

Recommended Cutting Speeds/Feeds

Recommended Cutting Speeds for Dapra Toroid Cutters

		1018, 12L14, 1041, 1045	4140, 4150, 4340, H13, P20, A2, D2	4140, 4150, 4340, H13, P20, A2, D2 (40s Rc)	4140, 4150, 4340, H13, P20, A2, D2	STAINLESS STEEL – 300, 400 & PH SERIES	STAINLESS STEEL – 300, 400 & PH SERIES	GRAY, MALLEABLE, DUCTILE	6061, 7075	AMPCO, WEARITE	INCONEL, WASPALLOY, MONEL	TI-6AL-4V		
		LOW-TO-MEDIUM CARBON STEELS	TOOL STEELS, HIGH-ALLOY STEELS (SOFT)	TOOL STEELS, HIGH-ALLOY STEELS (MID-HARDNESS)	TOOL STEELS, HIGH-ALLOY STEELS (HARDENED)	DRY MACHINING	WITH COOLANT	CAST IRONS	ALU ALLOYS	COPPER ALLOYS	HIGH-TEMP. ALLOYS	TITANIUM	PLASTICS, NON-FERROUS	
LOWER TEMPS >>	TOUGHEST Shock Resistance	DMK30							1500+	200-600	50-120	120-180	1500+	
		DMK30-TCI	450-700	350-600	250-400		450-650	250-450	450-750		300-550	50-120	120-180	
		DMK30-GLH	550-800	450-700	250-400		450-700	300-550	500-800		400-600	50-120	120-180	1500+
		DMK30-HM	550-800	450-700	250-400		450-700	300-550	500-800		400-600	50-120	120-180	
MEDIUM Shock Resistance		DMK25-TCI†	400-700	350-600		450-650	250-450	450-750 (GRAY)		300-550				
		DMK25-GLH†	450-900	400-700		450-700	300-550	500-800 (GRAY)		400-600	50-120 FINISHING	120-180 FINISHING		
MEDIUM Shock & Wear		DMP25-TCI	400-700	350-600	300-500			300-650 DUCTILE		300-600				
		DMP25-GLH	450-900	400-700	350-550	200-400		300-750 DUCTILE		400-650				
		DMP25-HM	450-900	400-700	350-550	200-400		300-750 DUCTILE		400-650				
HARDEST Wear Resistance		DMK15-TCI	500-800	450-750	300-500	< 52 Rc 250-450	250-650 FINISHING	300-750 GRAY		300-600				
		DMK15-GLH	550-900	450-800	350-550	> 44 Rc 250-450	225-600 FINISHING	400-800 GRAY		400-650	50-120 FINISHING	120-180 FINISHING		
		DMK15-HM	550-900	450-800	350-550	> 44 Rc 250-450	225-600 FINISHING	400-800 GRAY		400-650	50-120 FINISHING	120-180 FINISHING		
1ST CHOICE GEOMETRY		N/D	N/T	T	T	D/N	D/N	T/N	D (Ground)	D/N	D/N	D	D (Ground)	
RECOMMENDED IPT		.006-.012	.006-.012	.005-.009	.002-.006	.004-.012	.003-.010	.005-.015	.005-.030	.005-.012	.002-.006	.002-.006	.005-.030	

** Best choice for material shown in **bold text**.

The parameters provided are suggested operating parameters. Actual speeds and feeds will depend on many variables, such as rigidity, workpiece hardness, tool extension, machine accuracy, Depth of Cut, etc. Start at the middle of the SFM range and the low end of the FPT range. Next, increase FPT to optimize productivity and tool life. Higher SFM will provide higher output but may reduce tool life. Try different combinations to find the parameters that best suit your needs.

- The -TCI coating is best suited for low to medium operating speeds (temperatures) and softer materials.
- The -GLH and -HM coatings are best suited for high operating speeds (temperatures) and harder materials.