



CATALOG

GTS-Precision Tools
PCBN Tool Product Manual



T | **C** | **C** | **G** | **W** | **12**

Table 0 | Table 1 | Table 2 | Table 3 | Table 4 | Table 5

CBN Insert model
1-Insert Shape

Mark	Blade Shape
C	Lozenge
D	
V	
S	Square
T	Positive Triangle
R	Rotundity
W	Iso-Angle Hexagon

2-Back Corner

Mark	The Back Corner
B	
C	
N	
P	
O	Other

The band indicates that there are also cases where 10 degrees are used

0-Overall

Mark	Overall
T	One-on-one
	Welded
Z	Composite

4-Hole Type

Mark	Hole Type
N	No holes
A	Cylinder holes
B	One-sided inclination cylinder hole
W	
T	
C	Double-sided inclination cylinder hole
Q	
X	Special

02 | **04** | **W** | **D** | **00** | **1**

Table 6 | Table 7 | Table 8 | Table 9 | Table 10 | Table 11

3-Tip Height Allows Tolerances

Mark	High Tip Allows Tolerances	The Inner Cut Circle Allows Tolerances	The Thickness Allows Tolerances
A	±0.005	±0.025	±0.025
F	±0.005	±0.013	±0.025
C	±0.013	±0.025	±0.025
H	±0.013	±0.013	±0.025
E	±0.025	±0.025	±0.025
G	±0.025	±0.025	±0.13
M	±0.08~±0.2	±0.05~±0.15	±0.13

6-Thickness

Mark	Thickness
01	1.59
02	2.38
T2	2.78
03	3.18
T3	3.97
04	4.76
05	5.56
06	6.35
07	7.94
09	9.52

5-Cut Round

Shape	Mark	Long Cutting Edge	Inscribed Circle	Shape	Mark	Long Cutting Edge	Inscribed Circle	Shape	Mark	Long Cutting Edge	Inscribed Circle
	C	05	5.64		S	05	5.56		R	08	8
		06	6.4			06	6.35			10	10
		08	8			08	7.94			12	12
		09	9.7			09	9.525			12	12.7
		12	12.9			12	12.7			15	15.875
		16	16.1			15	15.875			16	16
		19	19.3			19	19.05			19	19.05
	D	07	7.7		T	06	6.9		W	04	4.3
		09	9.7			08	8.2			05	5.4
		11	11.6			09	9.6			06	6.5
		15	15.5			11	11			08	8.7
	V	08	8.3						10	10.9	15.875
		09	9.7								
		11	11.1								
		16	16.6								

7-Tip Arc

Mark	Knife Tip Arc
00	0
01	0.1
02	0.2
04	0.4
08	0.8
10	1
12	1.2
16	1.6
24	2.4
M O	Round (metric)

8-Inverted Width

Mark	Size (mm)
U	0.1
V	0.15
W	0.2
X	0.25
Y	0.3
Z	0.35

9-Invert Angle

Mark	Angle
B	5°
P	10°
D	15°
E	20°
F	25°
G	30°

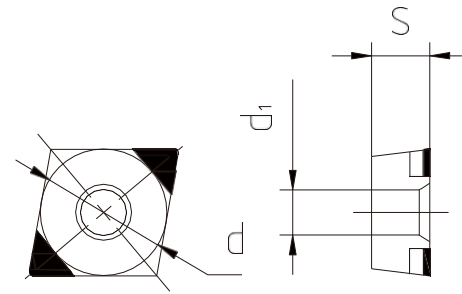
10-Passivation

Mark	Size
05	0.005
10	0.01
15	0.015
20	0.02
25	0.025

11-Number of Heads

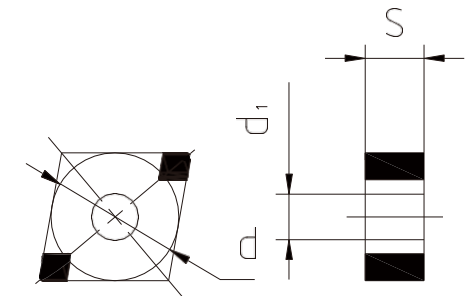
Mark	Number of Heads
1	1
2	2
3	3
4	4
6	6
8	8

CBN Tip Double Edge



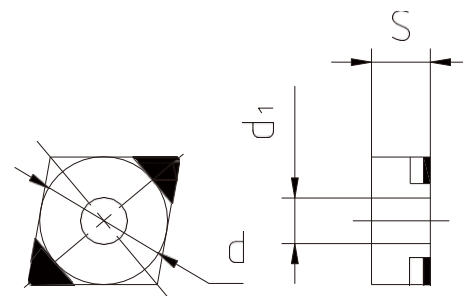
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
CCGW060202VE10-2	6.35	2.38	2.8	●	●	●	●
CCGW060202WE10-2				●	●	●	●
CCGW060204VE10-2	6.35	2.38	2.8	●	●	●	●
CCGW060204WE10-2				●	●	●	●
CCGW09T302VE10-2	9.525	3.97	4.4	●	●	●	●
CCGW09T302WE10-2				●	●	●	●
CCGW09T304VE10-2	9.525	3.97	4.4	●	●	●	●
CCGW09T304WE10-2				●	●	●	●
CCGW09T308VE10-2	9.525	3.97	4.4	●	●	●	●
CCGW09T308WE10-2				●	●	●	●

CBN Tip and Four Edge



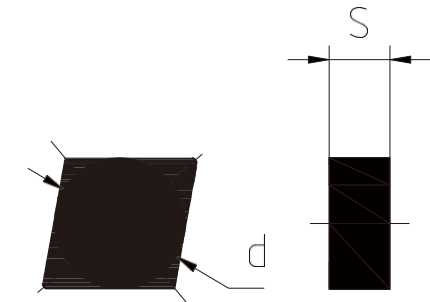
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
CNGA 120404 VD10-4	12.7	4.76	5.16	●	●	●	●
CNGA 120404 VE10-4				●	●	●	●
CNGA 120408 VD10-4	12.7	4.76	5.16	●	●	●	●
CNGA 120408 VE10-4				●	●	●	●
CNGA 120412 VD10-4	12.7	4.76	5.16	●	●	●	●
CNGA 120412 VE10-4				●	●	●	●

CBN Tip Double Edge



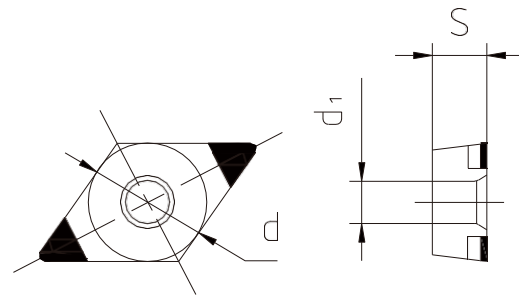
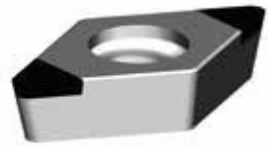
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
CNGA120404VD10-2	12.7	4.76	5.16	●	●	●	●
CNGA120404VE10-2				●	●	●	●
CNGA120408VD10-2	12.7	4.76	5.16	●	●	●	●
CNGA120408VE10-2				●	●	●	●
CNGA120412VD10-2	12.7	4.76	5.16	●	●	●	●
CNGA120412VE10-2				●	●	●	●

CBN Solid Insert



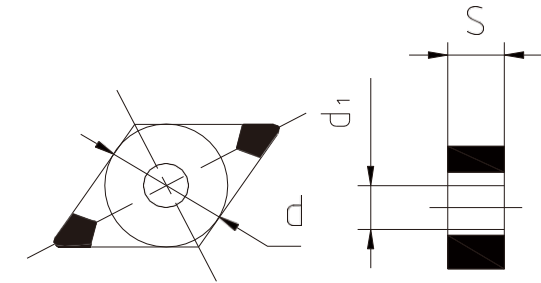
Model	Size		Material			
	d	S	GT96S	GT90	GT70	GT50
TCNGN090304VE10-4	9.525	3.18	●	●	●	●
TCNGN090304WE10-4			●	●	●	●
TCNGN090304XE10-4			●	●	●	●
TCNGN090308VE10-4	9.525	3.18	●	●	●	●
TCNGN090308WE10-4			●	●	●	●
TCNGN090308XE10-4			●	●	●	●
TCNGN090312VE10-4	9.525	3.18	●	●	●	●
TCNGN090312WE10-4			●	●	●	●
TCNGN090312XE10-4			●	●	●	●
TCNGN120408VE10-4	12.7	4.76	●	●	●	●
TCNGN120408WE10-4			●	●	●	●
TCNGN120408XE10-4			●	●	●	●
TCNGN120412VE10-4	12.7	4.76	●	●	●	●
TCNGN120412WE10-4			●	●	●	●
TCNGN120412XE10-4			●	●	●	●

CBN Tip Double Edge



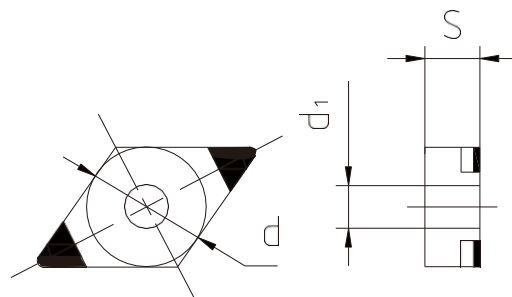
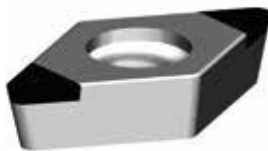
Model	Size			Material			
	d	S	d _i	GT96S	GT90	GT70	GT50
DCGW070202VD05-2	6.35	2.38	2.8	●	●	●	●
DCGW070202VE05-2				●	●	●	●
DCGW070204VD05-2	6.35	2.38	2.8	●	●	●	●
DCGW070204VE05-2				●	●	●	●
DCGW070208VD05-2	6.35	2.38	2.8	●	●	●	●
DCGW070208VE05-2				●	●	●	●
DCGW11T302VD05-2	9.525	3.97	4.4	●	●	●	●
DCGW11T302VE05-2				●	●	●	●
DCGW11T304VD05-2	9.525	3.97	4.4	●	●	●	●
DCGW11T304VE05-2				●	●	●	●
DCGW11T308VD05-2	9.525	3.97	4.4	●	●	●	●
DCGW11T308VE05-2				●	●	●	●

CBN Tip Four Edge



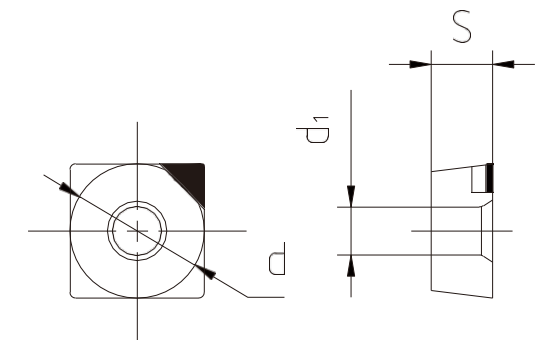
Model	Size			Material			
	d	S	d _i	GT96S	GT90	GT70	GT50
DNGA150404VD05-4	12.7	4.76	5.16	●	●	●	●
DNGA150404WD05-4				●	●	●	●
DNGA150408VD05-4	12.7	4.76	5.16	●	●	●	●
DNGA150408WD05-4				●	●	●	●
DNGA150412VD05-4	12.7	4.76	5.16	●	●	●	●
DNGA150412WD05-4				●	●	●	●
DNGA150604VD05-4	12.7	6.35	5.16	●	●	●	●
DNGA150604WD05-4				●	●	●	●
DNGA150608VD05-4	12.7	6.35	5.16	●	●	●	●
DNGA150608WD05-4				●	●	●	●
DNGA150612VD05-4	12.7	6.35	5.16	●	●	●	●
DNGA150612WD05-4				●	●	●	●

CBN Tip Double Edge



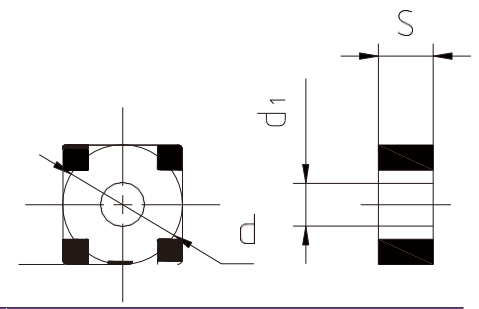
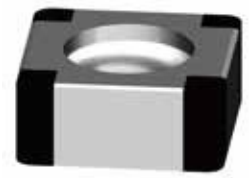
Model	Size			Material			
	d	S	d _i	GT96S	GT90	GT70	GT50
DNGA150404VD05-2	12.7	4.76	5.16	●	●	●	●
DNGA150404WD05-2				●	●	●	●
DNGA150408VD05-2	12.7	4.76	5.16	●	●	●	●
DNGA150408WD05-2				●	●	●	●
DNGA150412VD05-2	12.7	4.76	5.16	●	●	●	●
DNGA150412WD05-2				●	●	●	●
DNGA150604VD05-2	12.7	6.35	5.16	●	●	●	●
DNGA150604WD05-2				●	●	●	●
DNGA150608VD05-2	12.7	6.35	5.16	●	●	●	●
DNGA150608WD05-2				●	●	●	●
DNGA150612VD05-2	12.7	6.35	5.16	●	●	●	●
DNGA150612WD05-2				●	●	●	●

CBN tip Single Edge



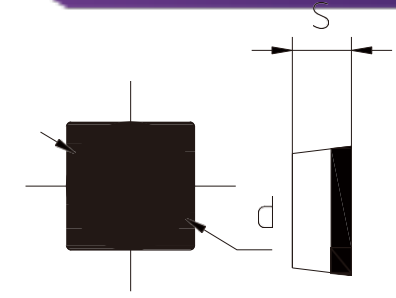
Model	Size			Material			
	d	S	d _i	GT96S	GT90	GT70	GT50
SCGW09T304VD05-1	9.525	3.97	4.4	●	●	●	●
SCGW09T304VE05-1				●	●	●	●
SCGW09T308VD05-1	9.525	3.97	4.4	●	●	●	●
SCGW09T308VE05-1				●	●	●	●

CBN Tip Eight Blade



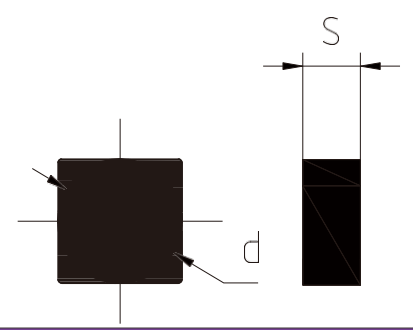
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
SNGA120404VE10-8	12.7	4.76	5.16	●	●	●	●
SNGA120404WE10-8				●	●	●	●
SNGA120408VE10-8	12.7	4.76	5.16	●	●	●	●
SNGA120408WE10-8				●	●	●	●
SNGA120412VE10-8	12.7	4.76	5.16	●	●	●	●
SNGA120412WE10-8				●	●	●	●

CBN Full Top



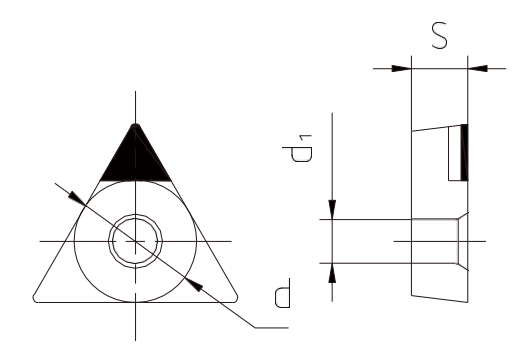
Model	Size		Material			
	d	S	GT96S	GT90	GT70	GT50
ZSPGN090308VE05-4	9.525	3.18	●	●	●	●
ZSPGN090308WE05-4			●	●	●	●
ZSPGN090312VE05-4	9.525	3.18	●	●	●	●
ZSPGN090312WE05-4			●	●	●	●

CBN Solid Insert



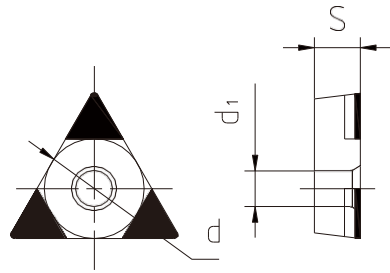
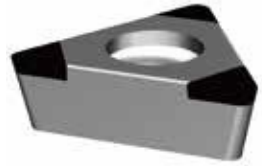
Model	Size		Material			
	d	S	GT96S	GT90	GT70	GT50
TSNGN090308WE15-8	9.525	3.18	●	●	●	●
TSNGN090308WF15-8			●	●	●	●
TSNGN090308XE15-8			●	●	●	●
TSNGN090308XF15-8			●	●	●	●
TSNGN090312WE15-8	9.525	3.18	●	●	●	●
TSNGN090312WF15-8			●	●	●	●
TSNGN090312XE15-8			●	●	●	●
TSNGN090312XF15-8			●	●	●	●
TSNGN120408WE15-8	12.7	4.76	●	●	●	●
TSNGN120408WF15-8			●	●	●	●
TSNGN120408XE15-8			●	●	●	●
TSNGN120408XF15-8			●	●	●	●
TSNGN120412WE15-8	12.7	4.76	●	●	●	●
TSNGN120412WF15-8			●	●	●	●
TSNGN120412XE15-8			●	●	●	●
TSNGN120412XF15-8			●	●	●	●

CBN Tip Single Edge



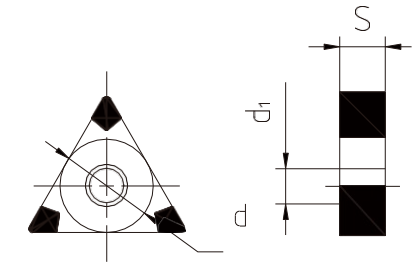
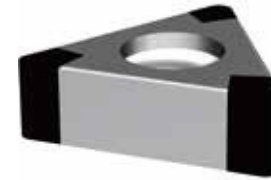
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
TCGW090204VD05-1	5.56	2.38	2.5	●	●	●	●
TCGW090204WD05-1				●	●	●	●
TCGW090208VD05-1	5.56	2.38	2.5	●	●	●	●
TCGW090208WD05-1				●	●	●	●
TCGW110204VD05-1	6.35	2.38	2.8	●	●	●	●
TCGW110204WD05-1				●	●	●	●
TCGW110208VD05-1	6.35	2.38	2.8	●	●	●	●
TCGW110208WD05-1				●	●	●	●

CBN Tip Three Edge



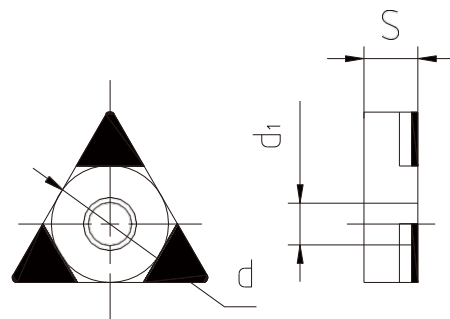
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
TCGW090204VD05-3	5.56	2.38	2.5				
TCGW090204WD05-3				●	●	●	●
TCGW090208VD05-3	5.56	2.38	2.5	●	●	●	●
TCGW090208WD05-3				●	●	●	●
TCGW110204VD05-3	6.35	2.38	2.8	●	●	●	●
TCGW110204WD05-3				●	●	●	●
TCGW110208VD05-3	6.35	2.38	2.8	●	●	●	●
TCGW110208WD05-3				●	●	●	●

CBN Tip Six Edge



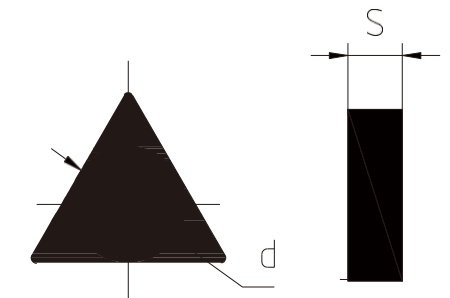
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
TNGA160404WE10-6	9.525	4.76	3.81	●	●	●	●
TNGA160404XE10-6				●	●	●	●
TNGA160408WE10-6	9.525	4.76	3.81	●	●	●	●
TNGA160408XE10-6				●	●	●	●
TNGA160412WE10-6	9.525	4.76	3.81	●	●	●	●
TNGA160412XE10-6				●	●	●	●

CBN Tip Three Edge



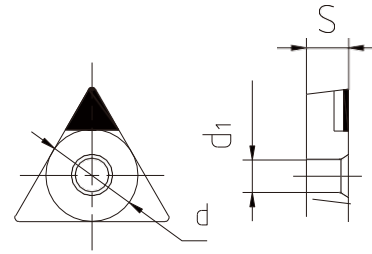
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
TNGA160404WE10-3	9.525	4.76	3.81	●	●	●	●
TNGA160404XE10-3				●	●	●	●
TNGA160408WE10-3	9.525	4.76	3.81	●	●	●	●
TNGA160408XE10-3				●	●	●	●
TNGA160412WE10-3	9.525	4.76	3.81	●	●	●	●
TNGA160412XE10-3				●	●	●	●

CBN Full Top



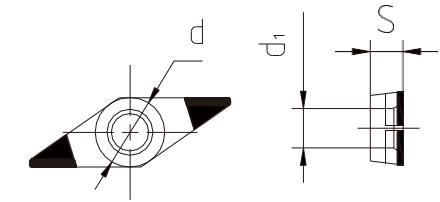
Model	Size		Material			
	d	S	GT96S	GT90	GT70	GT50
TTNGN110304WF10-6	6.35	3.18	●	●	●	●
TTNGN110304XE10-6			●	●	●	●
TTNGN110304XF10-6			●	●	●	●
TTNGN110308WF10-6	6.35	3.18	●	●	●	●
TTNGN110308XE10-6			●	●	●	●
TTNGN110308XF10-6			●	●	●	●
TTNGN110312WF10-6	6.35	3.18	●	●	●	●
TTNGN110312XE10-6			●	●	●	●
TTNGN110312XF10-6			●	●	●	●

CBN Tip Single Edge



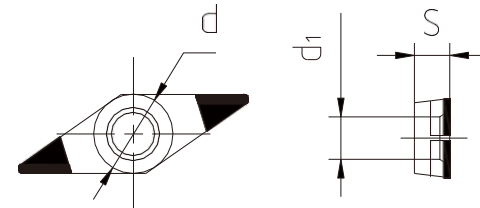
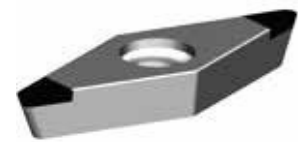
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
TPGW090204VD05-1	5.56	2.38	2.5	●	●	●	●
TPGW090204WD05-1				●	●	●	●
TPGW090208VD05-1	5.56	2.38	2.5	●	●	●	●
TPGW090208WD05-1				●	●	●	●
TPGW110204VD05-1	6.35	2.38	2.8	●	●	●	●
TPGW110204WD05-1				●	●	●	●
TPGW110208VD05-1	6.35	2.38	2.8	●	●	●	●
TPGW110208WD05-1				●	●	●	●

CBN Tip Double Edge



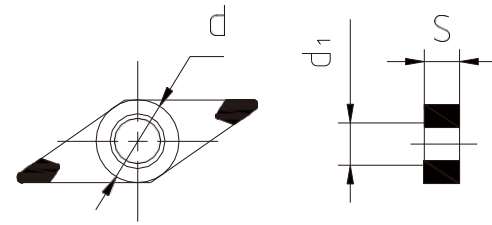
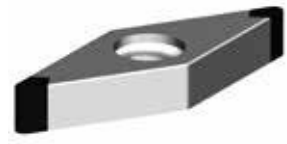
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
VCGW110302VD05-2	6.35	3.18	2.8	●	●	●	●
VCGW110302WD05-2				●	●	●	●
VCGW110304VD05-2	6.35	3.18	2.8	●	●	●	●
VCGW110304WD05-2				●	●	●	●
VCGW160404VD05-2	9.525	4.76	4.4	●	●	●	●
VCGW160404WD05-2				●	●	●	●
VCGW160408VD05-2	9.525	4.76	4.4	●	●	●	●
VCGW160408WD05-2				●	●	●	●
VCGW160412VD05-2	9.525	4.76	4.4	●	●	●	●
VCGW160412WD05-2				●	●	●	●

CBN Tip Double Edge



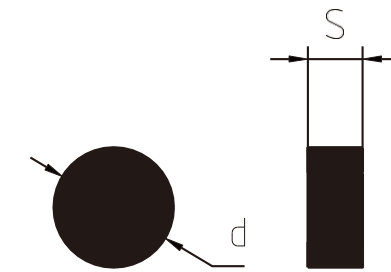
Model	Size			Material			
	d	S	d ₁	GT96S	GT90	GT70	GT50
VBGW160404WE10-2	9.525	4.76	4.4	●	●	●	●
VBGW160404WF10-2				●	●	●	●
VBGW160408WE10-2	9.525	4.76	4.4	●	●	●	●
VBGW160408WF10-2				●	●	●	●
VBGW160412WE10-2	9.525	4.76	4.4	●	●	●	●
VBGW160412WF10-2				●	●	●	●

CBN Tip and Four Edge



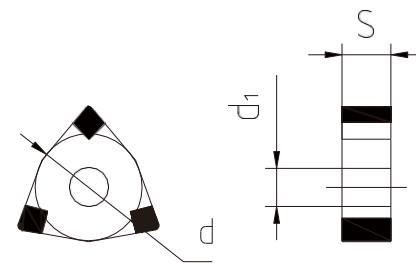
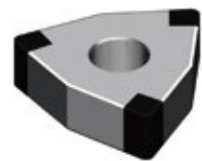
Model	Size			Material			
	d	S	d _i	GT96S	GT90	GT70	GT50
VNGA160404XD05-4	9.525	4.76	3.81	●	●	●	●
VNGA160404XF05-4				●	●	●	●
VNGA160408XD05-4	9.525	4.76	3.81	●	●	●	●
VNGA160408XF05-4				●	●	●	●
VNGA160412XD05-4	9.525	4.76	3.81	●	●	●	●
VNGA160412XF05-4				●	●	●	●

CBN Full Top



Model	Size		Material			
	d	S	GT96S	GT90	GT70	GT50
TRNGN060300WE10-1	6.35	3.18	●	●	●	●
TRNGN060300WE15-1			●	●	●	●
TRNGN060300XE10-1			●	●	●	●
TRNGN060300XE15-1			●	●	●	●
TRNGN090300WE10-1	9.525	3.18	●	●	●	●
TRNGN090300WE15-1			●	●	●	●
TRNGN090300XE10-1			●	●	●	●
TRNGN090300XE15-1			●	●	●	●
TRNGN120400WE10-1	12.7	4.76	●	●	●	●
TRNGN120400WE15-1			●	●	●	●
TRNGN120400XE10-1			●	●	●	●
TRNGN120400XE15-1			●	●	●	●

CBN Tip Six Edge



Model	Size			Material			
	d	S	d _i	GT96S	GT90	GT70	GT50
WNGA080404VD05-6	12.7	4.76	5.16	●	●	●	●
WNGA080404VE05-6				●	●	●	●
WNGA080408VD05-6	12.7	4.76	5.16	●	●	●	●
WNGA080408VE05-6				●	●	●	●
WNGA080412VD05-6	12.7	4.76	5.16	●	●	●	●
WNGA080412VE05-6				●	●	●	●