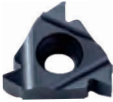
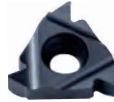
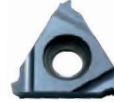
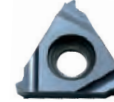
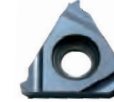
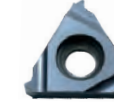
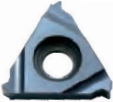
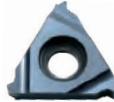
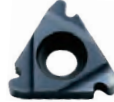
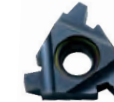
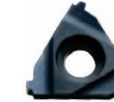
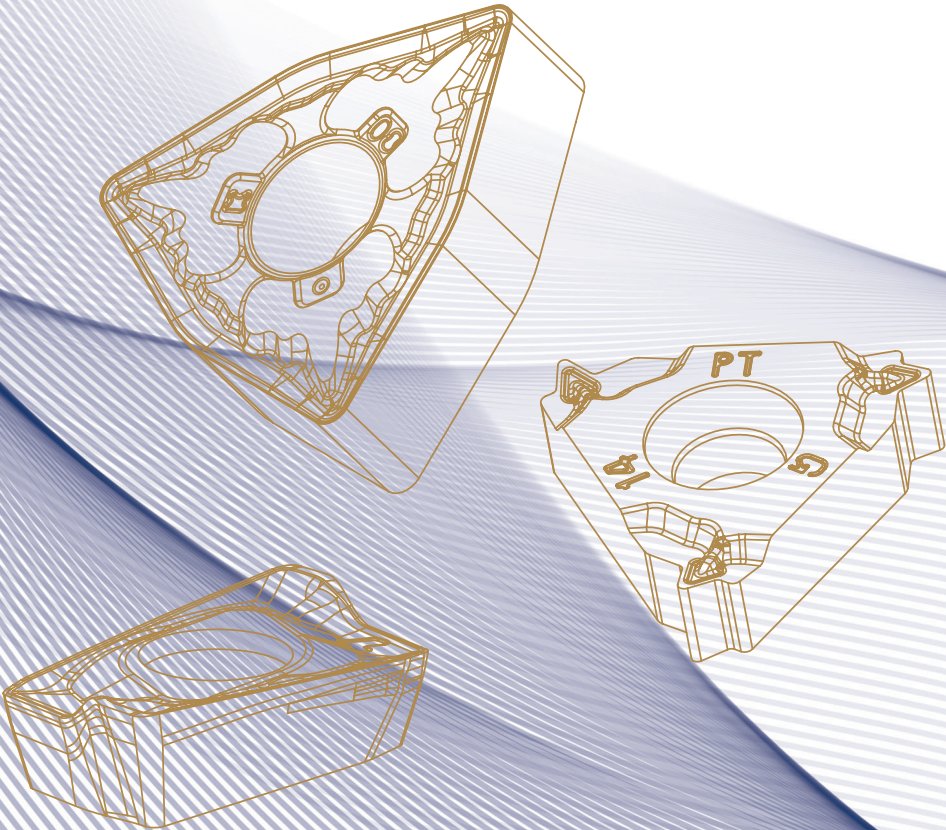
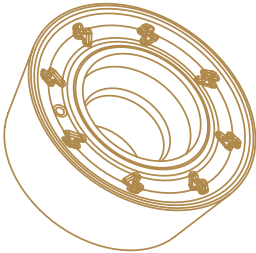


Inserts Overview

Threading Insert

60° general pitch threads	55° general pitch threads	ISO metric threads	Unified thread (American standard thread)	Whitworth threads	British standard taper pipe threads
 P47	 P48	 P49	 P50	 P51	 P52
NPT American standard taper pipe threads	UNJ American standard aerospace and aviation threads	30° DIN405 round threads	Petroleum pipeline threads	30° ISO metric threading insert	29° American standard ACME threads
 P53	 P54	 P55	 P56	 P56	 P57
29° American standard STACME threads					
 P58					

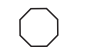
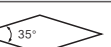
CUTTING TOOL CATALOG



ISO Turning Insert Naming Rules

Shape

C N M G 12 04 08 — OPM

A	B	C
		
D	E	H
		
K	L	M
		
O	P	R
		
S	T	T
		
V	W	Z
		

Chip Breaker and Hole

C N M G 12 04 08 — OPM

Symbol	Center Hole	Chip Breaker	Insert Profile	Symbol	Center Hole	Chip Breaker	Insert Profile
B	(Y)	(N)		N	(N)	(N)	
H	(Y)	(S)		R	(N)	(S)	
C	(Y)	(N)		F	(N)	(D)	
J	(Y)	(D)		A	(Y)	(N)	
W	(Y)	(N)		M	(Y)	(S)	
T	(Y)	(S)		G	(Y)	(D)	
Q	(Y)	(N)		X			
U	(Y)	(D)					

ISO Turning Insert Naming Rules

Cutting Edge Length

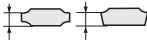
C N M G 12 04 08 — OPM

Inscribed Circle diameter(mm)	Insert Shape							
	C	D	R	S	T	V	W	K
3.97					06			
5			05					
5.56					09			
6			06					
6.35	06	07			11	11		
8			08					
9.525	09	11	09	09	16	16	06	16
10			10					
12			12					
12.7	12	15	12	12	22	22	08	
15.875	16		15	15	27			
16			19	16				
19.05	19		19	19	33			
20			20					
25	25	25	25					
25.4			25	25				
31.75			31					
32			32					

Thickness

C N M G 12 04 08 — OPM

Symbol	Thickness(mm)
00	0.79
T0	0.99
01	1.59
T1	1.98
02	2.38
T2	2.58
03	3.18
T3	3.97
04	4.76
T4	4.96
05	5.56
T5	5.95
06	6.35
T6	6.75
07	7.94
09	9.52
T9	9.72
11	11.11
12	12.7

 The Height Between Insert Bottom And Nose

Clearance Angle

C N M G 12 04 08 — OPM

A	B
	
C	D
	
E	F
	
G	N
	
P	O
	Others

Tolerance

C N M G 12 04 08 — OPM

Symbol	m(mm)	d=L.C. (mm)	s (mm)	(reference)M grade tolerance detail(according to shape, size.) Tolerance of insert nose height						
				Inscribed Circle	Regular Triangle	Square	80° Rhombus	55° Rhombus	35° Rhombus	Round
				6.35	±0.08	±0.08	±0.08	±0.11	±0.16	...
				9.525	±0.08	±0.08	±0.08	±0.11	±0.16	...
A	±0.005	±0.025	±0.025	12.7	±0.13	±0.13	±0.13	±0.15	...	...
F	±0.005	±0.013	±0.025	15.875	±0.15	±0.15	±0.15	±0.18	...	...
C	±0.013	±0.025	±0.025	19.05	±0.15	±0.15	±0.15	±0.18	...	...
H	±0.013	±0.013	±0.013	25.4	...	±0.18	...	...	...	...
E	±0.025	±0.025	±0.025	● Tolerance of Inscribed Circle						
G	±0.025	±0.025	±0.13	Inscribed Circle	Regular triangle	Square	80° Rhombus	55° Rhombus	35° Rhombus	Round
J	±0.005	±0.05~±0.13	±0.025	6.35	±0.05	±0.05	±0.05	±0.05	±0.05	
K	±0.013	±0.05~±0.13	±0.025	9.525	±0.05	±0.05	±0.05	±0.05	±0.05	±0.05
L	±0.025	±0.05~±0.13	±0.025	12.7	±0.08	±0.08	±0.08	±0.08	...	±0.08
M	±0.08~±0.18	±0.05~±0.13	±0.13	15.875	±0.1	±0.1	±0.10	±0.10	...	±0.1
N	±0.08~±0.18	±0.05~±0.13	±0.025	19.05	±0.1	±0.1	±0.10	±0.10	...	±0.1
U	±0.13~±0.38	±0.08~±0.25	±0.13	25.4	...	...	±0.13	...	...	±0.13

Corner Radius

C N M G 12 04 08 — OPM

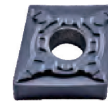
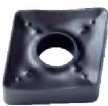
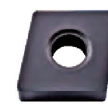
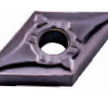
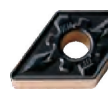
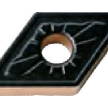
Symbol	Corner Radius (mm)
00	
02	0.2
04	0.4
08	0.8
12	1.2
16	1.6
20	2
24	2.4
32	3.2
X	其它 Special
Diameter Dimension	Round Insert

Chip Beaker

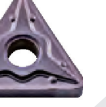
C N M G 12 04 08 — OPM

OPF	OPM	OPR	OMF	OMM
				
MF	MSF	OTF	OTM	OTR
				
OKM	OKR	OSM	SMM	NL
				

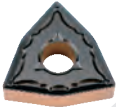
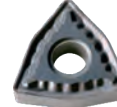
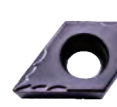
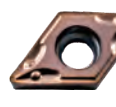
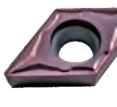
Inserts Overview

CNMG-OPF		CNMG-OMF		CNMG-MSF		CNMG-OPM		CNMG-OMM		CNMG-MF	
											
P10		P10		P10		P10		P11		P11	
EdgeLength	12.9	EdgeLength	12.9	EdgeLength	9.7 12.9	EdgeLength	12.9 16.1 19.3	EdgeLength	12.9 16.1	EdgeLength	9.7 12.9 16.1
CNMG-OKM		CNMG-OSM		CNMG-SMM		CNMG-OPR		CNMG-OMR		CNMG-OKR	
											
P11		P11		P11		P12		P12		P12	
EdgeLength	12.9	EdgeLength	12.9	EdgeLength	12.9	EdgeLength	12.9 16.1 19.3	EdgeLength	12.9	EdgeLength	12.9 16.1
CNMM-PR		CNMM-PR		CNMG		CNMA		DNMG-OPF		DNMG-OMF	
											
P12		P12		P13		P13		P14		P14	
EdgeLength	19.3	EdgeLength	25.8	EdgeLength	12.7 16.1 19.3	EdgeLength	12.7 16.1 19.3	EdgeLength	11.6 15.5	EdgeLength	15.5
DNMG-MSF		DNMG-OPM		DNMG-OMM		DNMG-MF		DNMG-OKM		DNMG-OSM	
											
P14		P14		P14		P14		P15		P15	
EdgeLength	11.6 15.5	EdgeLength	11.6 15.5	EdgeLength	11.6 15.5	EdgeLength	11.6 15.5	EdgeLength	15.5	EdgeLength	15.5
DNMG-OPR		DNMG-OKR		DNMG		DNMA		SNMG-OPF		SNMG-OMF	
											
P15		P15		P15		P15		P16		P16	
EdgeLength	15.5	EdgeLength	15.5	EdgeLength	11.6 15.5	EdgeLength	15.5	EdgeLength	12.7	EdgeLength	12.7
SNMG-OPM		SNMG-OMM		SNMG-MF		SNMG-OKM		SNMG-OSM		SNMG-SMM	
											
P16		P16		P16		P17		P17		P17	
EdgeLength	12.7 15.875 19.05	EdgeLength	12.7 15.875	EdgeLength	12.7	EdgeLength	12.7	EdgeLength	12.7	EdgeLength	12.7

Inserts Overview

SNMG-OPR		SNMM-OPR		SNMG-OKR		SNMM-PR		SNMG		SNMA	
											
P17		P17		P17		P18		P18		P18	
EdgeLength	12.7 15.875 19.05	EdgeLength	19.05	EdgeLength	12.7 15.875 19.05	EdgeLength	25.4	EdgeLength	12.7 15.875 19.05 25.4	EdgeLength	12.7
TNMG-OPF		TNMG-OMF		TNMG-MSF		TNMG-OPM		TNMG-OMM		TNMG-MF	
											
P19		P19		P19		P20		P20		P20	
EdgeLength	16.5	EdgeLength	16.5	EdgeLength	16.5	EdgeLength	16.5 22	EdgeLength	16.5 22	EdgeLength	16.5 22
TNMG8-OKM		TNMG-SMM		TNMG-OPR		TNMG-OMR		TNMG-OKR		TNMG	
											
P20		P20		P21		P21		P21		P22	
EdgeLength	16.5	EdgeLength	16.5	EdgeLength	16.5 22 27.5	EdgeLength	16.5	EdgeLength	16.5	EdgeLength	16.5 22
TNMA		VNMG-OPF		VNMG-MSF		VNMG-OPM		VNMG-OMM		VNMG-MF	
											
P22		P23		P23		P23		P23		P23	
EdgeLength	16.5 22	EdgeLength	16.6	EdgeLength	16.6	EdgeLength	16.6	EdgeLength	16.6	EdgeLength	16.6
VNMG-OKM		VNMG-SMM		VNMG-OPR		VNMG-OKR		VNMG		VNMA	
											
P24		P24		P25		P25		P25		P25	
EdgeLength	16.6	EdgeLength	16.6	EdgeLength	16.6	EdgeLength	16.6	EdgeLength	16.6	EdgeLength	16.6
WNMG-OPF		WNMG-OMF		WNMG-MSF		WNMG-OPM		WNMG-OMM		WNMG8-MF	
											
P26		P26		P26		P26		P26		P26	
EdgeLength	6.5	EdgeLength	6.5 8.7	EdgeLength	6.5 8.7	EdgeLength	6.5 8.7	EdgeLength	6.5 8.7	EdgeLength	6.5 8.7

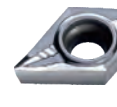
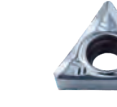
Inserts Overview

WNMG-OKM		WNMG-SMM		WNMG-OPR		WNMG-OMR		WNMG-OKR		WNMG	
											
P27		P27		P27		P27		P27		P27	
EdgeLength	8.7	EdgeLength	8.7	EdgeLength	8.7	EdgeLength	8.7	EdgeLength	8.7	EdgeLength	8.7
WNMA		CCMT-OTF		CCMT-MSF		CCMT-OTM		CCMT-OTR		DCMT-OTF	
											
P27		P28		P28		P28		P28		P29	
EdgeLength	8.7	EdgeLength	6.4 9.7 12.9	EdgeLength	6.4 9.7 12.9	EdgeLength	6.4 9.7 12.9	EdgeLength	6.4 9.7 12.9	EdgeLength	7.8 11.6
DCMT-MSF		DCMT-OTM		DCMT-OTR		RCMXMO		RCMXMO-Q		RCMTMO	
											
P29		P29		P29		P30		P30		P30	
EdgeLength	7.8 11.6	EdgeLength	7.8 11.6	EdgeLength	11.6	EdgeLength	8.0	EdgeLength	12 16 20 25 32	EdgeLength	8.0
RCMTMO-Q		SCMT-OTF		SCMT-OTM		SCMT-OTR		TCMT-OTF		TCMT-OTM	
											
P30		P31		P31		P31		P32		P32	
EdgeLength	16	EdgeLength	9.525 12.7	EdgeLength	9.525 12.7	EdgeLength	9.525 12.7	EdgeLength	11 16.5	EdgeLength	9.6 11 16.5
TCMT-OTR		VBMT-OTF		VBMT-OTM		VBMT-OMM		VBMT-OSM		VBMT-OTR	
											
P32		P33		P33		P33		P33		P33	
EdgeLength	16.5 22	EdgeLength	16.5	EdgeLength	11 16.5	EdgeLength	16.5	EdgeLength	16.5	EdgeLength	16.5
VCMT-OTF		VCMT-OTM		VCMT-OSM		TPGH		KNUX		175.32	
											
P34		P34		P34		P35		P36		P37	
EdgeLength	11 16.5	EdgeLength	16.5	EdgeLength	16.5	EdgeLength	6.4 8.2 9.6 11	EdgeLength	16.2	EdgeLength	19.1

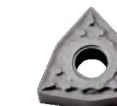
Inserts Overview

175.32	
	
P37	
EdgeLength	19.1

Insert for Aluminum

CCGX-NL		DCGX-NL		RCGT-NL		SCGX-NL		TCGX-NL		VCGX-NL	
											
P38		P38		P38		P39		P39		P39	
EdgeLength	6.4 9.7 12.9	EdgeLength	7.8 11.6	EdgeLength	6.5 8.7	EdgeLength	9.525 12.7	EdgeLength	9.6 11 16.5	EdgeLength	11 16.5 22

Cermet Inserts

CNMG-SAL		TNMG-SAL		VNMG-SAL		WNM-SAL	
							
P40		P40		P40		P40	
EdgeLength	12.9	EdgeLength	16.5	EdgeLength	16.6	EdgeLength	8.7

Parting and Grooving Inserts

Q□□D-MG		Q□□W-OC	
			
P43		P44	
EdgeLength	2.5 3 4 5 6	EdgeLength	2 2.5 3 4 5