

Milling Inserts Identification System

Symbol	Shape
H	Hexagon
O	Octagon
P	Pentagon
S	Square
T	Triangle
C	80° Rhombic
D	55° Rhombic
E	75° Rhombic
F	50° Rhombic
M	86° Rhombic
V	35° Rhombic
W	80° Trigon
L	Rectangle
A	85° Parallelogram
B	82° Parallelogram
K	55° Parallelogram
R	Round

Shown angle stands for acute angle for diamond and parallelogram inserts.

① Shape

Symbol	Relief Angle
A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°
O	Other angles

② Relief Angle

Symbol	Tolerance (mm)		
	Corner Height	Thickness	IC Size
A	±0.005	±0.025	±0.025
F			±0.013
C	±0.013		
H	±0.013		
E	±0.025	±0.13	±0.025
J	±0.005	±0.025	±0.05~±0.15
K*	±0.013		
L*	±0.025		
M*	±0.08~±0.18	±0.13	±0.08~±0.25
N*		±0.025	
U*	±0.13~±0.38	±0.13	

Insert's periphery is as fired (sintered).
*Tolerance difference is depending on insert size.

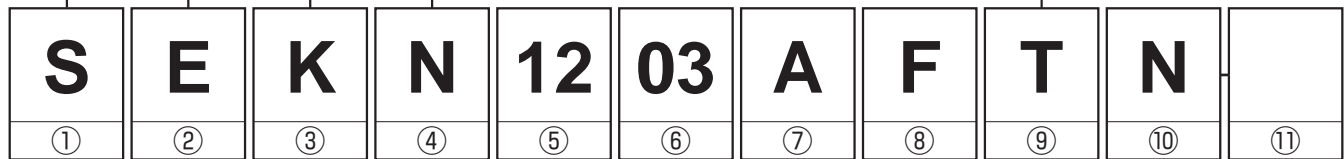
③ Tolerance

Symbol	Shape
W	No chipbreaker, with hole
T	1 edge chipbreaker, with hole
F	2 edge chipbreakers, without hole
N	No Chipbreaker, Without Hole
R	1 edge chipbreaker, without hole
M	1 edge chipbreaker, with hole
A	No chipbreaker, with hole

④ Hole / Chipbreaker Symbol

Symbol	Shape
F	Sharp Edge
E	R-honed
T	Chamfer
S	Chamfer + R-honed

⑤ Edge Preparation



⑤ Edge Length

⑥ Thickness

Symbol	Thickness
02	2.38
03	3.18
T3	3.97
04	4.76
05	5.56
06	6.35

⑦ Approach Angle

Symbol	Angle
A	45°
D	60°
E	75°
F	85°
H	87°
P	90°
X	65°

⑧ Relief Angle

Symbol	Angle
A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°
R	10°
S	14°
T	22°
U	23°

⑩ Tool Hand

Symbol	Hand
R	Right
L	Left
N	Neutral

⑪ Manufacturer's Option
• Chipbreaker, etc.

In case of indicating corner-R(ℓ) at ⑦ and ⑧

⑦ ⑧ Corner-R(ℓ)

Symbol	Value
04	0.4 Corner-R(ℓ)
08	0.8 //
12	1.2 //
16	1.6 //
20	2.0 //

