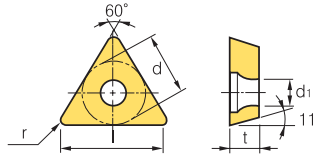


# TP



**Triangular 60° Positive**  
Relief Angle: 11°



Dimensions (mm)			
Size	d	t	d <sub>1</sub>
08	4.76	2.38	2.3
09	5.56	2.38	-
11	6.35	2.38~3.18	3.4
16	9.525	3.18~4.76	4.4
22	12.7	4.76	-
27	15.875	4.76~6.35	-

Workpiece	Material										Machining types				
	Steel	Stainless steel	Cast iron	Non-ferrous metal	Heat resistant alloy, Titanium alloy	Hardened steel	P	M	K	N	S	H	Continuous cutting	General cutting	Interrupted cutting
Steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Stainless steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cast iron	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-ferrous metal	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat resistant alloy, Titanium alloy	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hardened steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Inserts	Designation	Cermet		Coated		Coated										Uncoated		Cutting Condition												
		CN1500	CN2000	CN2500	CC1500	CC2500	NC3215	NC3120	NC3225	NC3030	NC5330	NC6310	NC6315	NC9115	NC9125	NC9135	PC5300	PC5400	PC8105	PC8110	PC8115	PC9030	H01	H05	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)				
Finishing		<b>TPGH</b>	080202L	●																						0.01~0.12	0.06~1.70			
			080204L	●	●																						0.01~0.15	0.08~1.70		
			110202L																									0.01~0.12	0.06~2.00	
			110204L																									0.01~0.15	0.08~2.00	
Medium to finishing		<b>TPGN</b>	090204																								0.07~0.20	0.70~2.00		
			110302																									0.05~0.15	0.50~2.00	
			110304								●														●			0.07~0.20	0.70~3.00	
			110308								●														●			0.10~0.25	1.00~3.00	
			160302																									0.05~0.18	1.00~5.00	
			160304								●	●													●			0.07~0.20	1.00~5.00	
			160308								●	●													●			0.10~0.25	1.00~5.00	
			160310																									0.10~0.25	1.00~5.00	
			160312																										0.15~0.30	1.00~5.00
			160316																										0.15~0.30	1.00~5.00
			160404																										0.07~0.20	1.00~5.00
			220404									●																	0.07~0.20	1.50~7.00
			220408									●	●																0.10~0.25	1.50~7.00
			220412									●																	0.15~0.30	1.50~7.00
			220430																										0.30~0.45	1.50~7.00
220440																										0.30~0.50	1.50~7.00			
270408																										0.15~0.25	3.00~8.00			
270608																										0.15~0.25	3.00~8.00			
Finishing		<b>TPGR</b>	110302-F																								0.05~0.15	0.10~1.50		
			110304-F																									0.05~0.20	0.30~1.50	
			160304-F																									0.08~0.25	0.50~2.00	
Medium cutting		<b>TPGR</b>	110308-M																								0.13~0.30	1.00~3.00		
			160308-M																									0.13~0.30	1.00~5.00	

↻ Cutting edge geometry **A52~A61**    
 ↻ Recommended chip breaker **B04~B11**    
 ↻ Code system **B26~B27**    
 ● : Stock item

Available tool holders			
Designation	Page	Designation	Page
STFPR/L	B210	STUPR/L	B215
CTFPR/L	B170	CTGPR/L	B170

