



	<b>C</b>
	<b>D</b>
	<b>R</b>
	<b>S</b>
	<b>T</b>
	<b>V</b>
	<b>W</b>
<b>1 - INSERT SHAPE</b>	

NOTE: tolerances apply prior to edge prep and coating

I.C.: theoretical diameter of the insert inscribed circle  
 T: thickness  
 B: see figures below

TOLERANCE CLASS	TOLERANCE ON "I.C."		TOLERANCE ON "B"		TOLERANCE ON "T"	
	inch	mm	inch	mm	inch	mm
C	±.0010	±0,025	±.0005	±0,013	±.001	±0,025
H	±.0005	±0,013	±.0005	±0,013	±.001	±0,025
E	±.0010	±0,025	±.0010	±0,025	±.001	±0,025
G	±.0010	±0,025	±.0010	±0,025	±.005	±0,130
M	See tables at right		See tables at right		±.005	±0,130
U	See tables at right		See tables at right		±.005	±0,130

**3 - TOLERANCE**

inch	<b>C</b>	<b>N</b>	<b>M</b>	<b>G</b>	
metric	<b>C</b>	<b>N</b>	<b>M</b>	<b>G</b>	
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	

2 - INSERT CLEARANCE ANGLE	
0°	<b>N</b>
5°	<b>B</b>
7°	<b>C</b>
11°	<b>P</b>
15°	<b>D</b>
25°	<b>F</b>

4 - INSERT TYPE	
	<b>N</b>
	<b>R</b>
	<b>F</b>
	<b>A</b>
	<b>M</b>
	<b>G, P</b>
	<b>W</b>
	<b>T</b>
	<b>B</b>
	<b>H</b>
Special	<b>X</b>

INCH	I.C.		METRIC CUTTING EDGE LENGTH (per insert shape indicated)							
	in.	mm	C	D	R	S	T	V	W	
	1.2 (5)	5/32	3,97	S4	04	03	03	06	-	-
1.5 (6)	3/16	4,76	04	05	04	04	08	08	S3	
1.8 (7)	7/32	5,56	05	06	05	05	09	09	03	
-	.236	6,00	-	-	06	-	-	-	-	
2	1/4	6,35	06	07	06	06	11	11	04	
2.5	5/16	7,94	08	09	07	07	13	13	05	
-	.315	8,00	-	-	08	-	-	-	-	
3	3/8	9,52	09	11	09	09	16	16	06	
-	.394	10,00	-	-	10	-	-	-	-	
3.5	7/16	11,11	11	13	11	11	19	19	07	
-	.472	12,00	-	-	12	-	-	-	-	
4	1/2	12,70	12	15	12	12	22	22	08	
4.5	9/16	14,29	14	17	14	14	24	24	09	
5	5/8	15,88	16	19	15	15	27	27	10	
-	.630	16,00	-	-	16	-	-	-	-	
5.5	11/16	17,46	17	21	17	17	30	30	11	
6	3/4	19,05	19	23	19	19	33	33	13	
-	.787	20,00	-	-	20	-	-	-	-	
7	7/8	22,22	22	27	22	22	38	38	15	
-	.984	25,00	-	-	25	-	-	-	-	
8	1	25,40	25	31	25	25	44	44	17	
10	1-1/4	31,75	32	38	31	31	54	54	21	
-	1,260	32,00	-	-	32	-	-	-	-	

NOTE: Inch sizes in parentheses for "alternate symbols" D or E (under 1/4" I.C.)



I.C.		± TOLERANCE ON "IC"								I.C.		± TOLERANCE ON "B"															
		CLASS "M" TOLERANCE						CLASS "U" TOLERANCE				CLASS "M" TOLERANCE						CLASS "U" TOLERANCE									
		SHAPES S, T, C, R & W				SHAPE D		SHAPE V				SHAPES S, T, & C		SHAPES S, T, C, R & W				SHAPE D		SHAPE V		SHAPES S, T, & C					
inch	metric	inch	mm	inch	mm	inch	mm	inch	mm	inch	metric	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm						
5/32	3,97	.002	0,05	-	-	-	-	-	-	.003	0,06	5/32	3,97	-	-	-	-	-	-	-	-						
3/16	4,76			-	-	-	-	-	-			3/16	4,76	-	-	-	-	-	-	-	-	-					
7/32	5,56			-	-	-	-	-	-			7/32	5,56	.003	0,06	.004	0,11	-	-	.005	0,13	-	-				
1/4	6,35			.002	0,05	.002	0,05	-	-			1/4	6,35					-	-			-	-				
5/16	7,94			-	-	-	-	-	-			5/16	7,94					-	-			-	-				
3/8	9,52			-	-	-	-	-	-			3/8	9,52	-	-	.007	0,18	-	-	-	-	-	-				
7/16	11,11	.003	0,06	.003	0,06	.003	0,06	.005	0,13	7/16	11,11	.005	0,13	.006	0,15	-	-	-	-	-	-						
1/2	12,70									-	-					-	-	-	-	1/2	12,70	-	-	.010	0,25	.008	0,20
9/16	14,29									-	-					-	-	-	-	9/16	14,29	-	-	-	-	-	-
5/8	15,88	.004	0,10	.004	0,10	.004	0,10	.007	0,18	5/8	15,88	.006	0,15	.007	0,18	-	-	.011	0,27	-	-						
11/16	17,46									-	-					-	-			-	-	11/16	17,46	-	-	-	-
3/4	19,05									-	-					-	-			-	-	3/4	19,05	-	-	-	-
7/8	22,22	.005	0,13	-	-	-	-	.010	0,25	7/8	22,22	-	-	-	-	-	-	-	-	-							
1	25,40			-	-	-	-			-	1	25,40	.007	0,18	-	-	-	-	.015	0,38							
1-1/4	31,75	.006	0,15	-	-	-	-	1-1/4	31,75	.008	0,20	-	-	-	-	-	-	-	-								

	<b>4</b>	<b>3</b>	<b>2</b>	<b>-</b>	<b>P3</b>
	<b>12</b>	<b>04</b>	<b>08</b>	<b>-</b>	<b>P3</b>
	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>

9 - CHIP CONTROL FEATURE (optional)	
GF	Finishing
KR	Finishing/Roughing
P2	Finishing
SF	Finishing
FM	Medium machining
GM	Medium machining
GP	Medium machining
HF	Medium machining
HP	Medium machining
MG	Medium machining
MM	Medium machining
P3	Medium machining
SG	Medium machining
VM	Medium machining
GR	Roughing
LR	Roughing
P4	Roughing
SR	Roughing
P5	Heavy roughing
XR	Heavy roughing

6 - THICKNESS			
SYMBOL		THICKNESS	
inch	metric	inch	mm
.5 (1)	-	1/32	0,79
.6	T0	.040	1,00
1 (2)	01	1/16	1,59
1.2	T1	5/64	1,98
1.5 (3)	02	3/32	2,38
2	03	1/8	3,18
2.5	T3	5/32	3,97
3	04	3/16	4,76
3.5	05	7/32	5,56
4	06	1/4	6,35
5	07	5/16	7,94
6	09	3/8	9,52
7	11	7/16	11,11
8	12	1/2	12,70

NOTE: Inch sizes in parentheses for "alternate symbols" D or E (under 1/4" I.C.)

7 - CORNER RADIUS			
SYMBOL		CORNER RADIUS	
inch	metric	inch	mm
X0	X0	.0015	0,04
0	01	.004	0,1
.5	02	.008	0,2
1	04	1/64	0,4
2	08	1/32	0,8
3	12	3/64	1,2
4	16	1/16	1,6
5	20	5/64	2,0
6	24	3/32	2,4
7	28	7/64	2,8
8	32	1/8	3,2
-	00	round insert (inch)	
-	M0	round insert (metric)	

