

THE NEW VALUE FRONTIER



## GMM type Cut-Off Inserts

# TMR Chipbreaker

Achieves a high feed rate with stable chip control

- Stable chip control at medium to high feed rates

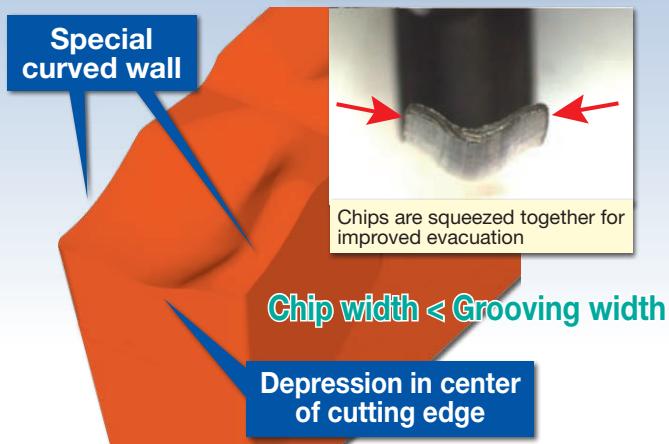
- Special curved wall controls the curl diameter of chips
- Depression in center of cutting edge improves chip control

Advancing Productivity

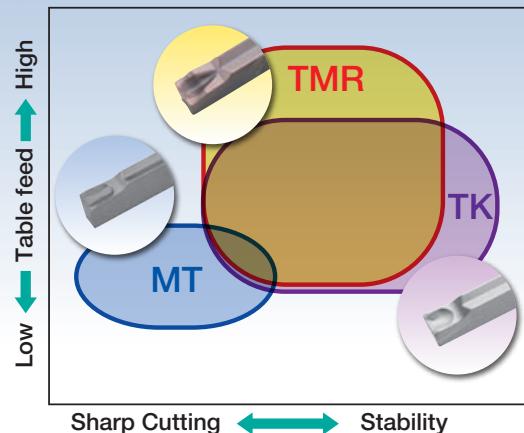
2-Edges

- Good chip control even when cutting speed (spindle revolution) is increased

### Chipbreaker Advantages



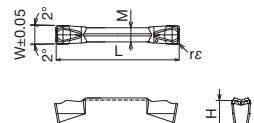
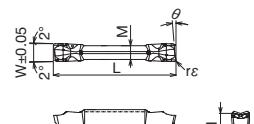
### Chipbreaker map



ADVANCING PRODUCTIVITY

## ■ Stock Items

The TMR chipbreaker provides stable chip control at high feed rates even in sticky work piece materials such as SCM415

Shape Handed Insert shows Right-hand.		Description	Dimension(mm)					Angle	PVD Coated	Tool-holder
W	rε		L	H	M	θ				
		GMM2020-TMR	2.0	0.2	20	4.3	1.5	-	●	KGM®/L
		GMM2520-TMR	2.5				1.9		●	
		GMM3020-TMR	3.0	0.25			2.3		●	
		GMM2020R-TMR-6D	2.0	0.2	20	4.3	1.5	6	●	KGM®/L
		GMM2520R-TMR-6D	2.5				1.9		●	
		GMM3020R-TMR-6D	3.0	0.25			2.3		●	

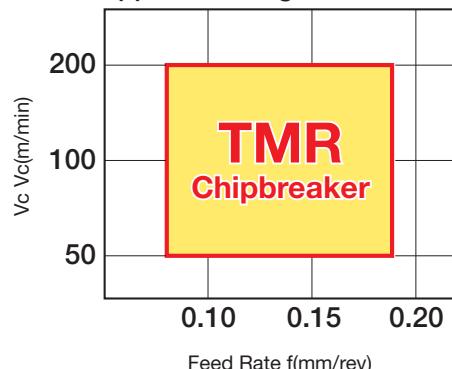
Edge Preparation:Chamfer+hone

## ■ The TMR chipbreaker provides stable chip control even when high feed rates are required.

Good chip control even when cutting speed (spindle revolution) is increased.

Description	n=1060min <sup>-1</sup> (Vc=100m/min)		n=2120min <sup>-1</sup> (Vc=200m/min)	
	f=0.12mm/rev	f=0.18mm/rev	f=0.12mm/rev	f=0.18mm/rev
GMM 3020-TMR	 	 	 	 
GMM 3020R-TMR-6D R-hand	 	 	 	 

applicable range



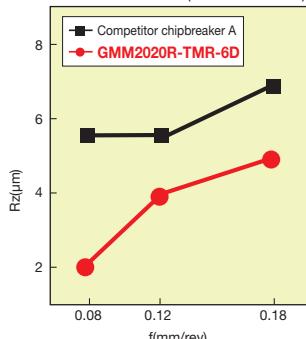
## ■ Recommended Cutting Conditions

Workpiece Material	Vc (m/min)	f (mm/rev)
Carbon Steel	60~200	0.08~0.18
Alloy Steel	60~150	
Stainless Steel	50~140	

## ■ Workpiece surface roughness

The TMR chipbreaker provides good surface finish on the work piece end face even at high feed rates.

- GMM2020R-TMR-6D (VC=200m/min)



- GMM2020-TMR (VC=200m/min)

