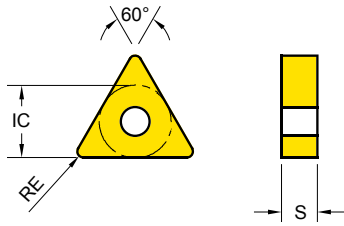


Turning Inserts - Negative








**TNMA / TNMG (60° Triangle)**



Series	IC	S
TN** 1604	9.525	4.76
TN** 2204	12.700	4.76

EDP 2200..

● : Stock item ○ : Order made item

TNMA TNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05	P10	P15	P10	P20	P30	P20	M25	M15	M30	M40	S10	P15	M15	N20	N20		
					YG1010	YG1001	YG3010	YG3015	YG3115	YG3020	YG3030	YG801	YG2025	YG211	YG213	YG214	YG401	YT100	YG100	YG10			
..MA  Cast iron	TNMA 160404	0.4	0.15 ~ 0.50	0.5 ~ 5.0	●	○	○																
	TNMA 160408	0.8	0.15 ~ 0.50	1.0 ~ 5.0	●	○	○																
	TNMA 160412	1.2	0.15 ~ 0.50	1.5 ~ 5.0	●	○	○																
-UF  Finishing	TNMG 160404 - UF	0.4	0.05 ~ 0.25	0.5 ~ 2.5			○		●	●	●	○											
	TNMG 160408 - UF	0.8	0.05 ~ 0.25	1.0 ~ 2.5			○		●	●	●												
	TNMG 160412 - UF	1.2	0.05 ~ 0.25	1.5 ~ 2.5			○		●	●	●												
	TNMG 220404 - UF	0.4	0.10 ~ 0.35	0.5 ~ 4.0			○		●	●	●	○											
-UL  Light Machining and Sticky Material	TNMG 160404 - UL	0.4	0.10 ~ 0.30	0.5 ~ 3.0			○		●	●	●												
	TNMG 160408 - UL	0.8	0.10 ~ 0.30	1.0 ~ 3.0			○		●	●	●												
	TNMG 160412 - UL	1.2	0.10 ~ 0.30	1.5 ~ 3.0			○		●	●	●												
-UM  Medium Machining Unstable condition	TNMG 160404 - UM	0.4	0.15 ~ 0.30	0.5 ~ 3.0	○	○	○	○	●	●	●												
	TNMG 160408 - UM	0.8	0.15 ~ 0.30	1.0 ~ 3.0	○	○	○	○	●	●	●												
	TNMG 160412 - UM	1.2	0.15 ~ 0.30	1.5 ~ 3.0	○	○	○	○	●	●	●												
-UG  Medium Machining at stable condition	TNMG 160404 - UG	0.4	0.20 ~ 0.40	0.5 ~ 3.0	●	○	○		●	●	●												
	TNMG 160408 - UG	0.8	0.20 ~ 0.40	1.0 ~ 3.0	●	○	○		●	●	●												
	TNMG 160412 - UG	1.2	0.20 ~ 0.40	1.5 ~ 3.0	●	○	○		●	●	●												
	TNMG 220408 - UG	0.8	0.25 ~ 0.60	1.0 ~ 6.0	●	○	○		●	●	●	○											
	TNMG 220412 - UG	1.2	0.25 ~ 0.60	1.5 ~ 6.0	●	○	○		●	●	●												
	TNMG 220416 - UG	1.6	0.25 ~ 0.60	2.0 ~ 6.0	●	○	○		●	●	●												
-UC  Cast iron and Medium roughing	TNMG 160404 - UC	0.4	0.20 ~ 0.40	0.5 ~ 4.0	●	○	○		●	●	●												
	TNMG 160408 - UC	0.8	0.20 ~ 0.40	1.0 ~ 4.0	●	○	○		●	●	●												
	TNMG 160412 - UC	1.2	0.20 ~ 0.40	1.5 ~ 4.0	●	○	○		●	●	●												
	TNMG 220416 - UC	1.6	0.20 ~ 0.40	2.0 ~ 4.0																			
-UR  Roughing	TNMG 160408 - UR	0.8	0.30 ~ 0.50	1.0 ~ 5.0	●	○	○		●	●	●												
	TNMG 160412 - UR	1.2	0.30 ~ 0.50	1.5 ~ 5.0	●	○	○		●	●	●	○											
	TNMG 220412 - UR	1.2	0.30 ~ 0.65	1.5 ~ 7.0	●	○	○		●	●	●	○											
	TNMG 220416 - UR	1.6	0.30 ~ 0.65	2.0 ~ 7.0	●	○	○		●	●	●												

## Turning Inserts - Negative TNMG (60° Triangle)

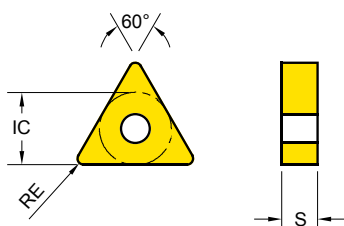
TURNING

PARTING & GROOVING

MILLING

DRILLING





TECHNICAL INFORMATION



Series	IC	S
TN** 1604	9.525	4.76
TN** 2204	12.700	4.76

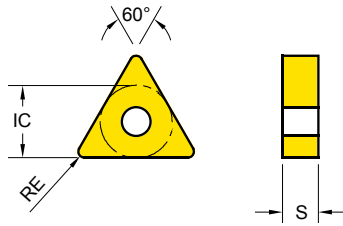
EDP 2200..

● : Stock item ○ : Order made item

TNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05	P10	P15	P10	P20	P30	P20	M25	M15	M30	M40	S10	P15	M15	N20	N20	
					YG1010	YG1001	YG3010	YG3015	YG3115	YG3020	YG3030	YG801	YG2025	YG211	YG213	YG214	YG401	YT100	YG100	YG10	K20	K30
-MF  Stainless steel Finishing	TNMG 160404 - MF	0.4	0.07~0.3	0.2~1.5												●	●	●	○			
	TNMG 160408 - MF	0.8	0.07~0.3	0.2~1.5						○						●	●	●	○			
-MM  Stainless steel Medium	TNMG 160404 - MM	0.4	0.20~0.35	0.5~3.5												●	●	●	○			
	TNMG 160408 - MM	0.8	0.20~0.35	1.0~3.5												●	●	●	○			
	TNMG 160412 - MM	1.2	0.20~0.35	1.5~3.5												●	●	●	○			
-MG  Stainless steel General	TNMG 160404 - MG	0.4	0.20~0.40	0.5~4.0											●	●	●	●	●			
	TNMG 160408 - MG	0.8	0.20~0.40	1.0~4.0											●	●	●	●	●			
	TNMG 160412 - MG	1.2	0.20~0.50	2.0~4.0											●	●	●	●	●			
-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							○				●	●	●	●				

# Turning Inserts - Negative







## TNGG / TNMG (60° Triangle)



Series	IC	S
TN** 1604	9.525	4.76
TN** 2204	12.700	4.76

EDP 2200..

● : Stock item ○ : Order made item

TNGG TNMG	Designation	RE	Fn (mm/rev.)	Ap (mm)	K10	P05 K20	P10 K30	P15	P10	P20	P30	P20	M25	M15	M30	M40 S30	S10	P15 K15	N20	N20		
					YG1010	YG1001	YG3010	YG3015	YG3115	YG3020	YG3030	YG801	YG2025	YG211	YG213	YG214	YG401	YT100	YG100	YG10		
<b>-SF</b>  Stainless steel Finishing	TNMG 160408 - SF	0.8	0.10~0.25	0.5~3.0																		
																	●					
<b>-SM</b>  Stainless steel Medium	TNMG 160408 - SM	0.8	0.10~0.25	0.5~4.0										○	○	○	●					
	TNMG 160412 - SM	1.2	0.10~0.25	0.5~4.0										○	○	○	●					
<b>-SR</b>  HRSA Roughing	TNMG 160408 - SR	0.8	0.10~0.40	0.5~4.0																●		
	TNMG 160412 - SR	1.2	0.10~0.40	0.5~4.0																	●	
<b>NEW</b> <b>-PSF</b>  Cermet Finishing	TNMG 160404 - PSF	0.4	0.07~0.30	0.4~2.5																	●	
	TNMG 160408 - PSF	0.8	0.10~0.30	0.6~2.5																		●
<b>NEW</b> <b>-C</b>  Cermet Medium Left Hand Shown	TNGG 160402L - C	0.2	0.10~0.30	0.8~3.5																	○	
	TNGG 160404L - C	0.4	0.12~0.30	1.0~3.5																		○
	TNGG 160408L - C	0.8	0.05~0.35	1.0~3.5																		○
<b>NEW</b> <b>-C</b>  Cermet Medium Right Hand Shown	TNGG 160402R - C	0.2	0.10~0.30	0.8~3.5																	○	
	TNGG 160404R - C	0.4	0.12~0.30	1.0~3.5																		○
	TNGG 160408R - C	0.8	0.05~0.35	1.0~3.5																		○