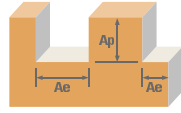


# FRACTIONAL S-Carb APR®



Series 43APR-3 Fractional	Ae x DC	Ap x DC	Vc (sfm)	DC • inch			
				APR-3			
				0.75	1		
N ALUMINIUM ALLOYS 6068, 7075	Slot 	1	5250 (980-6900)	RPM	26740	20055	
				Fz	0.0055	0.0059	
				Feed (ipm)	441	355	
	Profile 	≤ 0.5	≤ 1.5	5900 (980-6900)	RPM	30051	22538
					Fz	0.0063	0.0067
					Feed (ipm)	568	453
	HSM 	≤ 0.1	≤ 2	6900 (980-6900)	RPM	35144	26358
					Fz	0.0075	0.0079
					Feed (ipm)	791	625

Series 43APR-3L Fractional	Ae x DC	Ap x DC	Vc (sfm)	DC • inch					
				APR-3 LONG					
				0.5	0.625	0.75	1		
N ALUMINIUM ALLOYS 6068, 7075	Slot 	1	3280 (980-6900)	RPM	25059	20047	16706	12530	
				Fz	0.0039	0.0043	0.0047	0.0051	
				Feed (ipm)	293	259	236	192	
	Profile 	≤ 0.5	≤ 1.5	3950 (980-6900)	RPM	30178	24142	20119	15089
					Fz	0.0047	0.0051	0.0055	0.0059
					Feed (ipm)	426	369	332	267
	HSM 	≤ 0.1	≤ 2	4600 (980-6900)	RPM	35144	28115	23429	17572
					Fz	0.0055	0.0059	0.0063	0.0067
					Feed (ipm)	580	498	443	353

RPM stated may be outside of most machine tools in the smaller sizes, adjust the surface speed but maintain the Fz  
 For best results use the peak power of the specific machine torque chart.  
 Typically 10hp is required to remove 45 cubic inches of material (MRR).  
 Eg. >> (Ae x Ap x Feed) >> Therefore Full slotting 1" dia: 1 x 1 x 355 = 355 cubic inches, so it needs a min of 78hp.  
 Larger cuts and chip load consume more power.  
 Review the power chart of each machine to determine MAX power for ultimate performance.  
 Example below shows peak power @ 10,000 rpm.  
 The new coolant supply is designed for MQL as well as normal emulsion coolant on the same data.  
 Ensure max MQL flow prior to cutting.  
 Refer to the SGS Tool Wizard® for complete technical information ([www.kyocera-sgstool.com](http://www.kyocera-sgstool.com)).

