

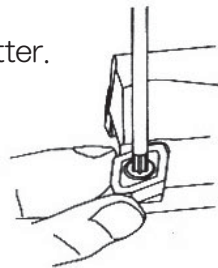
GENERAL INSTRUCTION MITSUBISHI MATERIALS CORPORATION

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.)



■Recommended Cutting Condition

Workpiece	Hardness (HB)	Cutting speed (SFM)			Breaker	Feed(IPR)				
		2D / 3D		4D		drill diameter(mm)				
		φ12~φ14.5	φ15~	φ16~		φ12~φ14.5	φ15~φ22.5	φ23~φ34	φ35~φ48	φ49~φ56
Mild steel	~180	150 (100~200)	200 (150~300)	140 (100~200)	U1	0.06(0.04~0.10)	0.07(0.04~0.10)	0.08(0.04~0.10)	0.10(0.04~0.12)	0.08(0.04~0.10)
Carbon steel	180~280	120 (80~160)	150 (120~180)	100 (80~120)	U2	0.06(0.04~0.10)	0.08(0.04~0.12)	0.10(0.04~0.12)	0.12(0.04~0.14)	0.10(0.04~0.12)
					U3	0.06(0.04~0.10)	0.08(0.04~0.12)	0.10(0.04~0.12)	0.12(0.04~0.14)	0.10(0.04~0.12)
					U1	0.06(0.04~0.10)	0.09(0.06~0.12)	0.12(0.08~0.14)	0.15(0.08~0.18)	0.12(0.08~0.14)
Alloy steel	180~280	120 (80~160)	150 (120~180)	100 (80~120)	U2	0.06(0.04~0.10)	0.12(0.06~0.14)	0.14(0.08~0.18)	0.17(0.08~0.20)	0.14(0.08~0.18)
					U3	0.06(0.04~0.10)	0.12(0.06~0.14)	0.14(0.08~0.18)	0.17(0.08~0.20)	0.14(0.08~0.18)
					U1	0.06(0.04~0.10)	0.08(0.06~0.10)	0.09(0.06~0.12)	0.11(0.06~0.14)	0.09(0.06~0.12)
Stainless steel	below 200	100 (80~120)	150 (150~200)	110 (80~140)	U2	0.07(0.04~0.10)	0.08(0.04~0.12)	0.10(0.04~0.14)	0.12(0.04~0.16)	0.10(0.04~0.14)
					U3	0.07(0.04~0.10)	0.08(0.04~0.12)	0.10(0.04~0.14)	0.12(0.04~0.16)	0.10(0.04~0.14)
					U1	0.07(0.06~0.10)	0.07(0.06~0.10)	0.10(0.06~0.14)	0.10(0.06~0.14)	0.10(0.06~0.14)
Cast iron	tensile strength ~350 (N/mm ²)	120 (80~160)	150 (120~180)	140 (110~160)	U2	0.07(0.06~0.10)	0.15(0.10~0.18)	0.20(0.10~0.25)	0.20(0.10~0.16)	0.20(0.10~0.25)
					U3	0.07(0.06~0.10)	0.15(0.10~0.18)	0.20(0.10~0.25)	0.20(0.10~0.25)	0.20(0.10~0.25)
					U1	0.06(0.04~0.10)	0.07(0.06~0.10)	0.10(0.06~0.14)	0.10(0.06~0.14)	0.10(0.06~0.14)
Ductile cast iron	tensile strength ~450 (N/mm ²)	120 (800~150)	150 (120~180)	100 (80~120)	U2	0.06(0.04~0.10)	0.12(0.08~0.14)	0.15(0.08~0.20)	0.18(0.08~0.20)	0.15(0.08~0.20)
					U3	0.06(0.04~0.10)	0.12(0.08~0.14)	0.15(0.08~0.20)	0.18(0.08~0.20)	0.15(0.08~0.20)
					U1	0.06(0.04~0.10)	0.12(0.08~0.14)	0.15(0.08~0.20)	0.18(0.08~0.20)	0.15(0.08~0.20)

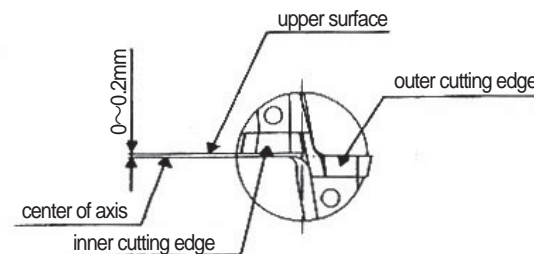
Note: If you use 4D drill, the feed has to be reduced to 80% of the above table.

■Spare Parts

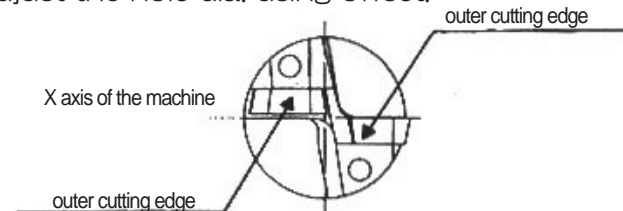
Drill Diameter (inch)	Insert			Parts	
	U1 Breaker	U2 Breaker	U3 Breaker	Clamp screw	Wrench
φ12~φ14.5	GCMT040204-U1	GCMT040204-U2		TS2	①TKY06F
φ15~φ17	GPMT060204-U1	GPMT060204-U2	GPMT060204-U3		
φ18~φ22	GPMT070204-U1	GPMT070204-U2	GPMT070204-U3	TS25	①TKY08F
φ23~φ27 φ49~φ56	GPMT090304-U1	GPMT090304-U2	GPMT090304-U3	TS3	
φ28~φ34	GPMT11T308-U1	GPMT11T308-U2	GPMT11T308-U3	TS4	②TKY15D
φ35~φ48	GPMT140408-U1	GPMT140408-U2	GPMT140408-U3	TS55	②TKY25D

■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.

