



For radial depths of cut (a_p) less than 1/4 of cutter diameter (DC), increase feed rates by the following %, or use the Chip Thinning Calculator to ensure h_{max} is within the f_z range:

<https://www.imc-i.com/mpwr/Milling/HChipThickness>

Depth of Cut (a_p) x Cutter Dia. (DC)	1/4	1/6	1/8	1/10	1/20
Increase Feed Rate by	0%	15%-	30%	45%	100%

Materials				Vc Cutting Speed (SFM)	fz Feed/Tooth (inch)				Harder <-----> Tougher					Coolant
ISO	Group	Type	Examples		0.063	0.087-0.094	0.122-0.161	0.188-0.250	K10	TT6030	TT9030	TT8020	TT5100	
P	1-5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-700	0.002-0.004	0.003-0.006	0.003-0.007	0.003-0.008	-	-	3	2	1	No
	6-9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	300-500										
	10-11	High-alloy Steel	H13, A2, D2, M2, T1											
M	12-13	Stainless Steel (ferritic and martensitic)	410, 416, 440	350-550	0.002-0.004	0.003-0.006	0.003-0.006	0.003-0.006	-	-	2	1	-	May not be required at high speeds
	14	Stainless Steel (austenitic)	303, 304, 316, 15-5, 17-4	250-500										
K	15-16	Gray Cast Iron	CLS. 20, 30, 45	300-600	0.002-0.004	0.003-0.006	0.003-0.007	0.003-0.008	-	1	2	3	-	No
	17-18	Nodular Cast Iron	60-40-18, 100-70-03	250-500										
N	21-30	Aluminum	7075, 6061	700-800	0.002-0.003	0.003-0.007	0.003-0.008	0.003-0.009	1	2	-	3	-	Yes
S	31-35	High-Temp Alloys	Inconel, Hastelloy, Nimonic, Monel	65-100	0.002-0.003	0.003-0.005	0.003-0.005	0.003-0.005	-	-	1	2	-	Yes
	36-37	Titanium Alloys	6Al-4V, 5Al-5Mo-5V-3Cr	90-130										