



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

02 04 W D 00 1
Table 6 Table 7 Table 8 Table 9 Table 10 Table 11

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 |

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 |
|-------|------|-------------------|------------------|-------|------|-------------------|------------------|-------|-------|-------------------|------------------|
| | 05 | 5.64 | 5.56 | | 05 | 5.56 | 5.56 | | 08 | 8 | 8 |
| | 06 | 6.4 | 6.35 | | 06 | 6.35 | 6.35 | | 10 | 10 | 10 |
| | 08 | 8 | 7.94 | | 08 | 7.94 | 7.94 | | 12 | 12 | 12 |
| | 09 | 9.7 | 9.525 | | 09 | 9.525 | 9.525 | | 12 | 12.7 | 12.7 |
| | 12 | 12.9 | 12.7 | | 12 | 12.7 | 12.7 | | 15 | 15.875 | 15.875 |
| | 16 | 16.1 | 15.875 | | 15 | 15.875 | 15.875 | | 16 | 16 | 16 |
| | 19 | 19.3 | 19.05 | | 19 | 19.05 | 19.05 | | 19 | 19.05 | 19.05 |
| | 07 | 7.7 | 6.35 | | 06 | 6.9 | 3.97 | | 25 | 25 | 25 |
| | 09 | 9.7 | 7.94 | | 08 | 8.2 | 4.76 | | 25 | 25.4 | 25.4 |
| | 11 | 11.6 | 9.525 | | 09 | 9.6 | 5.56 | | 04 | 4.3 | 6.35 |
| | 15 | 15.5 | 12.7 | | 11 | 11 | 6.35 | | 05 | 5.4 | 7.94 |
| | 19 | 19.4 | 15.875 | 16 | 16.5 | 9.525 | 06 | 6.5 | 9.525 | | |
| | 08 | 8.3 | 4.76 | | 08 | 8.7 | 12.7 | 08 | 8.7 | 12.7 | |
| | 09 | 9.7 | 5.56 | | 10 | 10.9 | 15.875 | 10 | 10.9 | 15.875 | |
| 11 | 11.1 | 6.35 | | | | | | | | | |
| 16 | 16.6 | 9.525 | | | | | | | | | |

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° |

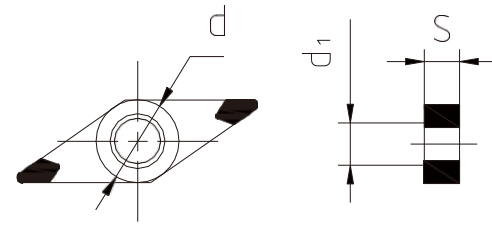
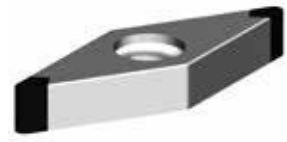
10-Passivation

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

11-Number of Heads

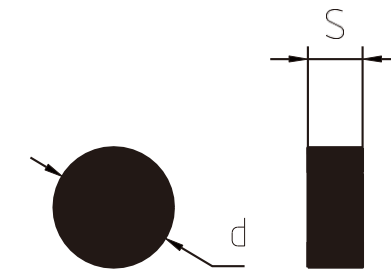
| Mark | Number of Heads |
|------|-----------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 6 | 6 |
| 8 | 8 |

CBN Tip and Four Edge



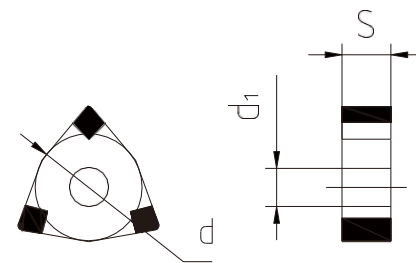
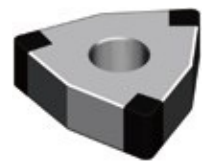
| Model | Size | | | Material | | | |
|------------------|-------|------|----------------|----------|------|------|------|
| | d | S | d ₁ | GT96S | GT90 | GT70 | GT50 |
| VNGA160404XD05-4 | 9.525 | 4.76 | 3.81 | ● | ● | ● | ● |
| VNGA160404XF05-4 | | | | ● | ● | ● | ● |
| VNGA160408XD05-4 | 9.525 | 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 ₁ | 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 | | | | ● | ● | ● | ● |