

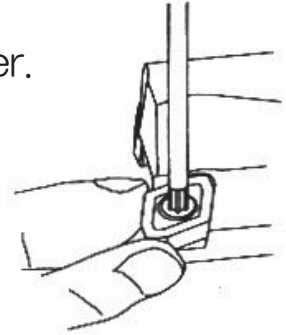
GENERAL INSTRUCTION MITSUBISHI MATERIALS CORPORATION

MITSUBISHI INDEXABLE DRILL TAF TYPE

We appreciate purchasing our product INDEXABLE DRILL.
We recommend you to read the instruction carefully before using the product.

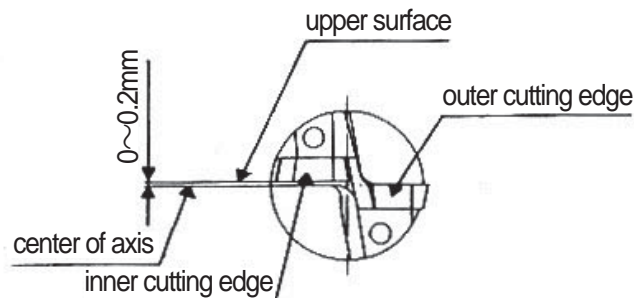
■ INSERT installment instruction

1. Insert pocket must be clean and free of foreign matter.
Use compressed air to clean.
2. To set the insert, press slightly as shown in the picture right and set the clamp screw using attached wrench.
(The upper surface of the insert and the pocket surface must be parallel.)

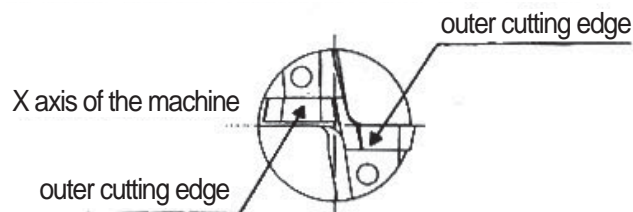


■ Caution

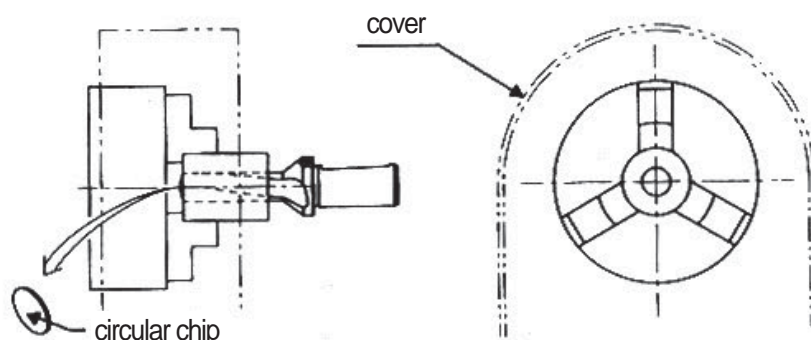
- Please use machine and holder with enough rigidity.
- It is not applicable on lamellar plates.
We urge you not to use lamellar plates since it may cause tool damage due to the formation of disk chip during drilling.
- In case of using turning machine
(1) Set the inner cutting edge height . . . 0~0.2mm below the center.



- (2) Set the outer cutting edge parallel to the X axis of the machine, if you adjust the hole dia. using offset.



- (3) Offset stroke must be less than 2% of the drill dia. If you enlarge the hole dia.. Please note you can not shorten the hole dia. conversely.
- (4) In case of drilling the hole through, the circular chip may disperse when through out. Please install the cover to avoid the injury.






Recommended Cutting Condition

Workpiece	Hardness	Cutting speed (SFM)			Breaker	Feed(IPR)				
		2D / 3D		4D		Drill diameter (inch)				
		φ.468~.562	φ.593~2.25			φ.468~φ.562	φ.593~φ.875	φ.937~φ.1.312	φ1.375~φ1.875	φ1.937~φ2.25
Mild steel	≤180HB	500 (300~650)	650 (500~980)	450 (330~650)	U1	0.0024(0.0016~0.0032)	.0028(.0016~.0040)	.0032(.0016~.0040)	.0040(.0016~.0048)	.0032(.0016~.0040)
					U2	0.0024(0.0016~0.0040)	.0032(.0016~.0048)	.0040(.0016~.0048)	.0048(.0016~.0056)	.0040(.0016~.0048)
					U3		.0032(.0016~.0048)	.0040(.0016~.0048)	.0048(.0016~.0056)	.0040(.0016~.0048)
Carbon steel	180~280HB	400 (250~500)	500 (400~600)	300 (260~400)	U1	0.0024(0.0016~0.0032)	.0036(.0024~.0048)	.0048(.0032~.0056)	.0060(.0032~.0072)	.0048(.0032~.0056)
					U2	0.0024(0.0016~0.0040)	.0048(.0024~.0056)	.0056(.0032~.0072)	.0068(.0032~.0080)	.0056(.0032~.0072)
					U3		.0048(.0024~.0056)	.0056(.0032~.0072)	.0068(.0032~.0080)	.0056(.0032~.0072)
Alloy steel	180~280HB	400 (250~500)	500 (400~600)	300 (260~400)	U1	0.0024(0.0016~0.0032)	.0032(.0024~.0040)	.0036(.0024~.0048)	.0044(.0024~.0056)	.0036(.0024~.0048)
					U2	0.0024(0.0016~0.0040)	.0040(.0024~.0048)	.0048(.0032~.0064)	.0056(.0032~.0072)	.0048(.0032~.0064)
					U3		.0040(.0024~.0048)	.0048(.0032~.0064)	.0056(.0032~.0072)	.0048(.0032~.0064)
Stainless steel	≤200HB	300 (250~400)	400 (300~500)	350 (270~450)	U1	0.0024(0.0016~0.0032)	.0028(.0016~.0040)	.0032(.0016~.0040)	.0040(.0016~.0048)	.0032(.0016~.0040)
					U2	0.0024(0.0016~0.0040)	.0032(.0016~.0048)	.0040(.0016~.0056)	.0048(.0016~.0064)	.0040(.0016~.0056)
					U3		.0032(.0016~.0048)	.0040(.0016~.0056)	.0048(.0016~.0064)	.0040(.0016~.0056)
Cast iron	180~220HB	400 (250~500)	500 (400~600)	450 (360~540)	U1	0.0024(0.0016~0.0035)	.0028(.0024~.0040)	.0040(.0024~.0056)	.0040(.0024~.0056)	.0040(.0024~.0056)
					U2	0.0028(0.0016~0.0040)	.0060(.0040~.0072)	.0080(.0040~.0100)	.0080(.0040~.0100)	.0080(.0040~.0100)
					U3		.0060(.0040~.0072)	.0080(.0040~.0100)	.0080(.0040~.0100)	.0080(.0040~.0100)
Ductile cast iron	230~300HB	400 (300~500)	450 (350~550)	300 (260~400)	U1	0.0024(0.0016~0.0032)	.0028(.0024~.0040)	.0040(.0024~.0056)	.0040(.0024~.0056)	.0040(.0024~.0056)
					U2	0.0024(0.0016~0.0040)	.0048(.0032~.0056)	.0060(.0032~.0080)	.0072(.0032~.0080)	.0060(.0032~.0080)
					U3		.0048(.0032~.0056)	.0060(.0032~.0080)	.0072(.0032~.0080)	.0060(.0032~.0080)

Note: If you use 4D drill, the feed has to be reduced to 80% of the above table.

Spare Parts

Drill Diameter (inch)	Insert order number			Spare parts	
	U1 Breaker	U2 Breaker	U3 Breaker	Clamp screw	Wrench
φ.468~φ.562	GCMT040204-U1	GCMT040204-U2		 TS2	 ①  ② ①TKY06F
φ.593~φ.687	GPMT060204-U1	GPMT060204-U2	GPMT060204-U3		
φ.750~φ.875	GPMT070204-U1	GPMT070204-U2	GPMT070204-U3	TS25	①TKY08F
φ.937~φ1.062 φ1.937~φ2.187	GPMT090304-U1	GPMT090304-U2	GPMT090304-U3	TS3	
φ1.125~φ1.312 φ2.25	GPMT11T308-U1	GPMT11T308-U2	GPMT11T308-U3	TS4	②TKY15D
φ1.375~φ1.875	GPMT140408-U1	GPMT140408-U2	GPMT140408-U3	TS55	②TKY25D