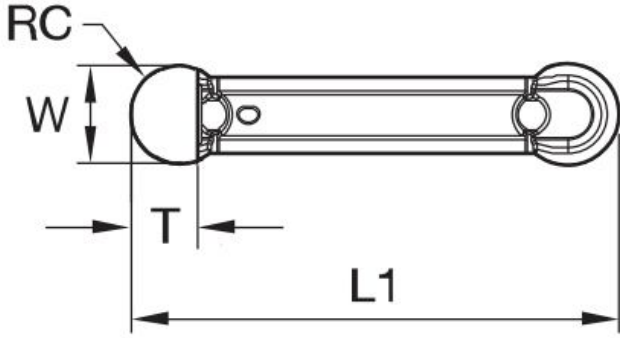
8. CBN Grooving Insert

				
	ISO Code			
Dimension (mm)				
L	W	S	r	
GBMP15E060	15.0	6.0	7.5	0.8
GBMP15E080	15.0	8.0	7.5	0.8
GBMP15E100	15.0	10.0	7.5	0.8

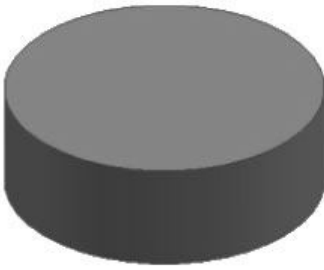
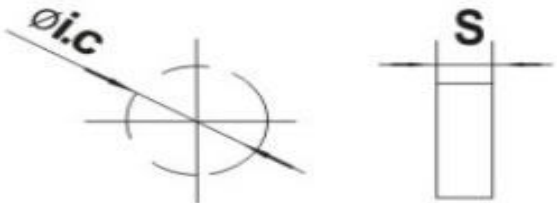
				
	ISO Code			
Dimension (mm)				
L	W	S		
LBMP12A060	12.0	6.0	5.0	
LBMP15E080	15.0	8.0	7.5	


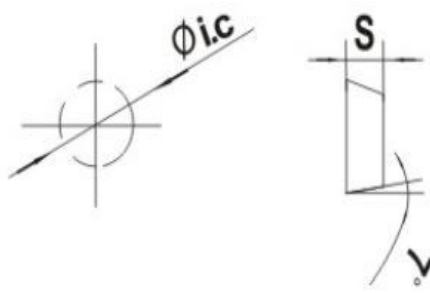
SINAMASTER
Cutting Tool

						
<p>ISO Code</p>	<p>Dimension (mm)</p>					
	<table border="1"> <thead> <tr> <th>W</th> <th>RR</th> <th>L1</th> <th>T</th> <th>Seat Size</th> </tr> </thead> </table>	W	RR	L1	T	Seat Size
W	RR	L1	T	Seat Size		
<p>G0500M05U08</p>	<table border="1"> <tbody> <tr> <td>5.0</td> <td>0.8</td> <td>25</td> <td>3.5</td> <td>5</td> </tr> </tbody> </table>	5.0	0.8	25	3.5	5
5.0	0.8	25	3.5	5		
<p>G0600M06U08</p>	<table border="1"> <tbody> <tr> <td>6.0</td> <td>0.8</td> <td>30</td> <td>4.0</td> <td>6</td> </tr> </tbody> </table>	6.0	0.8	30	4.0	6
6.0	0.8	30	4.0	6		

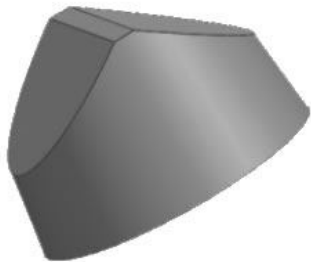
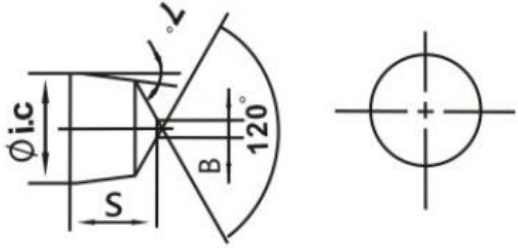
						
<p>ISO Code</p>	<p>Dimension (mm)</p>					
	<table border="1"> <thead> <tr> <th>W</th> <th>RC</th> <th>L1</th> <th>T</th> <th>Seat Size</th> </tr> </thead> </table>	W	RC	L1	T	Seat Size
W	RC	L1	T	Seat Size		
<p>R0500M05U00</p>	<table border="1"> <tbody> <tr> <td>5.0</td> <td>2.5</td> <td>25</td> <td>3.7</td> <td>5</td> </tr> </tbody> </table>	5.0	2.5	25	3.7	5
5.0	2.5	25	3.7	5		
<p>R0600M06U00</p>	<table border="1"> <tbody> <tr> <td>6.0</td> <td>3.0</td> <td>30</td> <td>4.0</td> <td>6</td> </tr> </tbody> </table>	6.0	3.0	30	4.0	6
6.0	3.0	30	4.0	6		


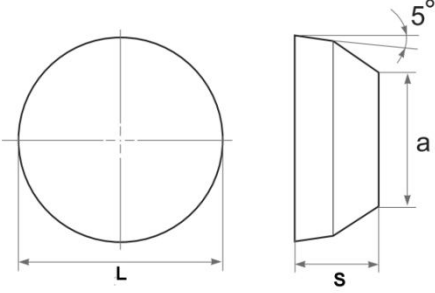
9. CERAMIC INSERT

				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
RNGN090400	9.525	9.525	4.76	0
RNGN120400	12.7	12.7	4.76	0
RNGN120700	12.7	12.7	7.94	0
RNGN150700	15.875	15.875	7.94	0
RNGN190700	19.05	19.05	7.94	0
RNGN201000	20	20	10	0
RNGN250700	25.4	25.4	7.94	0
RNGN251000	25.4	25.4	10	0

				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
RCGN120400	12.7	12.7	4.76	0
RCGN120700	12.7	12.7	7.94	0
RCGN150700	15.875	15.875	7.94	0

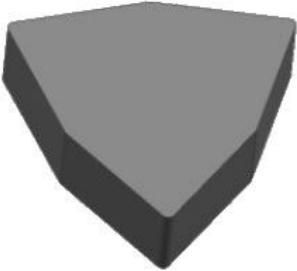
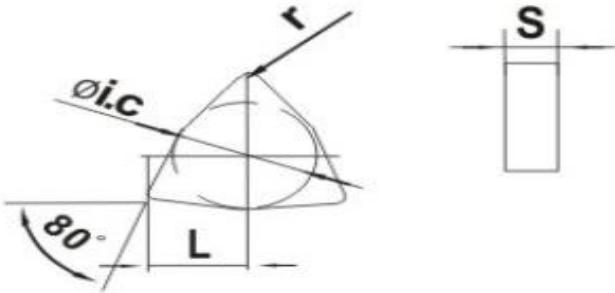
SINAMASTER
Cutting Tool

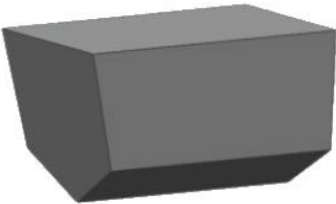
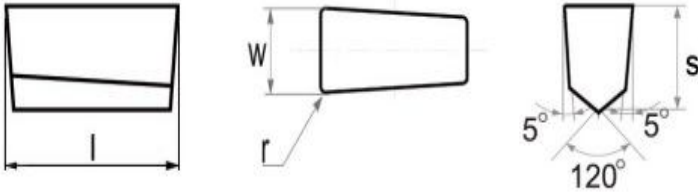
				
ISO Code	Dimension (mm)			
	L	i.c.	S	V-Bottom
RCGX090700	9.525	9.525	7.94	120°
RCGX120700	12.7	12.7	7.94	120°
RCGX191000	19.05	19.05	9.77	120°
RCGX251200	25.40	25.40	12	140°


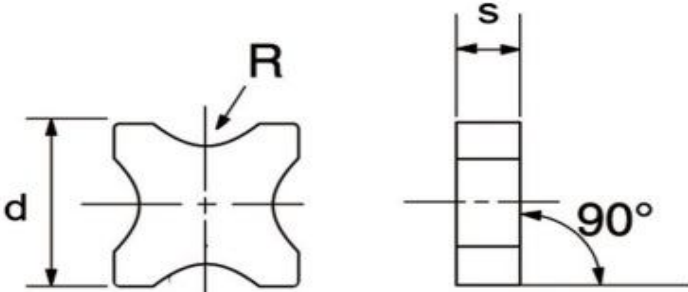
				
ISO Code	Dimension (mm)			
	L	i.c.	S	
RBGN120800	12.0	12.0	8.0	
RBGN160800	16.0	16.0	8.0	
RBGN200800	20.0	20.0	8.0	
RBGN250800	25.0	25.0	8.0	

SINAMASTER


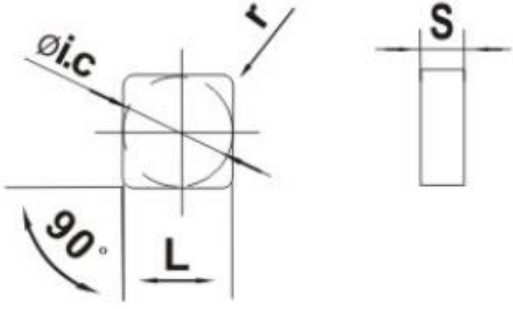
Cutting Tool


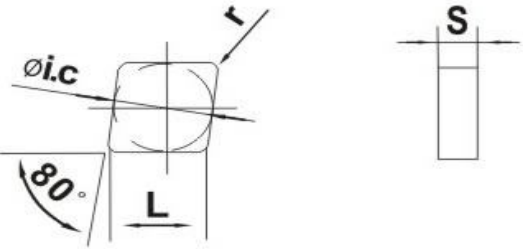
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
WNGN080404	8.7	12.7	4.76	0.4
WNGN080408	8.7	12.7	4.76	0.8
WNGN080412	8.7	12.7	4.76	1.2

				
ISO Code	Dimension (mm)			
	L	W	S	r
GBMP15E060	15.0	6.0	7.5	0.8
GBMP15E080	15.0	8.0	7.5	0.8
GBMP15E100	15.0	10.0	7.5	0.8


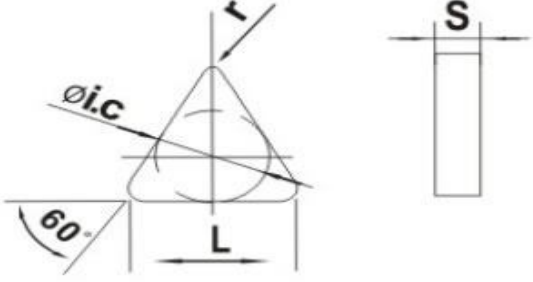
			
ISO Code	Dimension (mm)		
	d	S	r
SNMX1207R9	12.7	7.94	9.0
SNMX1705R6	15.88	4.76	6.0
SNMX1910R12	19.05	10	12.0

SINAMASTER
Cutting Tool

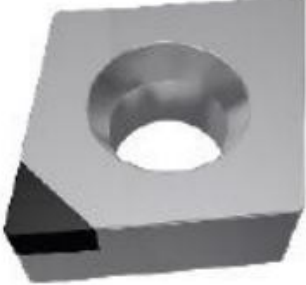
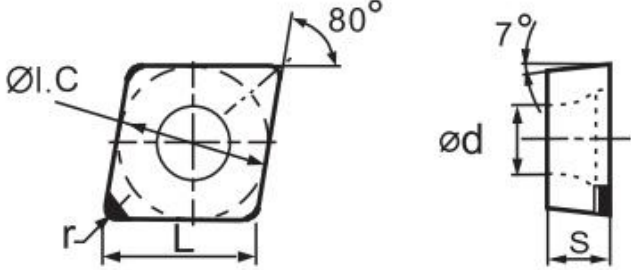
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
SNGN090408	9.525	9.525	4.76	0.8
SNGN090412	9.525	9.525	4.76	1.2
SNGN120408	12.7	12.7	4.76	0.8
SNGN120412	12.7	12.7	4.76	1.2
SNGN120712	12.7	12.7	7.94	1.2
SNGN120720	12.7	12.7	7.94	2.0
SNGN150716	15.875	15.875	7.94	1.6
SNGN150720	15.875	15.875	7.94	2.0
SNGN201016	20	20	10	1.6
SNGN201020	20	20	10	2.0


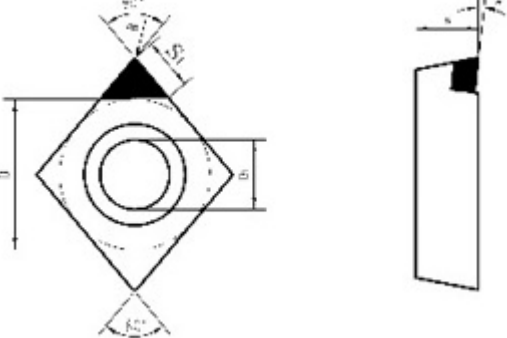
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
CNGN090404	9.525	9.525	4.76	0.4
CNGN120408	12.9	12.7	4.76	0.8
CNGN120412	12.9	12.7	4.76	1.2
CNGN120712	12.9	12.7	7.94	1.2

SINAMASTER
Cutting Tool


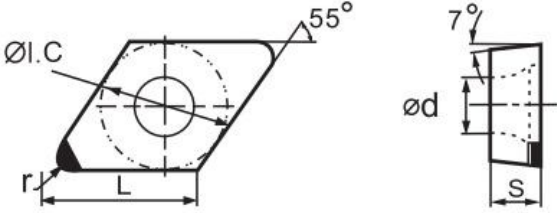
				
ISO Code	Dimension (mm)			
	L	i.c.	S	r
TNGN110308	11.1	6.35	3.18	0.8
TNGN160408	16.5	9.525	4.76	0.8
TNGN160412	16.5	9.525	4.76	1.2
TNGN160416	16.5	9.525	4.76	1.6


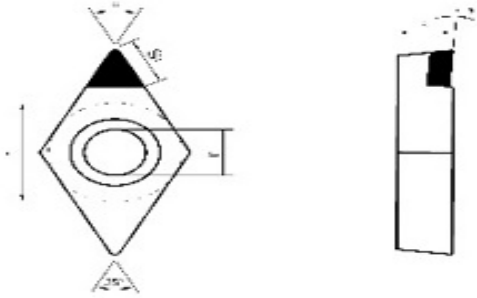
5. Tipped PCD INSERT


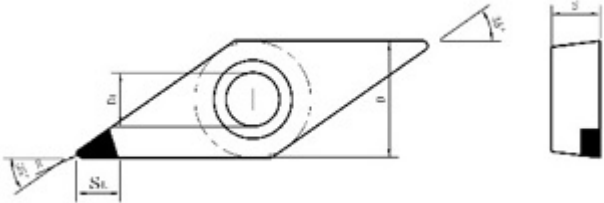
					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
CCGW060202	16.4	6.35	2.38	2.8	0.2
CCGW09T304	9.7	9.525	3.97	4.4	0.4
CCGW120408	12.9	12.7	4.76	5.5	0.8

					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
CCGT060202	6.4	6.35	2.38	2.8	0.2
CCGT09T304	9.7	9.525	3.97	4.4	0.4
CCGT09T308	9.7	9.525	3.97	4.4	0.8


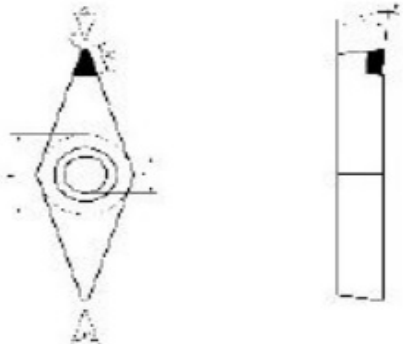
SINAMASTER
Cutting Tool

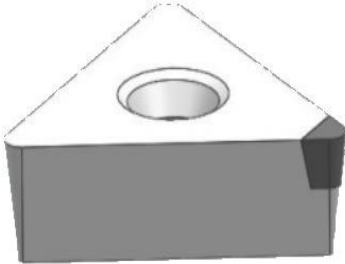
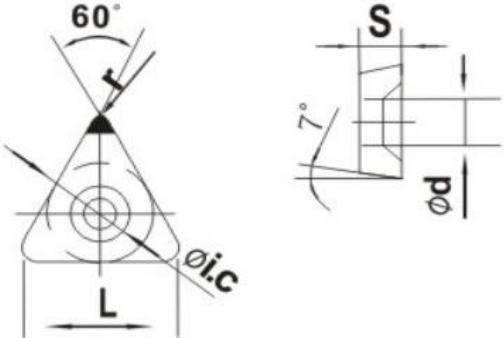
					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
DCGW070202	7.8	6.35	2.38	2.8	0.2
DCGW11T304	11.6	9.525	3.97	4.4	0.4
DCGW11T308	11.6	9.525	3.97	4.4	0.8

					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
DCGT070202	7.8	6.35	2.38	2.8	0.2
DCGT11T304	11.6	9.525	3.97	4.4	0.4
DCGT11T308	11.6	9.525	3.97	4.4	0.8

					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
VCGW160404	16.6	9.525	4.76	4.4	0.4
VCGW160408	16.6	9.525	4.76	4.4	0.8

SINAMASTER
Cutting Tool


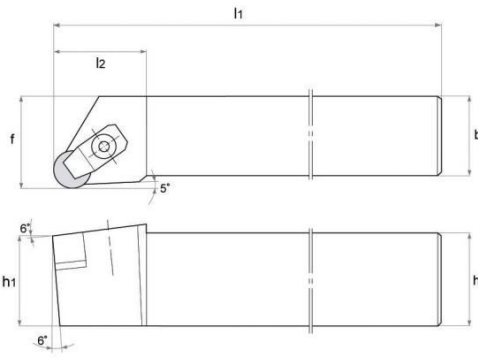
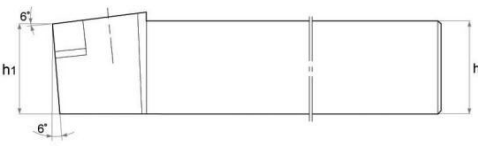
					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
VCGT160404	16.6	9.525	4.76	4.4	0.4
VCGT160408	16.6	9.525	4.76	4.4	0.8


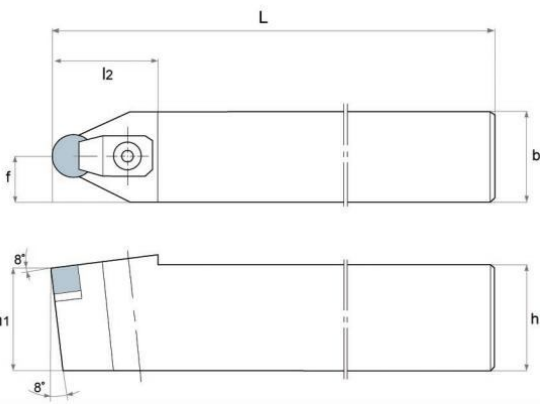
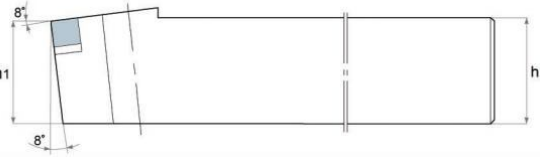
					
ISO Code	Dimension (mm)				
	L	i.c.	S	d	r
TCGW110304	16.5	9.525	3.18	2.8	0.4
TCGW16T308	16.5	9.525	3.97	4.4	0.8

ISO code key for External Turning Tool holders


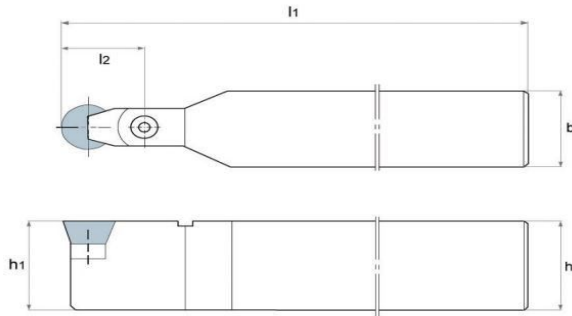
<p>1, Clamping System</p> <p>Top Clamping C</p> <p>Top and Hole Clamping M</p> <p>Hole Clamping P</p> <p>Screw On S</p>	<p>2, Insert Shape</p> <p>80° W R </p> <p>S T </p> <p>80° C D </p> <p>55° K V </p>	<p>6, Holder Height</p> <p>h_1</p> <p>h</p> <p>$h=h_1$</p>	<p>7, Holder Width</p> <p>b</p>	<p>9, Cutting Edge Length</p> <p>W </p> <p>R </p> <p>S </p> <p>T </p> <p></p> <p>80° 55° 55° 35° C D K V</p>																																																																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 33%; text-align: center;">C</td><td style="width: 33%; text-align: center;">S</td><td style="width: 33%; text-align: center;">K</td></tr> <tr><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> </table>	C	S	K	1	2	3	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 33%; text-align: center;">P</td><td style="width: 33%; text-align: center;">R</td><td style="width: 33%; text-align: center;">25</td></tr> <tr><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">6</td></tr> </table>	P	R	25	4	5	6	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 33%; text-align: center;">25</td><td style="width: 33%; text-align: center;">25</td><td style="width: 33%; text-align: center;">M</td></tr> <tr><td style="text-align: center;">6</td><td style="text-align: center;">7</td><td style="text-align: center;">8</td></tr> </table>	25	25	M	6	7	8	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 33%; text-align: center;">12</td></tr> <tr><td style="text-align: center;">9</td></tr> </table>	12	9																																																																									
C	S	K																																																																																														
1	2	3																																																																																														
P	R	25																																																																																														
4	5	6																																																																																														
25	25	M																																																																																														
6	7	8																																																																																														
12																																																																																																
9																																																																																																
<p>3, Holder Style and Lead Angle</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">75° B</td> <td style="text-align: center;">45° D</td> <td style="text-align: center;">60° E</td> </tr> <tr> <td style="text-align: center;">90° F</td> <td style="text-align: center;">90° G</td> <td style="text-align: center;">107.5° H</td> </tr> <tr> <td style="text-align: center;">93° J</td> <td style="text-align: center;">75° K</td> <td style="text-align: center;">95° L</td> </tr> <tr> <td style="text-align: center;">63° N</td> <td style="text-align: center;">117.5° Q</td> <td style="text-align: center;">75° R</td> </tr> <tr> <td style="text-align: center;">45° S</td> <td style="text-align: center;">60° T</td> <td style="text-align: center;">72.5° V</td> </tr> </table>	75° B	45° D	60° E	90° F	90° G	107.5° H	93° J	75° K	95° L	63° N	117.5° Q	75° R	45° S	60° T	72.5° V	<p>4, Clearance Angle</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">3° A</td></tr> <tr><td style="text-align: center;">5° B</td></tr> <tr><td style="text-align: center;">7° C</td></tr> <tr><td style="text-align: center;">15° D</td></tr> <tr><td style="text-align: center;">0° N</td></tr> <tr><td style="text-align: center;">11° P</td></tr> </table>	3° A	5° B	7° C	15° D	0° N	11° P	<p>5, Feed Direction</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;"> R</td></tr> <tr><td style="text-align: center;"> L</td></tr> <tr><td style="text-align: center;"> N</td></tr> </table>	 R	 L	 N	<p>8, Holder Length</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20px;"></td><td style="width: 50px;">A</td><td style="width: 50px;">32</td></tr> <tr><td></td><td>B</td><td>40</td></tr> <tr><td></td><td>C</td><td>50</td></tr> <tr><td></td><td>D</td><td>60</td></tr> <tr><td></td><td>E</td><td>70</td></tr> <tr><td></td><td>F</td><td>80</td></tr> <tr><td></td><td>G</td><td>90</td></tr> <tr><td></td><td>H</td><td>100</td></tr> <tr><td></td><td>J</td><td>110</td></tr> <tr><td></td><td>K</td><td>125</td></tr> <tr><td></td><td>L</td><td>140</td></tr> <tr><td></td><td>M</td><td>150</td></tr> <tr><td></td><td>N</td><td>160</td></tr> <tr><td></td><td>P</td><td>170</td></tr> <tr><td></td><td>Q</td><td>180</td></tr> <tr><td></td><td>R</td><td>200</td></tr> <tr><td></td><td>S</td><td>250</td></tr> <tr><td></td><td>T</td><td>300</td></tr> <tr><td></td><td>U</td><td>350</td></tr> <tr><td></td><td>V</td><td>400</td></tr> <tr><td></td><td>W</td><td>450</td></tr> <tr><td></td><td>Y</td><td>500</td></tr> <tr><td></td><td>X</td><td></td></tr> </table>		A	32		B	40		C	50		D	60		E	70		F	80		G	90		H	100		J	110		K	125		L	140		M	150		N	160		P	170		Q	180		R	200		S	250		T	300		U	350		V	400		W	450		Y	500		X	
75° B	45° D	60° E																																																																																														
90° F	90° G	107.5° H																																																																																														
93° J	75° K	95° L																																																																																														
63° N	117.5° Q	75° R																																																																																														
45° S	60° T	72.5° V																																																																																														
3° A																																																																																																
5° B																																																																																																
7° C																																																																																																
15° D																																																																																																
0° N																																																																																																
11° P																																																																																																
 R																																																																																																
 L																																																																																																
 N																																																																																																
	A	32																																																																																														
	B	40																																																																																														
	C	50																																																																																														
	D	60																																																																																														
	E	70																																																																																														
	F	80																																																																																														
	G	90																																																																																														
	H	100																																																																																														
	J	110																																																																																														
	K	125																																																																																														
	L	140																																																																																														
	M	150																																																																																														
	N	160																																																																																														
	P	170																																																																																														
	Q	180																																																																																														
	R	200																																																																																														
	S	250																																																																																														
	T	300																																																																																														
	U	350																																																																																														
	V	400																																																																																														
	W	450																																																																																														
	Y	500																																																																																														
	X																																																																																															


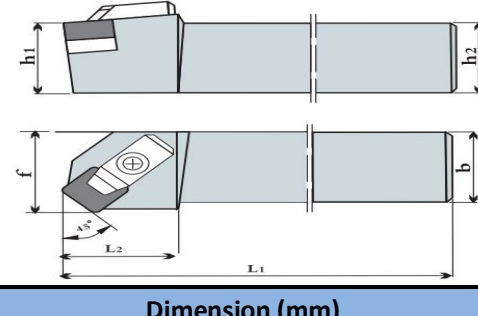
Turning Tool holders


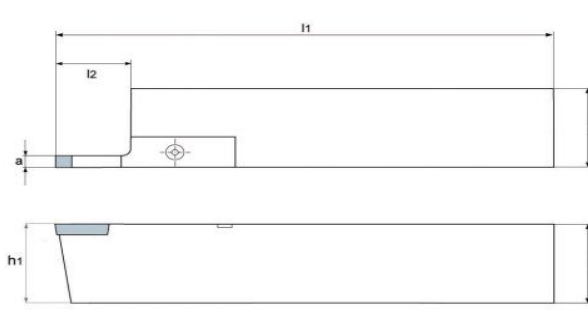
					
					
ISO Code	Dimension (mm)				
	h	b	L1	L2	Insert
CRGNR/L3232P12	32	32	170	40	RNGN120400
CRGNR/L3232P15	32	32	170	40	RNGN150700
CRGNR/L4040S20	40	40	250	42	RNGN200700
CRGNR/L5050T20	40	40	300	42	RNGN201000

					
					
ISO Code	Dimension (mm)				
	h	b	L1	L2	Insert
CRDNN3232P12	32	32	170	64	RNGN120400
CRDNN4040S15	40	40	250	80	RNGN150700

SINAMASTER
Cutting Tool

																																		
	<table border="1"> <thead> <tr> <th>ISO Code</th> <th colspan="5">Dimension (mm)</th> </tr> <tr> <th></th> <th>h</th> <th>b</th> <th>L1</th> <th></th> <th>Insert</th> </tr> </thead> <tbody> <tr> <td>CRDCN3225P09</td> <td>32</td> <td>25</td> <td>170</td> <td></td> <td>RCGX090700</td> </tr> <tr> <td>CRDCN3225P12</td> <td>32</td> <td>25</td> <td>170</td> <td></td> <td>RCGX120700</td> </tr> <tr> <td>CRDCN4040S15</td> <td>40</td> <td>40</td> <td>250</td> <td></td> <td>RCGX151000</td> </tr> </tbody> </table>					ISO Code	Dimension (mm)						h	b	L1		Insert	CRDCN3225P09	32	25	170		RCGX090700	CRDCN3225P12	32	25	170		RCGX120700	CRDCN4040S15	40	40	250	
ISO Code	Dimension (mm)																																	
	h	b	L1		Insert																													
CRDCN3225P09	32	25	170		RCGX090700																													
CRDCN3225P12	32	25	170		RCGX120700																													
CRDCN4040S15	40	40	250		RCGX151000																													


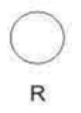
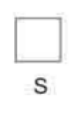

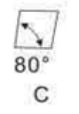
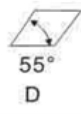

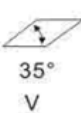
																																		
	<table border="1"> <thead> <tr> <th>ISO Code</th> <th colspan="5">Dimension (mm)</th> </tr> <tr> <th></th> <th>h</th> <th>b</th> <th>L1</th> <th>L2</th> <th>Insert</th> </tr> </thead> <tbody> <tr> <td>CSSNR2525P12</td> <td>25</td> <td>25</td> <td>170</td> <td>32</td> <td>SNGN120408</td> </tr> <tr> <td>CSSNR3232P12</td> <td>32</td> <td>32</td> <td>170</td> <td>35</td> <td>SNGN120712</td> </tr> <tr> <td>CSSNR4040S15</td> <td>40</td> <td>40</td> <td>250</td> <td>45</td> <td>SNGN150712</td> </tr> </tbody> </table>					ISO Code	Dimension (mm)						h	b	L1	L2	Insert	CSSNR2525P12	25	25	170	32	SNGN120408	CSSNR3232P12	32	32	170	35	SNGN120712	CSSNR4040S15	40	40	250	45
ISO Code	Dimension (mm)																																	
	h	b	L1	L2	Insert																													
CSSNR2525P12	25	25	170	32	SNGN120408																													
CSSNR3232P12	32	32	170	35	SNGN120712																													
CSSNR4040S15	40	40	250	45	SNGN150712																													

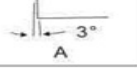


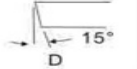
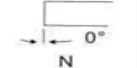
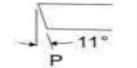
																						
	<table border="1"> <thead> <tr> <th>ISO Code</th> <th colspan="5">Dimension (mm)</th> </tr> <tr> <th></th> <th>h</th> <th>b</th> <th>L1</th> <th>L2</th> <th>Insert</th> </tr> </thead> <tbody> <tr> <td>CSGF3225P</td> <td>32</td> <td>25</td> <td>170</td> <td>19</td> <td>GBMP15E080</td> </tr> </tbody> </table>					ISO Code	Dimension (mm)						h	b	L1	L2	Insert	CSGF3225P	32	25	170	19
ISO Code	Dimension (mm)																					
	h	b	L1	L2	Insert																	
CSGF3225P	32	25	170	19	GBMP15E080																	

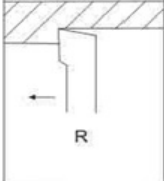
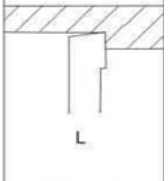
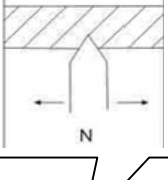
ISO Code Key for Internal Turning Toolholder

1. Holder	
S-Steel	

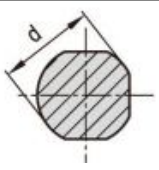
3. Shank Length	
A = 32	P = 170
B = 40	Q = 180
C = 50	R = 200
D = 60	S = 250
E = 70	T = 300
F = 80	U = 350
G = 90	V = 400
H = 100	W = 450
J = 110	Y = 500
K = 125	X = 特殊
L = 140	
M = 150	
N = 160	


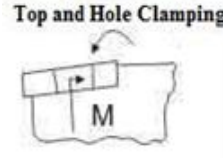
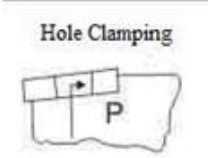
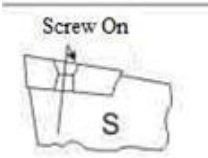
5. Insert Shape	
 W	 R
 S	 T
 C	 D
 K	 V

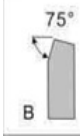
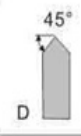


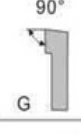


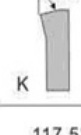

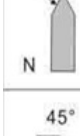
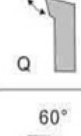




7. Clearance Angle	
 A	
 B	
 C	
 D	
 N	
 P	

8. Feed Direction	
 R	
 L	
 N	

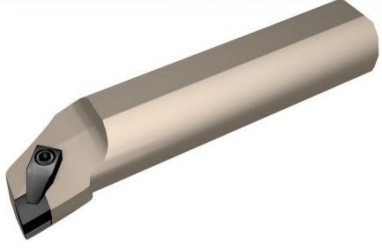
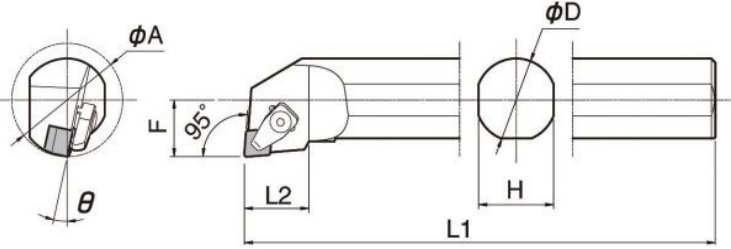
S	25	Q	-	C	C	L	N	R
1	2	3		4	5	6	7	8

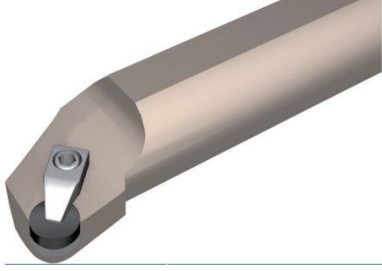
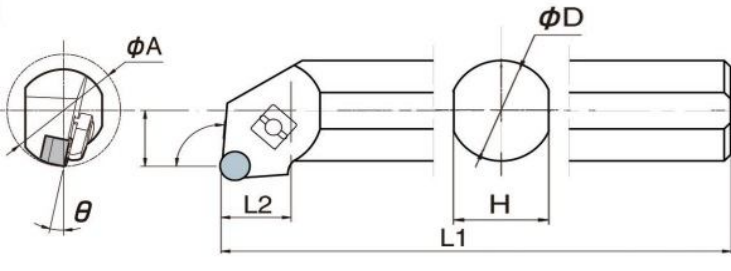
2. Shank Diameter


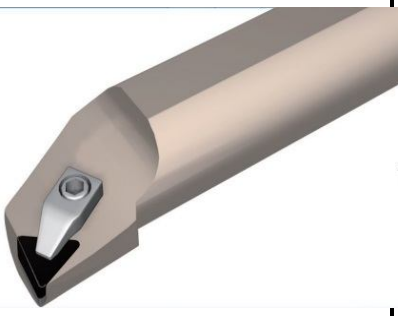
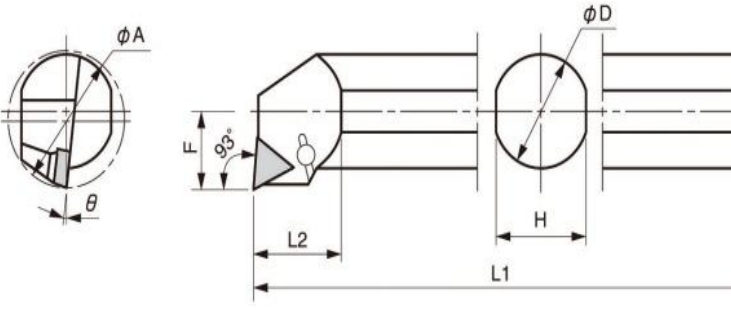
4. Clamping Type
 C
 M
 P
 S

6. Holder Angle		
 B	 D	 E
 F	 G	 H
 J	 K	 L
 N	 Q	 R
 S	 T	 V


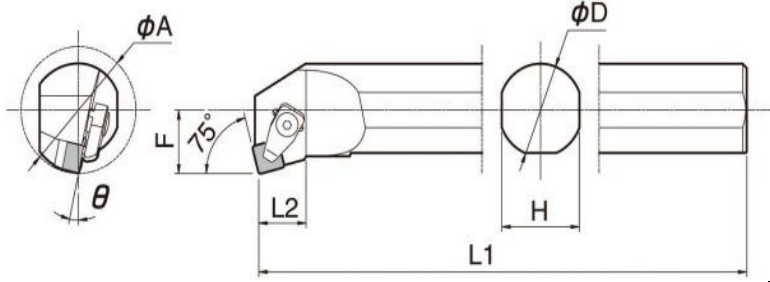
SINAMASTER
Cutting Tool


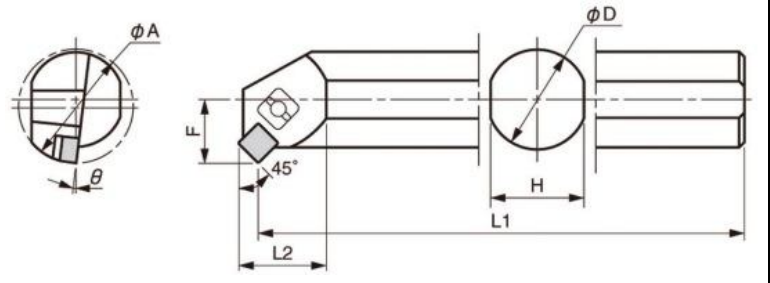
																																		
	<table border="1"> <thead> <tr> <th>ISO Code</th> <th colspan="5">Dimension (mm)</th> </tr> <tr> <th></th> <th>D</th> <th>H</th> <th>L1</th> <th>L2</th> <th>Insert</th> </tr> </thead> <tbody> <tr> <td>S25Q-CCLNR/L</td> <td>25</td> <td>24</td> <td>180</td> <td>40</td> <td>CNGN0904</td> </tr> <tr> <td>S32S-CCLNR/L</td> <td>32</td> <td>30</td> <td>250</td> <td>40</td> <td>CNGN1204</td> </tr> <tr> <td>S40T-CCLNR/L</td> <td>40</td> <td>37</td> <td>300</td> <td>35</td> <td>CNGN1207</td> </tr> </tbody> </table>					ISO Code	Dimension (mm)						D	H	L1	L2	Insert	S25Q-CCLNR/L	25	24	180	40	CNGN0904	S32S-CCLNR/L	32	30	250	40	CNGN1204	S40T-CCLNR/L	40	37	300	35
ISO Code	Dimension (mm)																																	
	D	H	L1	L2	Insert																													
S25Q-CCLNR/L	25	24	180	40	CNGN0904																													
S32S-CCLNR/L	32	30	250	40	CNGN1204																													
S40T-CCLNR/L	40	37	300	35	CNGN1207																													

																																		
	<table border="1"> <thead> <tr> <th>ISO Code</th> <th colspan="5">Dimension (mm)</th> </tr> <tr> <th></th> <th>D</th> <th>H</th> <th>L1</th> <th>L2</th> <th>Insert</th> </tr> </thead> <tbody> <tr> <td>S25Q-CRGNR/L</td> <td>25</td> <td>24</td> <td>180</td> <td>40</td> <td>RNGN0904</td> </tr> <tr> <td>S32S-CRGNR/L</td> <td>32</td> <td>30</td> <td>250</td> <td>40</td> <td>RNGN1204</td> </tr> <tr> <td>S40T-CRGNR/L</td> <td>40</td> <td>37</td> <td>300</td> <td>35</td> <td>RNGN1207</td> </tr> </tbody> </table>					ISO Code	Dimension (mm)						D	H	L1	L2	Insert	S25Q-CRGNR/L	25	24	180	40	RNGN0904	S32S-CRGNR/L	32	30	250	40	RNGN1204	S40T-CRGNR/L	40	37	300	35
ISO Code	Dimension (mm)																																	
	D	H	L1	L2	Insert																													
S25Q-CRGNR/L	25	24	180	40	RNGN0904																													
S32S-CRGNR/L	32	30	250	40	RNGN1204																													
S40T-CRGNR/L	40	37	300	35	RNGN1207																													

																																		
	<table border="1"> <thead> <tr> <th>ISO Code</th> <th colspan="5">Dimension (mm)</th> </tr> <tr> <th></th> <th>D</th> <th>H</th> <th>L1</th> <th>L2</th> <th>Insert</th> </tr> </thead> <tbody> <tr> <td>S25Q-CTUNR/L</td> <td>25</td> <td>24</td> <td>180</td> <td>40</td> <td>TNGN1604</td> </tr> <tr> <td>S32S-CTUNR/L</td> <td>32</td> <td>30</td> <td>250</td> <td>40</td> <td>TNGN1604</td> </tr> <tr> <td>S40T-CTUNR/L</td> <td>40</td> <td>37</td> <td>300</td> <td>35</td> <td>TNGN1604</td> </tr> </tbody> </table>					ISO Code	Dimension (mm)						D	H	L1	L2	Insert	S25Q-CTUNR/L	25	24	180	40	TNGN1604	S32S-CTUNR/L	32	30	250	40	TNGN1604	S40T-CTUNR/L	40	37	300	35
ISO Code	Dimension (mm)																																	
	D	H	L1	L2	Insert																													
S25Q-CTUNR/L	25	24	180	40	TNGN1604																													
S32S-CTUNR/L	32	30	250	40	TNGN1604																													
S40T-CTUNR/L	40	37	300	35	TNGN1604																													

SINAMASTER
Cutting Tool

					
	ISO Code		Dimension (mm)		
	D	H	L1	L2	Insert
S25Q-CSKNR/L	25	24	180	40	SNGN1204
S32S-CSKNR/L	32	30	250	40	SNGN1207
S40T-CSKNR/L	40	37	300	35	SNGN1207

					
	ISO Code		Dimension (mm)		
	D	H	L1	L2	Insert
S25Q-CSSNR/L	25	24	180	40	SNGN1204
S32S-CSSNR/L	32	30	250	40	SNGN1207
S40T-CSSNR/L	40	37	300	35	SNGN1207

MILLING CUTTER

S **EM** **90** - **A** **P** **10**

D12 - **W16** - **L100** - **Z01**

2 **Cutter Style**

FM: Face Milling Tools
EM: End Face Milling Tools
CM: Chamfering End Milling Tools

3 **Lead Angle**

90° - 75° - 60° - 45°
20° - 15° - 11° - 5° - 0°

6 **Cutting Edge Length**

4 **Insert Shape**

C	D	E	K
L	R	S	T
V	W	A	B
H	M	O	P

5 **Clearance angle of Insert**

A	B	C
D	E	F
G	N	P

7 **Tool Diameter**


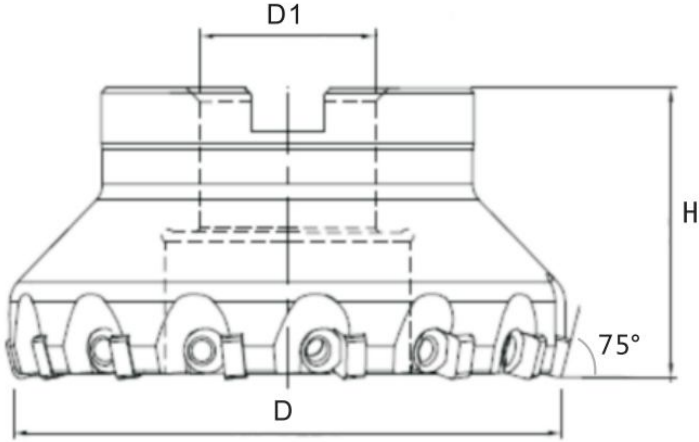
8 **Assembly Form and Diameter**


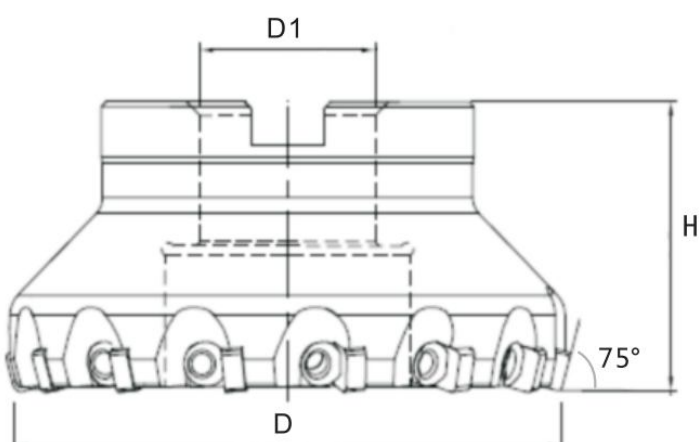
A, B, C, D,: Assembly form according to ISO

9 **Tool Length**

10 **Number of Effective Tooth**

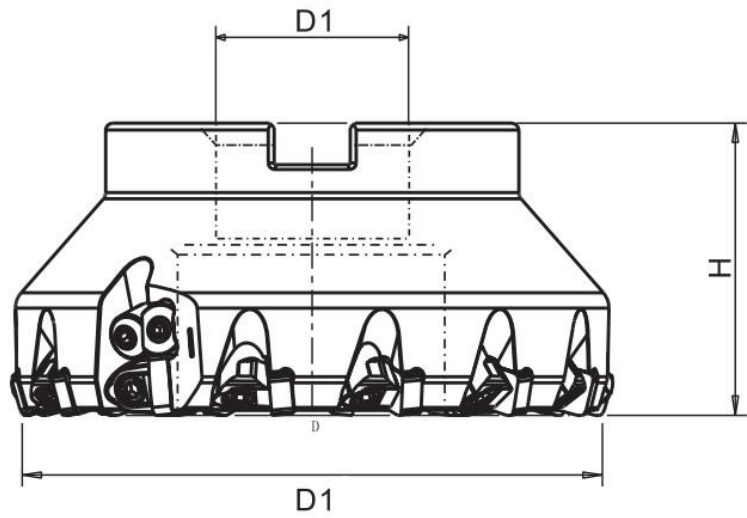
SINAMASTER
Cutting Tool

<p>75°</p> 					
<p>ISO Code</p>	<p>Dimension (mm)</p>				
	<p>D</p>	<p>D1</p>	<p>H</p>	<p>Tooth</p>	<p>Insert</p>
<p>SEM75-SN09-D125-B40-L63-Z14</p>	<p>125</p>	<p>40</p>	<p>63</p>	<p>14</p>	<p>SNEN090408</p>

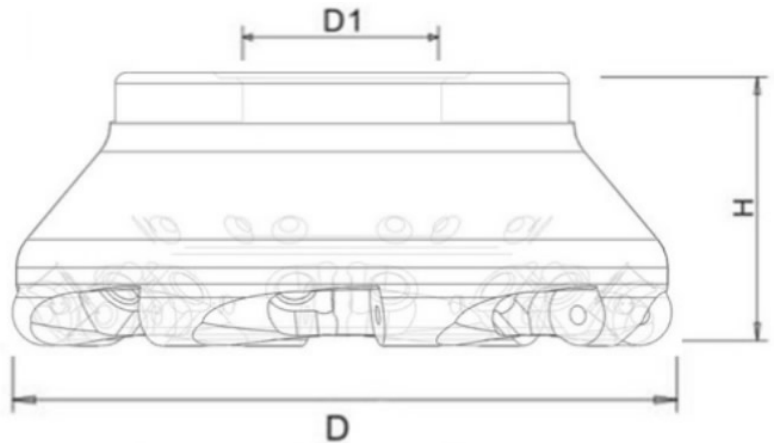
<p>75°</p> 					
<p>ISO Code</p>	<p>Dimension (mm)</p>				
	<p>D</p>	<p>D1</p>	<p>H</p>	<p>Tooth</p>	<p>Insert</p>
<p>SEM75-SN12-D63-A22-L40-Z05</p>	<p>63</p>	<p>22</p>	<p>40</p>	<p>5</p>	<p>SNEN120412</p>

SINAMASTER
Cutting Tool

75° wiper



ISO Code	Dimension (mm)						
	D	D1	H	Tooth Number		Milling Insert	Wiper Insert
				Milling	Wiper		
SEM75W-SN12-D100-B32-L50-Z10	100	32	50	8	2	SNFN120412	SNEN1204ZZ



ISO Code	Dimension (mm)				
	D	D1	H	Tooth	Insert
SFM-RN12-D80-A27-L50-Z06	80	27	50	6	RNEN120400
SFM-RN12-D125-B40-L63-Z09	125	40	63	9	RNEN120400



Contact Information:

Mr. Anthony Huang

Sales Manager

SINAMASTER CUTTING TOOL

Add: 431-H, Building C, No. 93 Xiangyu Rd.,
Huli District, Xiamen City, China 361006

Phone: 0086-15659828280 (Whatsapp, Telegram)

Fax: 0086-5926010174

Skype: anthony999huang@hotmail.com

Email: tool@sinamaster.com

Http://www.sinamaster.com

