

# Milling Inserts

## Milling Inserts

Classification of usage		P	M	K	N	S	H
★ : Roughing / 1st Choice ☆ : Roughing / 2nd Choice ■ : Finishing / 1st Choice □ : Finishing / 2nd Choice (In case hardness is under 45HRC)	Carbon Steel / Alloy Steel	■	★	☆	☆	☆	
	Mold Steel	■	★	☆	☆	☆	
	Stainless Steel		★			★	☆
	Gray Cast Iron			★		★	☆
	Nodular Cast Iron			★		★	☆
	Non-ferrous Metals						★
	Heat-resistant Alloys					☆	☆
	Titanium Alloys			★			☆
	Hard Materials						□

Insert Handed Insert shows R-hand	Description	Dimension (mm)				Angle (°)			Material										Ref. Page for Toolholder										
		A	T	X	Z	re	α	β	γ	Cermet	MEGACOAT	PVD Coated		Carbide	Carbide														
									TN60	TN100M	TC60	PR1225	PR1210	PR630	PR730	PR830	PR1025	PR660	PR905	PW30	KW10								
	TEKN 1603PTTR	9.525	3.18	R0.8	1.0	-	20°	22°	30°	□	●	□	●	●	●						●		M95						
	1603PTFR									0.7																			
	TEEN 2204PTTR	12.70	4.76	R1.0	1.4									□	●	□	●	●	●	●	●	●	●	●	●		M44		
	2204PTFR									0.7																		M45	
	TEKR 2204PTER-S	12.70	4.76	R1.0	1.4	-	20°	22°	30°	●	●			●	●	●	●	●	●			M44							
	TEMR 1603PTER-H	9.525	3.18	R0.8	1.2	-	20°	22°	30°			●		●	●								M95						
	TEMR 2204PTER-H	12.70	4.76	R1.0	1.4									●		●	●									M44			
	TPKN 1603PDTR	9.525	3.18	0.7	1.2	-	11°	15°	30°	□	●	□	●	●	●					●	●		-						
	1603PDFR																												
	TPKN 2204PDTR	12.70	4.76	0.7	1.6					□	●	□	●	●	●				●	●			-						
	2204PDFR																												
	TPKR 2204PDER-S	12.70	4.76	R1.0	1.4	-	11°	15°	30°	●	●			●					●	●			M44						
	TPMR 1603PDER-H	9.525	3.18	R0.8	1.2	-	11°	15°	30°					●		●							-						
	TPMR 2204PDER-H	12.70	4.76	R1.0	1.4													●		●						M44			
	TPMN 110304	6.35	3.18		0.4	-	11°	-	-												●		M95						
	110308				0.8																								
	160304	9.525			0.4					●	□																-		
	160308				0.8					●	□																		
	160312				1.2					●	□																		
	220408			12.70	4.76						0.8	●	□																
	220412		1.2							●	□																		
	TPGN 090202	5.56	2.38		0.2					●																		-	
	090204				0.4					●																			-
	090208		0.8	●																									
	110302	6.35	3.18		0.2																							M95	
	110304				0.4					●																			
	110308				0.8					●																			
	160304				0.4					●																			
160308	9.525			0.8	●																		-						
160312				1.2	●																								

Cutting Range	Chipbreaker	Features
Finishing - Roughing	S	S chipbreaker for general-purpose cutting. Low resistant cutting is possible with 13° chipbreaker rake angle. Recommended for various ap with 3-step chipbreaker design. Ground wiper edge enables good surface finish.
Medium - Roughing	H	H chipbreaker for general-purpose cutting. Smooth chip evacuation due to the chipbreaker's smooth rake face. 20% less cutting force than non-chipbreaker type due to 25° rake angled chipbreaker.

Inserts are sold in 10 piece boxes.

● : Std. Item  
□ : Check Availability