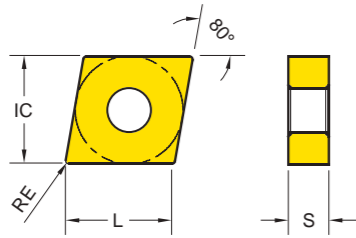


Turning Inserts - Negative
CNMG / CNMA (80° Negative)



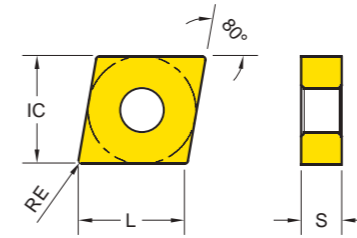
Series	L	IC	S
CN** 1204	12	12.7	4.76
CN** 1606	16	15.875	6.35
CN** 1906	19	19.05	6.35

EDP 2200.. ●: Stock item ○: Order made item

CNMA CNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..												
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10			
..MA 	CNMA 120404	0.4	0.15~0.5	0.5~2.5	● 0089	● 0354											
	CNMA 120408	0.8	0.15~0.5	1~3.5	● 0010	● 0355											
	CNMA 120412	1.2	0.15~0.5	1.5~5	● 0011	● 0356											
	CNMA 160612	1.2	0.15~0.5	1.5~5	● 0012	● 0357											
	CNMA 160616	1.6	0.15~0.5	2~5	● 0446	● 0447											
	CNMA 190616	1.6	0.15~1	3~10	● 0448	● 0449											
-UF 	CNMG 120404 - UF	0.4	0.05~0.25	0.5~1.5	● 0178	● 0179	● 0180	● 0003									
	CNMG 120408 - UF	0.8	0.05~0.25	1~2.5	● 0189	● 0190	● 0191										
-UL 	CNMG 120404 - UL	0.4	0.1~0.3	0.5~2	● 0358	● 0359	● 0524										
	CNMG 120408 - UL	0.8	0.1~0.3	1~3	● 0192	● 0193	● 0194										
	CNMG 120412 - UL	1.2	0.1~0.3	1.5~3.5	● 0201	● 0202	● 0203										
-UM 	CNMG 120404 - UM	0.4	0.15~0.3	0.5~1.5	● 0184	● 0185	● 0186										
	CNMG 120408 - UM	0.8	0.15~0.3	0.5~2	● 0338	● 0114	● 0100	● 0140									
	CNMG 120412 - UM	1.2	0.15~0.3	1.5~3.0	● 0525	● 0486	● 0526										

Cutting Speed			Vc (m/min.)										
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230	
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200	
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	350 1200	
S	31~37	Superalloys & Titanium	-	-	-	-	-	-	35	80	30	90	
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	250 800	

Turning Inserts - Negative
CNMG / CNMA (80° Negative)



Series	L	IC	S
CN** 1204	12	12.7	4.76
CN** 1606	16	15.875	6.35
CN** 1906	19	19.05	6.35

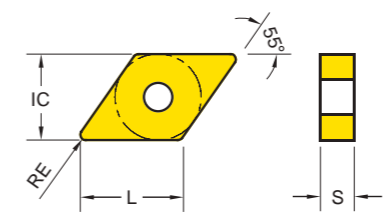
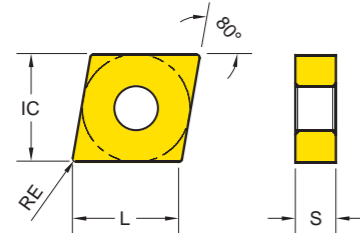
EDP 2200.. ●: Stock item ○: Order made item

CNMA CNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..												
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10			
-UG 	CNMG 120404 - UG	0.4	0.2~0.4	0.5~2		● 0181	● 0182	● 0183									
	CNMG 120408 - UG	0.8	0.2~0.4	1~3	● 0337	● 0113	● 0099	● 0139	● 0001								
	CNMG 120412 - UG	1.2	0.2~0.4	1.5~4	● 0685	● 0198	● 0199	● 0200									
	CNMG 160608 - UG	0.8	0.20~0.40	1.5~5.0				● 0749									
	CNMG 160612 - UG	1.2	0.2~0.4	1.5~5		● 0530	● 0508	● 0531									
	CNMG 160616 - UG	1.6	0.2~0.4	1.8~5		● 0534	● 0510	● 0535									
-UC 	CNMG 120404 - UC	0.4	0.2~0.4	0.5~2.5	● 0096	● 0115	● 0101	● 0116									
	CNMG 120408 - UC	0.8	0.2~0.4	1~4	● 0062	● 0117	● 0102	● 0118									
	CNMG 120412 - UC	1.2	0.2~0.4	1.5~4.5	● 0088	● 0119	● 0103	● 0120									
-UR 	CNMG 120408 - UR	0.8	0.3~0.5	1~4		● 0195	● 0196	● 0197									
	CNMG 120412 - UR	1.2	0.3~0.5	1.5~5		● 0204	● 0205	● 0206	● 0004								
	CNMG 120416 - UR	1.6	0.3~0.5	2~5		● 0707	● 0623										
	CNMG 160612 - UR	1.2	0.3~0.5	1.5~5		● 0532	● 0509	● 0533									
	CNMG 160616 - UR	1.6	0.3~0.5	2~5	● 0676	● 0536	● 0511	● 0537									
	CNMG 190608 - UR	0.8	0.3~0.8	3.0~9.0		● 0804	● 0805	● 0806									
-UR	CNMG 190612 - UR	1.2	0.3~0.8	3~9	● 0450	● 0451	● 0698	● 0699									
	CNMG 190616 - UR	1.6	0.3~0.8	3.0~9.0	● 0480	● 0481	● 0734	● 0735									

Cutting Speed			Vc (m/min.)										
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230	
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200	
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	350 1200	
S	31~37	Superalloys & Titanium	-	-	-	-	-	-	35	80	30	90	
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	250 800	

Turning Inserts - Negative
CNMG / CNMA (80° Negative)

Turning Inserts - Negative
DNMG / DNMA (55° Negative)



Series	L	IC	S
CN** 1204	12	12.7	4.76
CN** 1606	16	15.875	6.35
CN** 1906	19	19.05	6.35

Series	L	IC	S
DN** 1504	14	12.7	4.76
DN** 1506	14	12.7	6.35

EDP 2200.. ● : Stock item ○ : Order made item

EDP 2200.. ● : Stock item ○ : Order made item

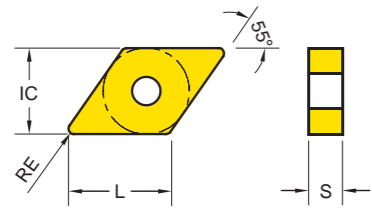
CNMA CNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	P05	P10	P20	P30	P20	M15	M30	M40	N20	N20
					K10	K20	M20	S10	S20	S30	N20	N20		
-MF Stainless steel Finishing	CNMG 120404 - MF	0.4	0.07~0.3	0.2~1.5										
	CNMG 120408 - MF	0.8	0.07~0.3	0.2~1.5						●	●			
										●	●	●		
-MM Stainless steel Medium	CNMG 120404 - MM	0.4	0.2~0.35	0.5~3						●	●			
	CNMG 120408 - MM	0.8	0.2~0.35	1~3.5				●	●	●	●	●		
	CNMG 120412 - MM	1.2	0.2~0.35	1.5~3.5				●	●	●	●	●		
-MR Stainless steel Roughing	CNMG 120408 - MR	0.8	0.3~0.55	1.2~5.5						●	●	●		
	CNMG 120412 - MR	1.2	0.3~0.55	1.5~5.5						●	●	●		
-KR Cast Iron Heavy Roughing	CNMG 120408 - KR	0.8	0.30~0.60	1.0~5.0						●				
	CNMG 120412 - KR	1.2	0.30~0.60	1.5~5.0						●				

DNMA DNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	P05	P10	P20	P30	P20	M15	M30	M40	N20	N20
					K10	K20	M20	S10	S20	S30	N20	N20		
..MA Cast iron	DNMA 150408	0.8	0.15~0.5	1~3										
	DNMA 150412	1.2	0.15~0.5	1.5~4										
	DNMA 150608	0.8	0.15~0.5	1~3										
	DNMA 150612	1.2	0.15~0.5	1.5~4										
-UF Finishing	DNMG 150404 - UF	0.4	0.05~0.25	0.5~1.5						●	●	●		
	DNMG 150604 - UF	0.4	0.05~0.25	1~2						●	●	●		
	DNMG 150608 - UF	0.8	0.05~0.25	1.5~3.5						●	●	●		
-UL Light Machining and Sticky Material	DNMG 150404 - UL	0.4	0.10~0.3	0.5~3.0						●	●	●		
	DNMG 150408 - UL	0.8	0.10~0.3	1.0~3.0						●	●	●		
	DNMG 150412 - UL	1.2	0.10~0.3	1.5~3.0						●	●	●		
	DNMG 150604 - UL	0.4	0.1~0.3	0.5~2						●	●	●		
	DNMG 150608 - UL	0.8	0.1~0.3	1.5~3						●	●	●		
-UM Medium Machining Unstable condition	DNMG 150612 - UL	1.2	0.10~0.3	1.5~3.0						●	●	●		
	DNMG 150408 - UM	0.8	0.15~0.3	1.0~3.0						●	●	●		
	DNMG 150412 - UM	1.2	0.15~0.3	1.5~4						●	●	●		
	DNMG 150608 - UM	0.8	0.15~0.3	0.5~2						●	●	●		
DNMG 150612 - UM	1.2	0.15~0.3	1.5~3.0						●	●	●			

Cutting Speed			Vc (m/min.)																		
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10									
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max									
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	-	-	-	-	-	-			
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	-	-	-	-	-	-			
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	-	-	-	-	-	-			
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	-	-	130	230	110	180	80	150	-	-	
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	-	-	100	200	40	130	30	120	-	-	
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	1200	250	800
S	31~37	Superalloys & Titanium	-	-	-	-	-	-	35	80	-	-	30	90	20	40	20	40	-	-	-
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Cutting Speed			Vc (m/min.)																		
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10									
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max									
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	-	-	-	-	-	-			
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	-	-	-	-	-	-			
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	-	-	-	-	-	-			
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	-	-	130	230	110	180	80	150	-	-	
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	-	-	100	200	40	130	30	120	-	-	
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	1200	250	800
S	31~37	Superalloys & Titanium	-	-	-	-	-	-	35	80	-	-	30	90	20	40	20	40	-	-	-
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Negative
DNMG / DNMA (55° Negative)



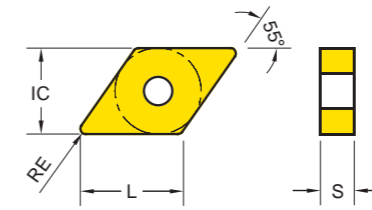
Series	L	IC	S
DN** 1504	14	12.7	4.76
DN** 1506	14	12.7	6.35

EDP 2200.. ●: Stock item ○: Order made item

DNMA DNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..																
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10							
-UG Medium Machining at stable condition	DNMG 150404 - UG	0.4	0.2~0.4	0.5~3.0			●														
	DNMG 150408 - UG	0.8	0.2~0.4	1~2.5	●	●	●	●	●												
	DNMG 150412 - UG	1.2	0.2~0.4	1.5~3	●		●	●													
	DNMG 150604 - UG	0.4	0.2~0.4	0.5~2		●	●	●													
	DNMG 150608 - UG	0.8	0.2~0.4	1~3	●	●	●	●	●												
	DNMG 150612 - UG	1.2	0.2~0.4	1.5~3.5	●	●	●	●													
-UC Cast iron and Medium roughing	DNMG 150408 - UC	0.8	0.2~0.4	1~3	●	●		●													
	DNMG 150412 - UC	1.2	0.2~0.4	1.5~3.5	●	●		●													
	DNMG 150608 - UC	0.8	0.2~0.4	1~3	●	●	●	●													
	DNMG 150612 - UC	1.2	0.2~0.4	1.5~3.5	●	●	●	●													
-UR Roughing	DNMG 150408 - UR	0.8	0.3~0.5	1~3.5		●															
	DNMG 150412 - UR	1.2	0.3~0.5	1.5~4		●															
	DNMG 150608 - UR	0.8	0.3~0.5	1.0~5.0	●	●	●														
	DNMG 150612 - UR	1.2	0.3~0.5	1.5~4	●	●	●	●													

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	350 1200 250 800
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Negative
DNMG / DNMA (55° Negative)



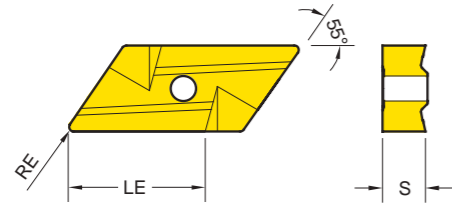
Series	L	IC	S
DN** 1504	14	12.7	4.76
DN** 1506	14	12.7	6.35

EDP 2200.. ●: Stock item ○: Order made item

DNMA DNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..															
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10						
-MF Stainless steel Finishing	DNMG 150404 - MF	0.4	0.07~0.3	0.2~1.5																
	DNMG 150408 - MF	0.8	0.07~0.3	0.2~1.5			●													
	DNMG 150604 - MF	0.4	0.07~0.3	0.2~1.5																
	DNMG 150608 - MF	0.8	0.07~0.3	0.2~1.5				●												
-MM Stainless steel Medium	DNMG 150404 - MM	0.4	0.2~0.35	0.5~3				●												
	DNMG 150408 - MM	0.8	0.2~0.35	1~3.5				●												
	DNMG 150412 - MM	1.2	0.2~.35	1.5~3.5				●												
	DNMG 150604 - MM	0.4	0.2~0.35	0.5~3				●												
	DNMG 150608 - MM	0.8	0.2~0.35	1~3.5				●												
	DNMG 150612 - MM	1.2	0.2~0.35	1.5~3.5				●												
-MR Stainless steel Roughing	DNMG 150408 - MR	0.8	0.3~0.55	2.0~5.5																
	DNMG 150412 - MR	1.2	0.3~0.55	2.0~5.5																
	DNMG 150608 - MR	0.8	0.3~0.55	2.0~5.5																
	DNMG 150612 - MR	1.2	0.3~0.55	2.0~5.5																

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	350 1200 250 800
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Negative
KNUX (55° - 2 Corners Single Side)

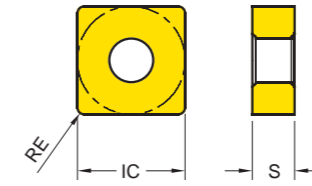


Series	LE	S
KN** 1604	15	4.76

EDP 2200.. ●: Stock item ○: Order made item

KNUX	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..															
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10						
..UX Left	KNUX 160405 L	0.5	0.1~0.4	0.5~6	●	●	●	●	●											
					○	○	○	○	○											
..UX Right	KNUX 160405 R	0.5	0.1~0.4	0.5~6	●	●	●	●	●											
					○	○	○	○	○											

Turning Inserts - Negative
SNMG / SNMA (90° Negative)



Series	IC	S
SN** 1204	12.7	4.76
SN** 1506	15.875	6.35

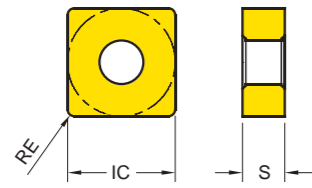
EDP 2200.. ●: Stock item ○: Order made item

SNMA SNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..															
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10						
..MA Cast iron	SNMA 120408	0.8	0.15~0.5	1~3.5	●															
	SNMA 120412	1.2	0.15~0.5	1.5~5	●															
	SNMA 150612	1.2	0.15~0.5	1.5~5	●															
-UF Finishing	SNMG 120404 - UF	0.4	0.05~0.25	0.5~1.5					●											
	SNMG 120404 - UL	0.4	0.10~0.30	0.5~3.0					●											
-UL Light Machining and sticky material	SNMG 120408 - UL	0.8	0.1~0.3	1~3	●	●	●													
	SNMG 120408 - UM	0.8	0.15~0.30	1.0~3.0	●	●	●													
-UM For Medium & Unstable conditions	SNMG 120408 - UG	0.8	0.2~0.4	1~3	●	●	●	●												
	SNMG 120412 - UG	1.2	0.2~0.4	1.5~4	●	●	●													
	SNMG 120416 - UG	1.6	0.2~0.40	2.0~3.0	●															
-UC Cast iron and Medium roughing	SNMG 120408 - UC	0.8	0.2~0.4	1~4	●	●	●	●												
	SNMG 120412 - UC	1.2	0.2~0.4	1.5~4.5	●	●	●	●												

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	350 1200 250 800
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	350 1200 250 800
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Negative
SNMG / SNMA (90° Negative)



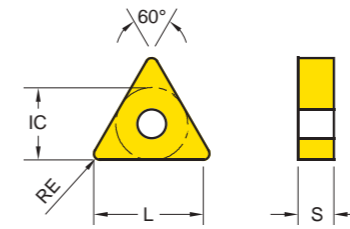
Series	IC	S
SN** 1204	12.7	4.76

EDP 2200.. ●: Stock item ○: Order made item

SNMA SNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..															
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10						
-UR Roughing	SNMG 120408 - UR	0.8	0.3~0.5	1~4.5	●	●	●													
	SNMG 120412 - UR	1.2	0.3~0.5	1.5~5		●	●	●			●									
-MF Stainless steel Finishing	SNMG 120408 - MF	0.8	0.07~0.3	0.2~1.5				●	●	●	●									
	SNMG 120412 - MF	1.2	0.07~0.3	0.2~1.5				●	●	●	●									
-MM Stainless steel Medium	SNMG 120408 - MM	0.8	0.2~0.35	1~3.5					●	●										
	SNMG 120412 - MM	1.2	0.2~0.35	1.5~3.5					●	●										
-MR Stainless steel Roughing	SNMG 120408 - MR	0.8	0.3~0.55	0.15~5.5					●	●	●									
	SNMG 120412 - MR	1.2	0.3~0.55	0.15~5.5				●	●	●	●									
-KR Cast Iron Heavy Roughing	SNMG 120416 - KR	1.6	0.30~0.60	2.0~5.0	●															

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Negative
TNMG / TNMA (60° Negative)



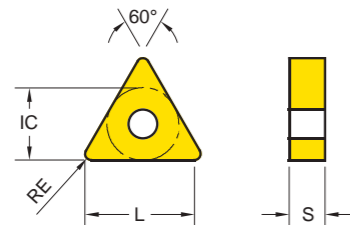
Series	L	IC	S
TN** 1604	15.7	9.525	4.76
TN** 2204	22	12.7	4.76

EDP 2200.. ●: Stock item ○: Order made item

TNMA TNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..															
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10						
..MA Cast iron	TNMA 160408	0.8	0.15~0.5	1~3	●															
	TNMA 160412	1.2	0.15~0.5	1.5~4	●															
-UF Finishing	TNMG 160404 - UF	0.4	0.05~0.25	1~2		●	●	●	●											
	TNMG 160408 - UF	0.8	0.05~0.25	1.5~3.5		●	●	●	●											
	TNMG 160412 - UF	1.2	0.05~0.25	1.5~3.5		●	●	●	●											
-UL Light Machining and sticky material	TNMG 220404 - UF	0.4	0.1~0.35	1~4		●				●										
	TNMG 160408 - UL	0.8	0.1~0.3	1~3		●	●	●												
-UM Medium Machining Unstable condition	TNMG 160408 - UM	0.8	0.15~0.3	0.5~2		●	●	●												
	TNMG 160412 - UM	1.2	0.15~0.3	1.5~3		●	●	●												

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Negative
TNMG / TNMA (60° Negative)

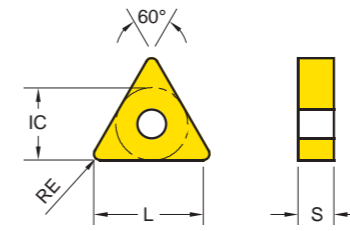


Series	L	IC	S
TN** 1604	15.7	9.525	4.76
TN** 2204	22	12.7	4.76

EDP 2200.. ●: Stock item ○: Order made item

TNMA TNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	P05		P10		P20		P30		M15		M30		M40		N20		N20	
					K10	K20	P20	M20	P20	S10	S20	S30	N20	N20								
-UG Medium Machining at Stable condition	TNMG 160404 - UG	0.4	0.2~0.4	0.5~2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 160408 - UG	0.8	0.2~0.4	1~3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 160412 - UG	1.2	0.2~0.4	1.5~3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 220408 - UG	0.8	0.25~0.6	1~4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
-UC Cast iron and Medium roughing	TNMG 160404 - UC	0.4	0.2~0.4	0.5~2.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 160408 - UC	0.8	0.2~0.4	1~3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 160412 - UC	1.2	0.2~0.4	1.5~3.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
-UR Roughing	TNMG 160408 - UR	0.8	0.30~0.50	1.0~5.0	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 160412 - UR	1.2	0.3~0.5	1.5~3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 220412 - UR	1.2	0.30~0.65	1.5~4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 220416 - UR	1.6	0.3~0.65	2~4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Turning Inserts - Negative
TNMG / TNMA (60° Negative)



Series	L	IC	S
TN** 1604	15.7	9.525	4.76
TN** 2204	22	12.7	4.76

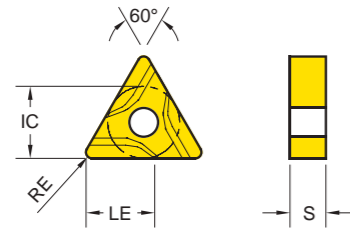
EDP 2200.. ●: Stock item ○: Order made item

TNMA TNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	P05		P10		P20		P30		M15		M30		M40		N20		N20	
					K10	K20	P20	M20	P20	S10	S20	S30	N20	N20								
-MF Stainless steel Finishing	TNMG 160404 - MF	0.4	0.05~0.3	0.2~1.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 160408 - MF	0.8	0.05~0.3	0.15~1.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
-MM Stainless steel Medium	TNMG 160404 - MM	0.4	0.2~0.35	0.5~3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 160408 - MM	0.8	0.15~0.3	1~3.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 160412 - MM	1.2	0.15~0.3	1.5~3.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
-MR Stainless steel Roughing	TNMG 160408 - MR	0.8	0.30~0.55	2.0~5.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	TNMG 160412 - MR	1.2	0.30~0.55	2.0~5.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	20	40

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	20	40

Turning Inserts - Negative
TNUX (60° Negative)

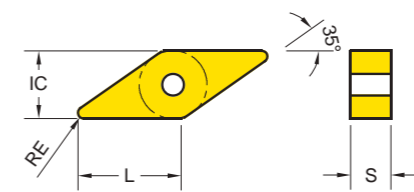


Series	LE	IC	S
TN** 1604	9.4	9.525	4.76

EDP 2200.. ●: Stock item ○: Order made item

TNUX	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..															
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10						
..UX Left	TNUX 160404 L	0.4	0.1~0.3	0.5~4	●	●		●												
	TNUX 160408 L	0.8	0.1~0.4	0.5~6	●	●	●	●	●											
..UX Right	TNUX 160404 R	0.4	0.1~0.3	0.5~4	●	●		●												
	TNUX 160408 R	0.8	0.1~0.4	0.5~6	●	●	●	●	●											

Turning Inserts - Negative
VNMG / VNMA (35° Negative)



Series	L	IC	S
VN** 1604	15.8	9.525	4.76

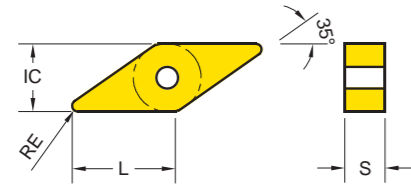
EDP 2200.. ●: Stock item ○: Order made item

VNMA VNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..															
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10						
..MA Cast iron	VNMA 160408	0.8	0.15~0.5	1~3	●															
-UF Finishing	VNMG 160404 - UF	0.4	0.05~0.25	0.5~2	●	●	●	●												
	VNMG 160408 - UF	0.8	0.05~0.25	1~2.5	●	●	●													
-UL Medium Machining and sticky material	VNMG 160408 - UL	0.8	0.10~0.30	1~2.5	●	●														
-UM Medium Machining Unstable condition	VNMG 160412 - UM	1.2	0.15~0.3	1.5~3	●	●														
-UG Medium Machining at stable condition	VNMG 160408 - UG	0.8	0.2~0.4	1~3	●	●	●	●	●											

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max
P	1~5	Non-Alloyed Steel	220 480	170 450	180 380	150 350	120 200	- -	- -	- -	- -	- -
	6~9	Low-Alloyed Steel	220 420	180 380	110 350	90 300	70 200	- -	- -	- -	- -	- -
	10~11	High-Alloyed Steel	- -	100 330	60 300	70 250	- -	- -	- -	- -	- -	- -
M	12~13	Ferritic & Martensitic	- -	- -	- -	120 230	- -	130 230	110 180	80 150	- -	- -
	14	Austenitic Stainless Steel	- -	- -	- -	80 200	- -	100 200	40 130	30 120	- -	- -
K	15~16	Grey Cast Iron	170 420	120 300	- -	- -	- -	- -	- -	- -	- -	- -
	17~18	Nodular Cast Iron	120 410	120 280	- -	- -	- -	- -	- -	- -	- -	- -
N	21~30	Non-Ferrous Metals (Al)	- -	- -	- -	- -	- -	- -	- -	- -	350 1200	250 800
S	31~37	Superalloys & Titanium	- -	- -	- -	35 80	- -	30 90	20 40	20 40	- -	- -
H	38~41	Hard Materials	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max
P	1~5	Non-Alloyed Steel	220 480	170 450	180 380	150 350	120 200	- -	- -	- -	- -	- -
	6~9	Low-Alloyed Steel	220 420	180 380	110 350	90 300	70 200	- -	- -	- -	- -	- -
	10~11	High-Alloyed Steel	- -	100 330	60 300	70 250	- -	- -	- -	- -	- -	- -
M	12~13	Ferritic & Martensitic	- -	- -	- -	120 230	- -	130 230	110 180	80 150	- -	- -
	14	Austenitic Stainless Steel	- -	- -	- -	80 200	- -	100 200	40 130	30 120	- -	- -
K	15~16	Grey Cast Iron	170 420	120 300	- -	- -	- -	- -	- -	- -	- -	- -
	17~18	Nodular Cast Iron	120 410	120 280	- -	- -	- -	- -	- -	- -	- -	- -
N	21~30	Non-Ferrous Metals (Al)	- -	- -	- -	- -	- -	- -	- -	- -	350 1200	250 800
S	31~37	Superalloys & Titanium	- -	- -	- -	35 80	- -	30 90	20 40	20 40	- -	- -
H	38~41	Hard Materials	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Turning Inserts - Negative
VNMG (35° Negative)



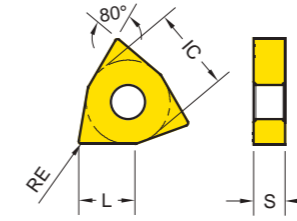
Series	L	IC	S
VN** 1604	15.8	9.525	4.76

EDP 2200.. ●: Stock item ○: Order made item

VNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..															
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10						
-UC Cast iron and Medium roughing	VNMG 160404 - UC	0.4	0.2~0.4	0.5~2.5	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	VNMG 160408 - UC	0.8	0.2~0.4	1~3	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
-UR Roughing	VNMG 160412 - UR	1.2	0.3~0.5	1.2~3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	VNMG 160408 - MF	0.8	0.05~0.3	0.2~1.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
-MM Stainless steel Medium	VNMG 160404 - MM	0.4	0.2~0.35	0.5~3.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	VNMG 160408 - MM	0.8	0.2~0.35	0.5~3.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
-MR Stainless steel Roughing	VNMG 160408 - MR	0.8	0.30~0.55	2.0~5.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Negative
WNMG / WNMA (80° Trigonal Negative)



Series	L	IC	S
WN** 0604	5.7	9.525	4.76
WN** 0804	7.8	12.7	4.76

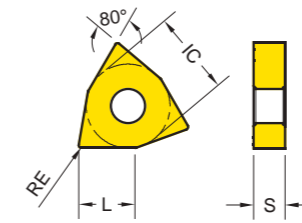
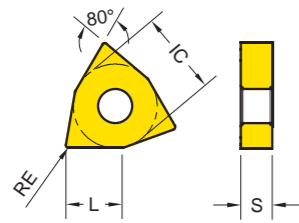
EDP 2200.. ●: Stock item ○: Order made item

WNMA WNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..															
					YG1001	YG3010	YG3015	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10					
..MA Cast iron	WNMA 080404	0.4	0.15~0.5	0.5~2.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMA 080408	0.8	0.15~0.5	1~3.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMA 080412	1.2	0.15~0.5	1.5~5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
-UF Finishing	WNMG 060404 - UF	0.4	0.05~0.2	0.5~1.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080404 - UF	0.4	0.05~0.25	0.5~2	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080408 - UF	0.8	0.05~0.25	1~2.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
-UL Light Machining and sticky material	WNMG 060408 - UL	0.8	0.1~0.3	1~2.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080408 - UL	0.8	0.1~0.3	1~3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
-UM Medium Machining at unstable condition	WNMG 060404 - UM	0.4	0.15~0.30	1.0~2.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMG 060408 - UM	0.8	0.15~0.3	1~2	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080404 - UM	0.4	0.15~0.30	0.5~3.0	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080408 - UM	0.8	0.15~0.3	1~3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080412 - UM	1.2	0.15~0.3	1.5~3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080416 - UM	1.6	0.15~0.3	2~3.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Negative
WNMG / WNMA (80° Trigonal Negative)

Turning Inserts - Negative
WNMG / WNMA (80° Trigonal Negative)



Series	L	IC	S
WN** 0604	5.7	9.525	4.76
WN** 0804	7.8	12.7	4.76

Series	L	IC	S
WN** 0604	5.7	9.525	4.76
WN** 0804	7.8	12.7	4.76

EDP 2200.. ●: Stock item ○: Order made item

EDP 2200.. ●: Stock item ○: Order made item

WNMA WNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	P05	P10	P15	P20	P30	P20	M15	M30	M40	N20	N20
					K10	K20	M20	S10	S20	S30	N20	N20			
-UG Medium Machining at stable condition	WNMG 060408 - UG	0.8	0.2~0.4	1~2.5	●	○	○	○	○	○	○	○	○	○	○
	WNMG 080404 - UG	0.4	0.2~0.4	1.5~2.5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080408 - UG	0.8	0.2~0.4	1~3.5	●	○	○	○	○	○	○	○	○	○	○
	WNMG 080412 - UG	1.2	0.2~0.4	1.5~3.5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080416 - UG	1.6	0.2~0.4	2~4	○	○	○	○	○	○	○	○	○	○	○
-UC Cast iron and Medium roughing	WNMG 080404 - UC	0.4	0.25~0.4	0.5~3.5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080408 - UC	0.8	0.2~0.4	1~4	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080412 - UC	1.2	0.2~0.4	1.5~4.5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080416 - UC	1.6	0.20~0.40	2.0~4.0	○	○	○	○	○	○	○	○	○	○	○
-UR Roughing	WNMG 080408 - UR	0.8	0.3~0.5	1.2~5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080412 - UR	1.2	0.3~0.5	1.5~5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080416 - UR	1.6	0.3~0.5	2~5	○	○	○	○	○	○	○	○	○	○	○

WNMA WNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	P05	P10	P15	P20	P30	P20	M15	M30	M40	N20	N20
					K10	K20	M20	S10	S20	S30	N20	N20			
-MF Stainless steel Finishing	WNMG 060404 - MF	0.4	0.07~0.30	0.2~1.5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080404 - MF	0.4	0.07~0.3	0.15~1.5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080408 - MF	0.8	0.07~0.3	0.2~1.5	○	○	○	○	○	○	○	○	○	○	○
-MM Stainless steel Medium	WNMG 080404 - MM	0.4	0.2~0.35	0.5~3.5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080408 - MM	0.8	0.2~0.35	1~3.5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080412 - MM	1.2	0.2~0.35	1.5~3.5	○	○	○	○	○	○	○	○	○	○	○
-MR Stainless steel Roughing	WNMG 060412 - MR	1.2	0.2~0.5	1.2~4	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080408 - MR	0.8	0.30~0.55	2.0~5.5	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080412 - MR	1.2	0.30~0.55	2.0~5.5	○	○	○	○	○	○	○	○	○	○	○
-KR Cast Iron Heavy Roughing	WNMG 080408 - KR	0.8	0.30~0.60	1.0~5.0	○	○	○	○	○	○	○	○	○	○	○
	WNMG 080412 - KR	1.2	0.30~0.60	1.5~5.0	○	○	○	○	○	○	○	○	○	○	○

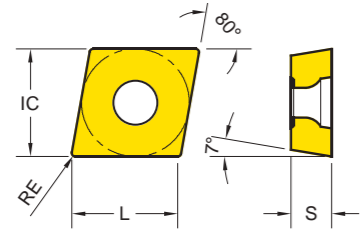
* YG3015 = Vc 90~430 m/min

* YG3015 = Vc 90~430 m/min

Cutting Speed			Vc (m/min.)										
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230	
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200	
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200	
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90	
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	20	40	

Cutting Speed			Vc (m/min.)										
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230	
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200	
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200	
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90	
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	20	40	

Turning Inserts - Positive
CCMT / CCGT (80° Positive)



Series	L	IC	S
CC** 0602	6.2	6.35	2.38
CC** 09T3	9.2	9.525	3.97
CC** 1204	12.4	12.7	4.76

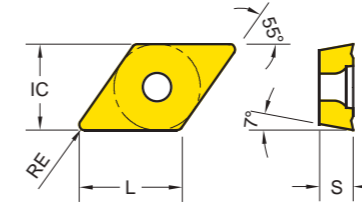
EDP 2200.. ●: Stock item ○: Order made item

CCGT CCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..											
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10		
-AL Aluminum	CCGT 09T302 - AL	0.2	0.02 ~ 0.08	0.5 ~ 1											●	●
	CCGT 09T304 - AL	0.4	0.05 ~ 0.25	0.5 ~ 2											●	●
	CCGT 09T308 - AL	0.8	0.1 ~ 0.35	1 ~ 3											●	●
	CCGT 120402 - AL	0.2	0.04 ~ 0.15	0.1 ~ 1											●	●
	CCGT 120404 - AL	0.4	0.04 ~ 0.2	0.3 ~ 1.5											●	●
	CCGT 120408 - AL	0.8	0.04 ~ 0.2	0.6 ~ 2.5											●	●
-UF Finishing	CCMT 060204 - UF	0.4	0.05 ~ 0.2	0.5 ~ 1.5	○	○	○									
	CCMT 09T304 - UF	0.4	0.05 ~ 0.2	0.5 ~ 2	○	○										
-UG General	CCMT 060204 - UG	0.4	0.1 ~ 0.25	0.5 ~ 2	●	●	●	●								
	CCMT 060208 - UG	0.8	0.1 ~ 0.25	0.8 ~ 2	●	●	●	●								
	CCMT 09T304 - UG	0.4	0.15 ~ 0.3	0.5 ~ 2	●	●	●	●								
	CCMT 09T308 - UG	0.8	0.15 ~ 0.3	0.8 ~ 2.5	●	●	●	●								
	CCMT 120404 - UG	0.4	0.15 ~ 0.35	0.5 ~ 2.5	●	●										
	CCMT 120408 - UG	0.8	0.15 ~ 0.35	0.8 ~ 3.5	●	●	●	●								

* YG3015 = Vc 90~430 m/min

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Positive
DCMT / DCGT (55° Positive)



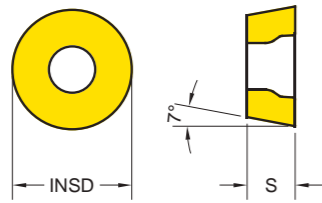
Series	L	IC	S
DC** 0702	7.5	6.35	2.38
DC** 11T3	11.2	9.525	3.97

EDP 2200.. ●: Stock item ○: Order made item

DCGT DCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..											
					YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10		
-AL Aluminum	DCGT 11T302 - AL	0.2	0.02 ~ 0.08	0.5 ~ 1												
	DCGT 11T304 - AL	0.4	0.05 ~ 0.25	0.5 ~ 2											●	●
	DCGT 11T308 - AL	0.8	0.1 ~ 0.3	1 ~ 2.5											●	●
-UF Finishing	DCMT 070204 - UF	0.4	0.05 ~ 0.2	0.5 ~ 1.5		○	○									
	DCMT 11T304 - UF	0.4	0.05 ~ 0.25	0.5 ~ 2		○	○									
	DCMT 11T308 - UF	0.8	0.05 ~ 0.25	1 ~ 2.5		○	○									
-UG General	DCMT 070204 - UG	0.4	0.1 ~ 0.25	0.5 ~ 1.5		○	○							●		
	DCMT 070208 - UG	0.8	0.1 ~ 0.25	0.8 ~ 1.5		○	○							●		
	DCMT 11T304 - UG	0.4	0.15 ~ 0.3	0.5 ~ 2		○	○							●		

Cutting Speed			Vc (m/min.)									
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Positive
RCMT (Round Positive)



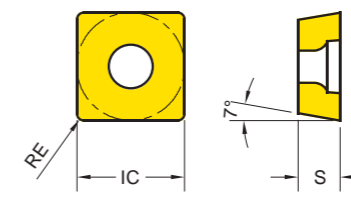
Series	INSD	S
RC** 0602	6	2.38
RC** 0803	8	3.18
RC** 10T3	10	3.97
RC** 1204	12	4.76

EDP 2200.. ●: Stock item ○: Order made item

P05	P10	P20	P30	P20	M15	M30	M40	N20	N20
K10	K20	M20	S10	S20	S30	N20	N20		

RCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
 General	RCMT 0602M0	3	0.05~0.25	0.2~1.2	●	●	●		●					
	RCMT 0803M0	4	0.05~0.3	0.5~1.5	○	○	○		○					
	RCMT 10T3M0	5	0.1~0.35	0.5~2.5	○	○	○		○					
	RCMT 1204M0	6	0.15~0.45	0.5~3	○	○	○		○					

Turning Inserts - Positive
SCMT (Square Positive)



Series	IC	S
SC** 09T3	9.525	3.97
SC** 1204	12.7	4.76

EDP 2200.. ●: Stock item ○: Order made item

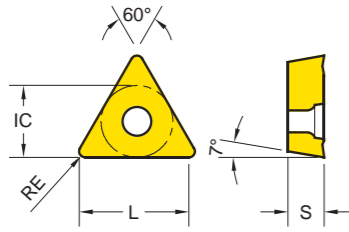
P05	P10	P20	P30	P20	M15	M30	M40	N20	N20
K10	K20	M20	S10	S20	S30	N20	N20		

SCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10
 Finishing	SCMT 09T304 - UF	0.4	0.05~0.25	0.5~2		●	●							
	SCMT 09T304 - UG	0.4	0.15~0.3	1~2.5	○	○			○					
 General	SCMT 09T308 - UG	0.8	0.15~0.3	1~2.5	○	○	○		○					
	SCMT 120408 - UG	0.8	0.15~0.35	1~3.5	○	○	○	○						

Cutting Speed			Vc (m/min.)											
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10		
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	-	-
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	-	-
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	-	-	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	-	-	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90	20	40
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-	-	-

Cutting Speed			Vc (m/min.)											
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10		
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	-	-
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	-	-
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	-	-	130	230
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	-	-	100	200
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	-	350	1200
S	31~37	Superalloys & Titanium	-	-	-	-	35	80	-	-	30	90	20	40
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-	-	-

Turning Inserts - Positive TCMT / TCGT (Triangle Positive)

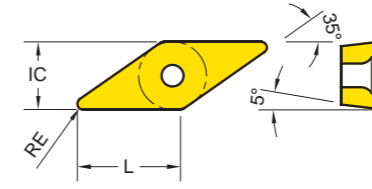


Series	L	IC	S
TC** 1102	10.3	6.35	2.38
TC** 16T3	15.6	9.525	3.97

EDP 2200.. ●: Stock item ○: Order made item

TCGT TCMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..														
					P05 K10	P10 K20	P20 M20	P30 M20	P20	M15 S10	M30 S20	M40 S30	N20	N20					
-AL Aluminum	TCGT 16T302 - AL	0.2	0.02~0.05	0.5~1	●	●												○	○
	TCGT 16T304 - AL	0.4	0.05~0.25	0.5~2														○	○
	TCGT 16T308 - AL	0.8	0.1~0.35	1~3														○	○
-UF Finishing	TCMT 110204 - UF	0.4	0.05~0.2	0.5~2		●	●												
	TCMT 16T304 - UF	0.4	0.05~0.25	0.5~3		●	●		●										
	TCMT 16T308 - UF	0.8	0.05~0.25	0.8~3		●	●			●									
-UG General	TCMT 110204 - UG	0.4	0.15~0.25	0.5~1.5	●						●								
	TCMT 110208 - UG	0.8	0.15~0.25	0.8~2		●	●												
	TCMT 16T304 - UG	0.4	0.15~0.3	0.5~2	●	●	●												
	TCMT 16T308 - UG	0.8	0.15~0.3	0.8~3	●	●	●		●	●									

Turning Inserts - Positive VBMT (35° Positive)



Series	L	IC	S
VB** 1604	15.8	9.525	4.76

EDP 2200.. ●: Stock item ○: Order made item

VBMT	Designation	RE	Fn (mm/rev.)	Ap (mm)	EDP 2200..														
					P05 K10	P10 K20	P20 M20	P30 M20	P20	M15 S10	M30 S20	M40 S30	N20	N20					
-UF Finishing	VBMT 160404 - UF	0.4	0.05~0.25	0.5~2		●	●												
	VBMT 160408 - UF	0.8	0.05~0.25	0.5~3		●	●												
-UG General	VBMT 160404 - UG	0.4	0.15~0.30	0.5~2.5	●	●	●				●								
	VBMT 160408 - UG	0.8	0.2~0.4	1~3	●	●	●				●	●							

Cutting Speed			Vc (m/min.)																			
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10										
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max										
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	-	-	-	-	-	-	-	-		
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	-	-	-	-	-	-	-	-		
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	-	-	-	-	-	-	-	-		
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	-	-	130	230	110	180	80	150	-	-	-	
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	-	-	100	200	40	130	30	120	-	-	-	
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	1200	250	800
S	31~37	Superalloys & Titanium	-	-	-	-	-	-	35	80	-	-	30	90	20	40	20	40	-	-	-	-
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Cutting Speed			Vc (m/min.)																			
ISO	VDI	Sub Group	YG1001	YG3010	YG3020	YG3030	YG801	YG211	YG213	YG214	YG100	YG10										
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max										
P	1~5	Non-Alloyed Steel	220	480	170	450	180	380	150	350	120	200	-	-	-	-	-	-	-	-	-	-
	6~9	Low-Alloyed Steel	220	420	180	380	110	350	90	300	70	200	-	-	-	-	-	-	-	-	-	-
	10~11	High-Alloyed Steel	-	-	100	330	60	300	70	250	-	-	-	-	-	-	-	-	-	-	-	-
M	12~13	Ferritic & Martensitic	-	-	-	-	-	-	120	230	-	-	130	230	110	180	80	150	-	-	-	-
	14	Austenitic Stainless Steel	-	-	-	-	-	-	80	200	-	-	100	200	40	130	30	120	-	-	-	-
K	15~16	Grey Cast Iron	170	420	120	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17~18	Nodular Cast Iron	120	410	120	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N	21~30	Non-Ferrous Metals (Al)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	1200	250	800
S	31~37	Superalloys & Titanium	-	-	-	-	-	-	35	80	-	-	30	90	20	40	20	40	-	-	-	-
H	38~41	Hard Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-