

# CDT Insert NOMENCLATURE / Speeds & Feeds

Shape	
A	Rectangle
C	80° Diamond
D	55° Diamond
S	Square
T	Triangle
V	35° Diamond
W	80° Trigon
R	Round

\*Exact tolerance is determined by the size of the insert

Tolerance	
Insert I.C.	Thickness
F = ± .002 to ± .004	± .002
G = ± .001	± .005
H = ± .005	± .001
K = ± .005	± .001
M = ± .002 to ± .007*	± .005

Inscribe Circle Size		
Bottom		Top
1.2 = .156"	2.5 = .312"	08 = 8mm
1.5 = .187"	3 = .375"	10 = 10mm
1.8 = .218"	4 = .500"	11 = 11mm
2 = .250"	5 = .625"	12 = 12mm
	6 = .750"	16 = 16mm

Radius		
ANSI	Corner Radius	ISO
0	.004	01
0.5	.008	02
1	.015 (1/64)	04
2	.031 (1/32)	08
3	.046 (3/64)	12
4	.062 (1/16)	16

**T N M G**

ISO	11	T3	08
ANSI	4	3	2

Clearance Angle	
B	5° Positive
C	7° Positive
D	15° Positive
N	0° Negative
P	11° Positive

Type	
A	With hole, without chipbreaker
B	Counter sink on one side, with hole
G	Chipbreaker on both sides, with hole
T	Chipbreaker & ISO countersink one side, with hole
W	ISO Countersink on one side, with hole
X	Special Design

Thickness		
ANSI	Thickness	ISO
0.6	.040	T0
1	1/16	01
1.2	5/64	T1
1.5	3/32	02
2	1/8	03
2.5	5/32	T3
3	3/16	04
4	1/4	06

## Insert Speed & Feed Information

Material	Turning		Milling*		Drilling	
	SFM	Inch/ Rev	SFM	Inch/ Rev	SFM	Inch/ Rev
<b>P</b> Mild Steel Annealed Alloy Steel Hardened Alloy Steel Cast Steel	490-1200		250-800		225-650	
	490-980	.004-.031	200-725	.003-.015	200-650	.0022-.006
	180-500		200-600		100-300	
	180-650		200-600		150-550	
<b>M</b> Stainless Steel	280-810	.004-.015	200-600	.003-.015	250-430	.002-.006
<b>K</b> Low Cast Iron High Cast Iron	590-1240	.004-.024	325-600	.004-.016	300-600	.0025-.009
	360-700		325-600		300-600	
<b>N</b> Alum. Alloy Un-heat Treated Alum. Alloy Heat Treated Cast Alum. & Copper Alloy	850-1980		860-1800		600-1100	
	550-1650	.004-.018	575-1230	.007-.018	315-790	.0038-.011
	360-950		280-930		250-760	
<b>S</b> Heat Resistant Steels	100-300	.002-.006	100-300	.0024-.008	60-150	.0028-.008
<b>K</b> Cast Iron (CBN INSERTS)	400-600	.002-.020				
<b>H</b> Hardened Material (CBN INSERTS)	450-950	.002-.011				

\*For APKT inserts refer to the chart below for cutting conditions.

### APKT 11T308

Feed Per Tooth (inch)

AP (inch)	Light	Medium	Heavy
.315	.0028	.0031	.0039
.236	.0039	.0047	.0059
.157	.0047	.0059	.0079

f/t

### APKT 160408

Feed Per Tooth (inch)

AP (inch)	Light	Medium	Heavy
.472	.0028	.0031	.0039
.315	.0039	.0047	.0059
.197	.0047	.0059	.0079

f/t