

Recommended Cutting Speeds/Feeds

Recommended Cutting Speeds for Dapra DSS 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	303, 304 LOW 400 SERIES	316, 347, PH STAINLESS	GRAY, MALLEABLE, DUCTILE	AMPCO, BERYLLIUM	INCONEL, WASPALLOY, MONEL		
		LOW-TO-MEDIUM CARBON STEELS	TOOL STEELS, HIGH-ALLOY STEELS (SOFT)	TOOL STEELS, HIGH-ALLOY STEELS (MID-HARDNESS)	TOOL STEELS, HIGH-ALLOY STEELS (HARDENED)	FREE MACHINING STAINLESS	TOUGHER STAINLESS	CAST IRONS	COPPER ALLOYS	HIGH-TEMP. ALLOYS	TITANIUM	
LOWER TEMPS >>	TOUGHEST Shock Resistance	DMK30-TS	700-900	450-750	300-500		250-500 (wet) 600-750 (dry)	250-500	550-1000	250-500	50-110	120-180
		DMK30-HM			300-500		250-500 (wet) 600-750 (dry)	250-550	600-1200	300-600	50-110	120-180
		DMK35-HM						300-600			50-110 INCONEL	120-180
		DMK35-IN						350-650			50-110 INCONEL	120-180
MEDIUM Shock & Wear		DMP25-TS	700-1100	500-800	350-550	200-400			550-900 DUCTILE			
		DMP25-HM		500-850	350-550	200-400			600-900 DUCTILE			
<< HIGHER TEMPS	HARDEST Wear Resistance	DMK15-TS	700-1100	500-800	350-550	250-550	250-500 (wet) 600-750 (dry)	300-600 FINISHING	700-1100 GRAY	250-500	50-110 FINISHING	120-180 FINISHING
		DMK15-HM		550-850	350-550	250-550	250-500 (wet) 600-750 (dry)	350-650 FINISHING	800-1200 GRAY	300-600	50-110 FINISHING	120-180 FINISHING
1ST CHOICE GEOMETRY		DSS-D / DSS-T	DSS-T	DSS-T	DSS-T	DSS-D	DSS-D	DSS-T	DSS-D	DSS-D	DSS-D	DSS-D
RECOMMENDED FPT RANGE		.004-.008	.005-.008	.004-.007	.003-.005	.003-.007	.003-.007	.004-.008	.003-.008	.002-.006	.002-.006	.002-.006

- First choice grade shown in **bold text**.
- For heavy WOC and/or DOC, use the lower end of the FPT range.
- For light WOC and DOC, the higher end of the FPT range may be possible.

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 IPT range. Next, increase IPT to optimize productivity and tool life.

Higher SFM will provide higher output but will reduce tool life. Try different combinations to find the parameters that best suit your needs.

