

Recommended Cutting Conditions

Cutting Speed

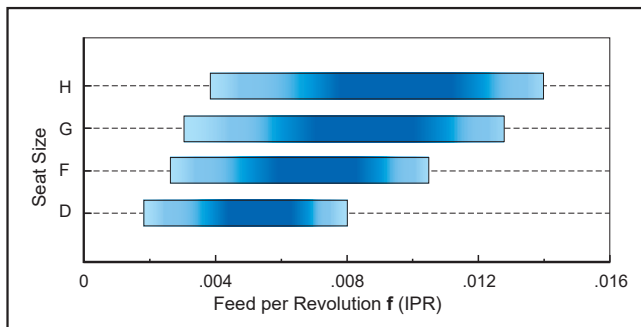
	Work Material	Properties	Grade	Cutting Speed v_c (SFM)					
				165	330	490	655	820	985
P	Mild Steels	$\leq 160\text{HB}$	VP20RT		330		785		
			VP10RT		360		820		
	Carbon Steels Alloy Steels	160–280HB	VP20RT		260		655		
			VP10RT		295		690		
			VP30RT	195		590			
			MY5015		360		820		
		$\geq 280\text{HB}$	VP20RT	195		525			
			VP10RT		230		560		
			VP30RT	130		460			
			MY5015		295		690		
M	Stainless Steels	$\leq 270\text{HB}$	VP20RT		195		590		
			VP10RT		230		620		
			VP30RT	130		525			
K	Gray Cast Irons	Tensile Strength $\leq 300\text{MPa}$	VP20RT		260		655		
			VP10RT		295		690		
			MY5015			460		985	
	Ductile Cast Irons	Tensile Strength $\leq 800\text{MPa}$	VP20RT		195		525		
			VP10RT		230		560		
			MY5015		295		690		
S	Heat Resistant Alloys Titanium Alloys	—	VP20RT	100 195					
			VP10RT	130 230					

(Note 1) VP20RT is the first recommended grade for materials.

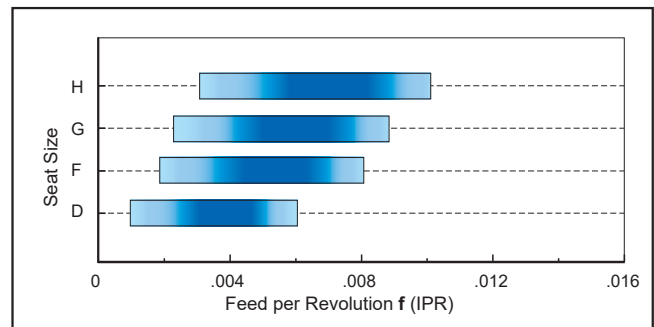
(Note 2) For VP10RT, VP20RT, VP30RT and MY5015, wet cutting is recommended.

Feed per Revolution

GM Breaker



GS Breaker



Chip Breaker	Feed per Revolution f (IPR)			
	Seat Size D	Seat Size F	Seat Size G	Seat Size H
GM Breaker	.002–.008	.003–.010	.003–.013	.004–.014
GS Breaker	.001–.006	.002–.008	.002–.009	.003–.010