

Identification System for Turning Inserts

<http://www.carbidemart.com/turninginserts1.html>

Insert shape			Major cutting edge Clearance angle		Chip-breaker and/or fixing type		
	A		B		C		N
	D		E		H		A
	K		L		M		M
	O		P		R		G
	S		T		T		C
	V		W		Z		J
	A		B		C		D
	E		F		G		N
	P	Other clearance angles					Q
	C		J		B		H
	H		W		T		Q
	Q		U	Special design			

T N M G 4 3 2 - DM

Tolerances, inch



Letter Symbol	Tolerances in inches			Inscribed circle diameter	Tolerances for M		Tolerances for d	
	m	s	d		Class M	Class U	Class M.J.K.L	Class U
A	±0.0002	±0.001	±0.0010	0.250 0.375 0.500 0.625 0.750 1.000	±0.003 ±0.003 ±0.005 ±0.008 ±0.008 ±0.007	±0.005 ±0.005 ±0.008 ±0.011 ±0.011 ±0.015	±0.002 ±0.002 ±0.003 ±0.004 ±0.004 ±0.005	±0.003 ±0.003 ±0.005 ±0.007 ±0.007 ±0.010
F	±0.0002	±0.001	±0.0005	Insert shape D				
C	±0.0005	±0.001	±0.0010	Inscribed circle diameter	Tolerances for M		Tolerances for M	
H	±0.0005	±0.001	±0.0005	±0.250 ±0.375 ±0.500 ±0.625 ±0.750	±0.004 ±0.004 ±0.006 ±0.007 ±0.007		±0.002 ±0.002 ±0.003 ±0.004 ±0.004	
E	±0.0010	±0.001	±0.0010	Insert shape D				
G	±0.0010	±0.005	±0.0010	Inscribed circle diameter	Tolerances for M		Tolerances for M	
J	±0.0002	±0.01	±0.002 ±0.005	±0.250 ±0.375 ±0.500 ±0.625 ±0.750	±0.004 ±0.004 ±0.006 ±0.007 ±0.007		±0.002 ±0.002 ±0.003 ±0.004 ±0.004	
K	±0.0005	±0.01	±0.02 ±0.05	Insert shape D				
L	±0.0010	±0.001	±0.002 ±0.005	Inscribed circle diameter	Tolerances for M		Tolerances for M	
M	±0.003 ±0.007	±0.005	±0.002 ±0.005	±0.250 ±0.375 ±0.500 ±0.625 ±0.750	±0.006 ±0.006 ±0.008 ±0.011 ±0.011		±0.002 ±0.002 ±0.003 ±0.004 ±0.004	
N	±0.003 ±0.007	±0.001	±0.002 ±0.005	Insert shape D				
U	±0.005 ±0.015	±0.005	±0.003 ±0.010	Inscribed circle diameter	Tolerances for M		Tolerances for M	

Inscribed circle diameter						
Code(inch)	2	3	4	5	6	8
Inscribed circle diameter(inch)	0.250	0.375	0.500	0.625	0.750	1.000

Nose radius							
	Code(inch)	0	1	2	3	4	5
	Nose radius circle (inch)	0.008	0.016	0.031	0.047	0.063	0.079

Insert thickness					
	Code(inch)	2	3	4	5
	Inscribed radius diameter(inch)	0.125	0.187	0.250	0.313

Chip-breakers code	
Position 10 indicates the cutting properties & chip-breakers of inserts	

