

# RECOMMENDED CUTTING SPEED [For External Grooving / Cutting Off]

Work Material	Hardness	Grade	Cutting Speed (m/min)								
			50	100	150	200	250	300	500		
P Mild Steel	≤160HB	VP20RT		100		220					
		VP10RT		110		230					
		NX2525		90		210					
	Carbon Steel Alloy Steel	160-280HB	VP20RT		80		180				
			VP10RT		90		190				
			MY5015		110		250				
			NX2525		70		170				
		280HB≤	VP20RT		60		140				
			VP10RT		70		150				
			MY5015		90		210				
NX2525		55		135							
M Stainless Steel	≤270HB	VP20RT		60		140					
		VP10RT		70		150					
K Gray Cast Iron	Tensile Strength ≤300MPa	VP20RT		80		180					
		VP10RT		90		180					
		MY5015		140		300					
	Ductile Cast Iron	Tensile Strength ≤800MPa	VP20RT		60		140				
			VP10RT		70		150				
			MY5015		90		210				
S Heat Resistant Alloy Titanium Alloy	-	MP9015		40		100					
		MP9025		30		90					
		VP20RT		30		60					
		VP10RT/ RT9010		40		70					
H Hardened steel	50HRC≤	BC8110		80		120					
N Aluminium Alloy	Content Si<5%	RT9010					200			500	
	Content 5%≤Si≤10%	RT9010					200			500	
	Content Si>10%	RT9010			100		200				

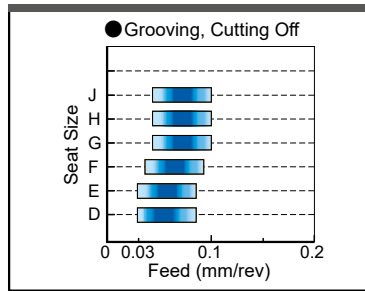
Note 1) For RT9010, VP10RT, VP20RT and MY5015, wet cutting is recommended.

# RECOMMENDED CUTTING CONDITIONS [For External Grooving / Cutting Off]

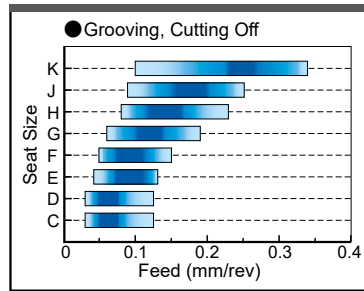
\*Below are the recommended cutting conditions when using the modular holder GYHR/L2525M00/90-M25R/L with the modular blade GYM25R/LA-○○○.

## Recommended feed rate and depth of cut

### GU BREAKER



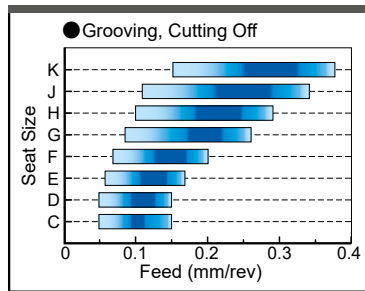
### GS BREAKER



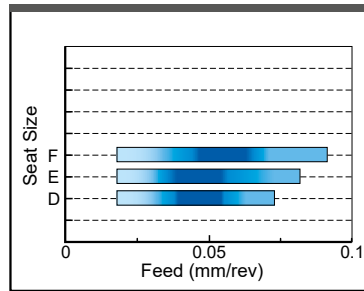
■ : 1st recommended area

Seat Size			
	Insert Width (mm)		Insert Width (mm)
C	1.50	G	4.00
			4.24
D	2.00	H	4.75
	2.24		5.00
E	2.39	J	6.00
	2.50		6.31
F	2.74	K	6.35
	3.00		
	3.18		
	3.24		

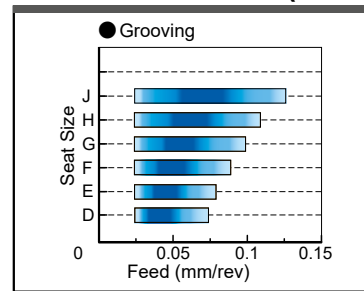
### GM BREAKER



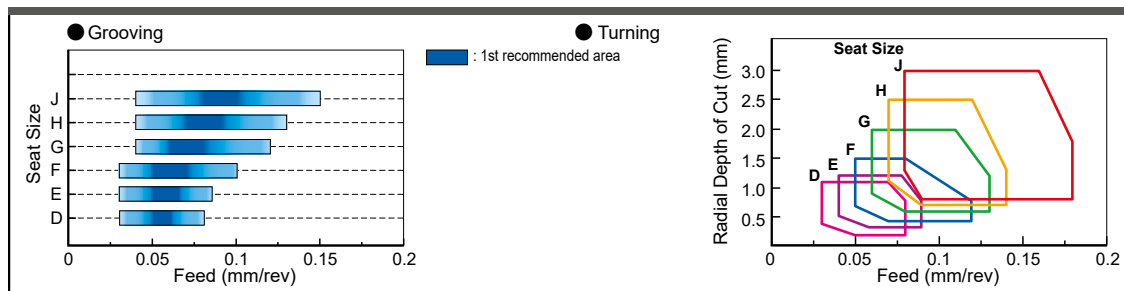
### GL BREAKER



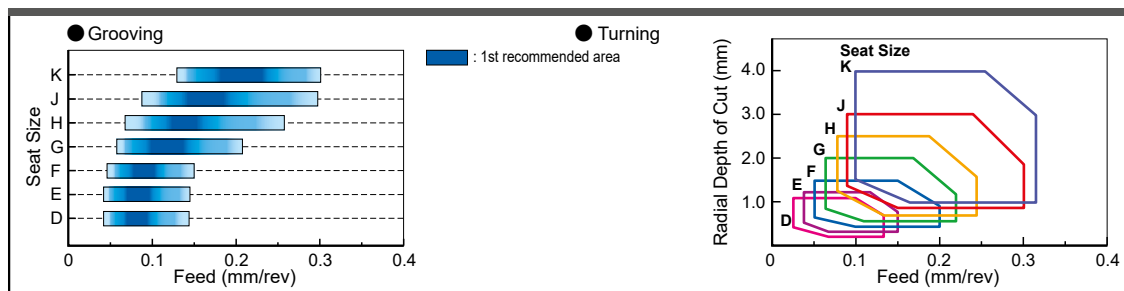
### FLAT TOP GFGS (CBN)



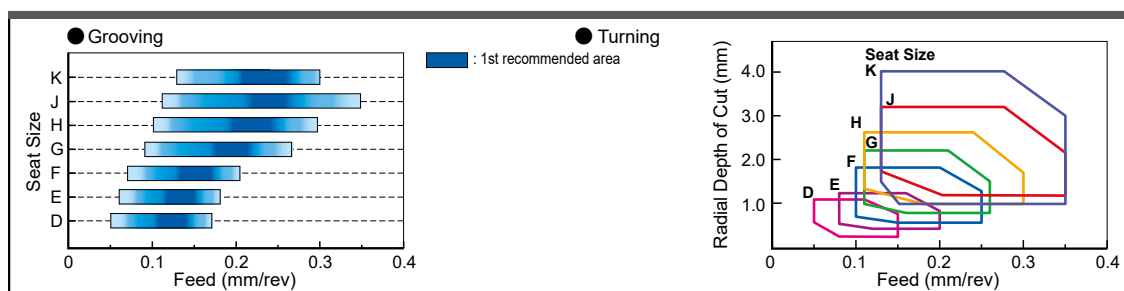
### MF BREAKER



### MS BREAKER

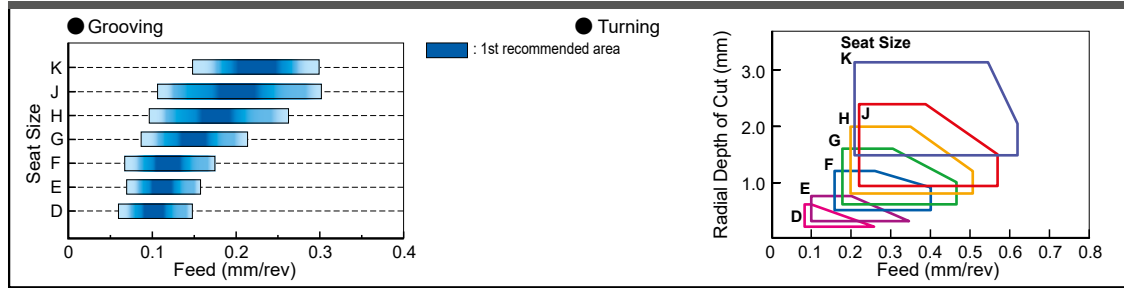


### MM BREAKER



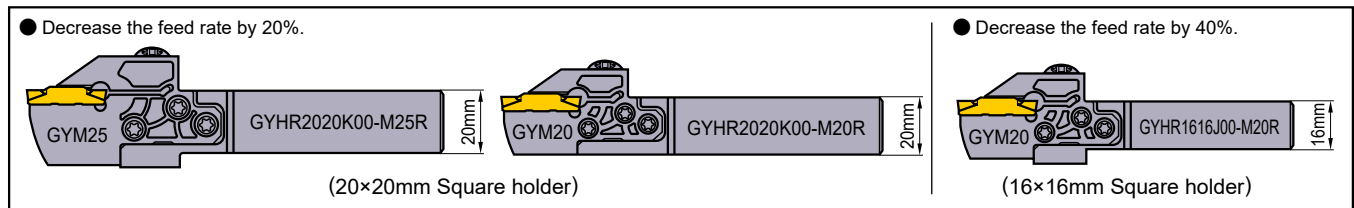
## Recommended feed rate and depth of cut

### BM BREAKER

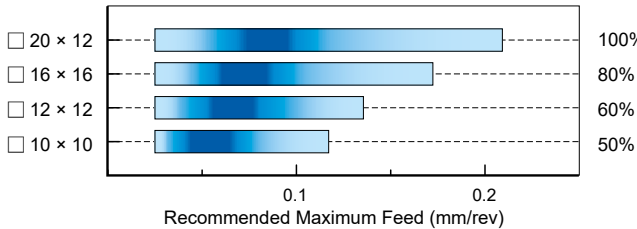


Seat Size	
Insert Width (mm)	
C	1.50
D	2.00 2.24
E	2.39 2.50 2.74
F	3.00 3.18 3.24
G	4.00 4.24
H	4.75 5.00 5.24
J	6.00 6.31 6.35
K	8.00

Note 1) When using a combination as shown below, decrease the recommended feed rate by 20% and 40% respectively.



### In the case of monoblock type holder for Swiss style lathes



Please refer to the tables above on recommended cutting conditions for external grooving and cutting off. Apply the percentage ratio shown on each shank size with the values in the table.

## LIMITATION OF THE MAXIMUM GROOVE DEPTH [For External Grooving]

● When using the modular blade GYM $\odot$ R/LA- $\odot\odot\odot$   
The maximum groove depth is not limited by the workpiece diameter.

● When using the modular blade GYM $\odot$ R/LB- $\odot\odot\odot$   
The maximum groove depth is limited by the workpiece diameter.

