

# Designation system according to ISO 1832

Inserts



Insert – metric

C N M G 12 04 08 E N - M50  
 1 2 3 4 5 6 7 8 9 13

Insert – inch

C N M G 4 3 2 E N - M50  
 1 2 3 4 5 6 7 8 9 13

Insert, CBN, ceramic – metric

C N G A 12 04 08 S N - 020D B 3  
 1 2 3 4 5 6 7 8 9 10 11 12

Insert, CBN, ceramic – inch

C N G A 4 3 2 S N - 020D B 3  
 1 2 3 4 5 6 7 8 9 10 11 12

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**Insert shape**

Included angle	35°	V
	55°	D
	75°	E
	80°	C
	86°	M
Included angle	55°	K
	82°	B
	85°	A
Other shapes	90°	L
	108°	P
	120°	H
	135°	O
	–	R
	90°	S
	60°	T
80°	W	

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**Clearance angle**

3°	A	25°	F
5°	B	30°	G
7°	C	0°	N
15°	D	11°	P
20°	E		

Clearance angles not included within the standard for which particular information is necessary } O

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**Tolerances**

	d ±		m ±		s ±	
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
A	0,025	.0010	0,005	.0002	0,025	.001
F	0,013	.0005	0,005	.0002	0,025	.001
C	0,025	.0010	0,013	.0005	0,025	.001
H	0,013	.0005	0,013	.0005	0,025	.001
E	0,025	.0010	0,025	.0010	0,025	.001
G	0,025	.0010	0,025	.0010	0,13	.005
J	0,05-0,15*	.002-.006*	0,005	.0002	0,025	.001
K	0,05-0,15*	.002-.006*	0,013	.0005	0,025	.001
L	0,05-0,15*	.002-.006*	0,025	.0010	0,025	.001
M	0,05-0,15*	.002-.006*	0,05-0,20	.003-.008*	0,13	.005
N	0,05-0,15*	.002-.006*	0,05-0,20	.003-.008*	0,025	.001
U	0,08-0,25*	.003-.010*	0,13-0,38	.005-.015*	0,13	.005

\* depends on insert size

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**Insert thickness**

Index		Index	
[inch]	[mm]	[mm]	[inch]
1/16	1,59	01	1
3/32	2,38	02	
1/8	3,18	03	2
5/32	3,97	T3	
3/16	4,76	04	3
7/32	5,56	05	
1/4	6,35	06	4
5/16	7,94	07	5
3/8	9,52	09	6

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**Corner radius**

Index		Index	
[mm]	[inch]	[mm]	[inch]
≤ 0,05	.0015	00	X0
0,1	.004	01	0
0,2	.008	02	.5
0,4	1/64	04	1
0,8	1/32	08	2
1,2	3/64	12	3
1,6	1/16	16	4
2,0	5/64	20	5
2,4	3/32	24	6
2,8	7/64	28	7
3,2	1/8	32	8

⊙ RN 00  
⊙ RC MO

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**Cutting edge**

F	sharp
E	honed
T	chamfered
S	chamfered and honed
K	double chamfered
P	double chamfered & honed

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