



Series 43MAPF Metric	Hardness	Profile	Ae x DC	Ap x DC	Vc (m/min)	DC • mm							
						6	8	10	12	16	20	25	
N	ALUMINUM ALLOYS 2024, 5052, 5086, 6061, 6063, 7075	Profile	≤ 0.1	≤ 2.5	800	RPM	42440	31830	25464	21220	15915	12732	10186
					(640-960)	Fz	0.050	0.055	0.060	0.070	0.100	0.140	0.170
					Feed (mm/min)	8488	7003	6111	5942	6366	7130	6926	
		Profile	≤ 0.1	≤ 4	800	RPM	42440	31830	25464	21220	15915	12732	10186
					(640-960)	Fz	0.040	0.045	0.050	0.050	0.070	0.100	0.120
					Feed (mm/min)	6790	5729	5093	4244	4456	5093	4889	
	ALUMINUM ALLOYS (LITHIUM)* 2090, 2091, 2099, 2195, 2199, 2297, 8090	Profile	≤ 0.1	≤ 2.5	600	RPM	31830	23873	19098	15915	11936	9549	7639
					(480-720)	Fz	0.050	0.055	0.060	0.070	0.100	0.140	0.170
					Feed (mm/min)	6366	5252	4584	4456	4774	5347	5195	
		Profile	≤ 0.1	≤ 4	600	RPM	31830	23873	19098	15915	11936	9549	7639
					(480-720)	Fz	0.040	0.045	0.050	0.050	0.070	0.100	0.120
					Feed (mm/min)	5093	4297	3820	3183	3342	3820	3667	

Bhn (Brinell)    HRc (Rockwell C)  
 surface speed is dependent on machine spindle and fixturing  
 balancing is recommended at ultra high surface speeds  
 \*tool life may be reduced when machining Lithium Alloys  
 $rpm = (Vc \times 1000) / (DC \times 3.14)$   
 $mm/min = Fz \times 4 \times rpm$   
 maximum recommended depths shown  
 reduce speed and feed for materials harder than listed  
 finish cuts typically require reduced feed and cutting depths of 0.02 X DC maximum  
 ramp angle = 6° (feed rate = 50%)  
 plunging not recommended  
 refer to the SGS Tool Wizard® for complete technical information ([www.kyocera-sgstool.com](http://www.kyocera-sgstool.com))