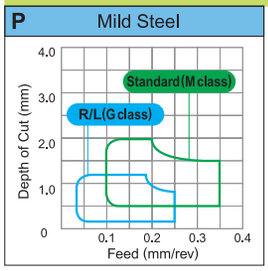
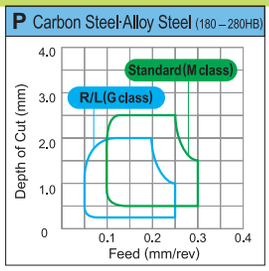
TP TYPE INSERTS WITHOUT HOLE 60°

CHIP CONTROL RANGE FOR WORK MATERIALS

Finish Cutting Medium Cutting





Cutting Conditions : ● Stable Cutting ◕ General Cutting ✣ Unstable Cutting

Workpiece			Coated												Cermet				Coated Cermet				Carbide				Dimensions (mm)				Applicable Holder Page
			UE6005	UE6010	UE6020	UE6035	UC6010	US7020	US735	UC5005	UC5015	VP10RT	VP15TF	UP20M	NX2525	NX33	NX55	NX99	AP25N	VP25N	VP45N	UP35N	UTi20T	HTi05T	HTi10	RT9010	D1	S1	Re		
P	Steel	●	◕	✣	✣	◕									●	●	●	◕	●	◕	◕	✣									
M	Stainless Steel						●	◕				◕	✣	✣	●				◕	◕			✣								
K	Cast Iron	◕	✣						●	◕	✣				◕				◕	◕			✣	◕	◕						
N	Non-iron Metal																							◕	◕						
S	Heat-resistant Alloy, Titanium Alloy											◕	✣													◕					
H	Hardened Materials																														
R/L Breaker	**TPGR110304R**														●	▲							●		●		6.35	3.18	0.4		
	110304L														●	▲							●		●		6.35	3.18	0.4		
	160304R														●	▲							★		★		9.525	3.18	0.4		A157 A186
	160304L														●	▲							●		●		9.525	3.18	0.4		
	160308R														●								★		★		9.525	3.18	0.8		
Finish Cutting	**160308L**														●								●		●		9.525	3.18	0.8		
Standard Breaker	**TPMR090202**			□											●												5.56	2.38	0.2		
	090204			★	□		▲								●												5.56	2.38	0.4		
	090208			□	□		▲									▲											5.56	2.38	0.8		
	110302			●	□		▲								●												6.35	3.18	0.2		
	110304			●	★		▲								★	▲	▲										6.35	3.18	0.4		A157 A186
	110308			●	★		▲								●	▲	▲										6.35	3.18	0.8		
	160304			●	★		▲								●	▲	▲										9.525	3.18	0.4		
	160308			●	★		▲								★	▲	▲										9.525	3.18	0.8		
Medium Cutting	**160312**			●	★		▲								★												9.525	3.18	1.2		
80 Breaker	**TPMR110304-80**			●			▲																●				6.35	3.18	0.4		
	110308-80			●			▲																●				9.252	3.18	0.8		
	160304-80			●			▲																●				9.525	3.18	0.4		A157 A186
Medium Cutting	**160308-80**			●			▲																●				9.525	3.18	0.8		
Flat Top	**TPMN110204**																						●				6.35	2.38	0.4		
	110208																						●				6.35	2.38	0.8		
	110304	●	●	□		▲			●	●			●		●	▲							●		●		6.35	3.18	0.4		
	110308	●	★	□		★			●	●					★								●		●		6.35	3.18	0.8		
	110312		□	□																			□				6.35	3.18	1.2		
	160304	●	●	□		▲			●	●			□		●	▲	▲						●		●		9.525	3.18	0.4		
	160304T														●												9.525	3.18	0.4		A157 A186
	160308	●	●	★		▲			●	●			●		●	▲	▲	□					●	★	●		9.525	3.18	0.8		
	160308T														●												9.525	3.18	0.8		
	160312		□	□						●			●					●					●		●		9.525	3.18	1.2		
	160312T														●												9.525	3.18	1.2		
	160316		□	□																			●				9.525	3.18	1.6		
	160320		□	□																			●				9.525	3.18	2		
	160408		★	★		★																	●				9.525	4.76	0.8		

● : Inventory maintained. ★ : Inventory maintained in Japan. □ : Non stock, produced to order only. No mark : Not manufactured.

▲ : Inventory maintained.
To be replaced by new products.