

CNMM 433 NR LT 10 & LT 1000

Speeds & Feeds

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [inch]		Feed [inch/rev]		Amax	V _c [sfm]		Suggested Starting Parameters			
					min	max	min	max		min	max	D.O.C.	Feed	V _c	
Steel	Non-alloyed	1	C35, Ck45, 1020,	125 HB	0.020	0.276	0.008	0.024	0.0056	590	1080	0.195	0.018	780	
		2	1045, 1060,	190 HB		0.276		0.024	0.0050		910		0.017	720	
		3	28Mn6	250 HB		0.276		0.021	0.0042		820		0.016	650	
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.020	0.276	0.008	0.021	0.0045	390	910	0.195	0.015	650
			4,6		230 HB		0.220	0.008	0.021	0.0039		820		0.015	590
			5,7		280 HB		0.220	0.007	0.019	0.0033		680		0.014	490
			8		350 HB		0.193	0.007	0.019	0.0028		590		0.014	420
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.020	0.220	0.007	0.019	0.0033	220	620	0.162	0.014	450
					280 HB		0.220		0.019	0.0033		490		0.014	390
					320 HB		0.165		0.017	0.0022		420		0.013	320
					350 HB		0.165		0.017	0.0022		360		0.013	290
	Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.020	0.276	0.008	0.019	0.0033	550	880	0.195	0.013	620
240 HB					0.276		0.019		0.0031	520		720		0.012	550
Duplex		5	14	X2CrNiN23-4, S31500	290 HB	0.020	0.220	0.007	0.017	0.0025	260	490	0.162	0.010	320
					310 HB		0.220		0.017		220			450	0.010
Ferritic & Martensitic		6	12	410, X6Cr17, 17-4 PH, 430	200 HB	0.020	0.276	0.009	0.019	0.0033	550	820	0.195	0.013	620
					42 HRC		0.220		0.019		390	620		0.162	0.012
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.020	0.276	0.006	0.028	0.0056	550	820	0.195	0.017	650	
				200 HB		0.276		0.028	0.0050		520			750	590
				250 HB		0.276		0.026	0.0050		490			680	520
	Malleable & Nodular	8	17,19	GGG40, GGG70, 50005	150 HB	0.020	0.276	0.006	0.024	0.0042	390	820	0.195	0.014	590
					200 HB		0.276		0.024	0.0036		750			520
					250 HB		0.276		0.024	0.0033		620			450
High Temp. Alloys	Fe, Ni & Co based	9	31,32	Incoloy 800	240 HB	0.020	0.165	0.008	0.017	0.0022	80	160	0.130	0.013	100
			33	Inconel 700	250 HB		0.165		0.017	0.0022	80	160		90	
			34	Stellite 21	350 HB		0.165		0.017	0.0020	70	140		90	
	Ti based	10	36	TiAl6V4	-	0.020	0.193	0.008	0.019	0.0025	140	210	0.130	0.015	180
37			T40	-	0.165		0.017		0.0020	110	190	0.013		140	
Hardened Mat.	Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRC	0.020	0.138	0.004	0.014	0.0017	160	320	0.130	0.012	260	
				50 HRC		0.110		0.012	0.0014	130	290		0.097	0.009	220
				55 HRC		0.088		0.009	0.0008	130	260		0.065	0.009	190
	Chilled Cast Iron	40	Ni-Hard 2	400 HB	0.020	0.110	0.004	0.012	0.0014	130	190	0.097	0.009	160	
	White Cast Iron	41	G-X300CrMo15	55 HRC	0.020	0.088	0.004	0.009	0.0008	90	160	0.065	0.007	130	
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.020	0.331	0.008	0.028	0.0056	650	1310	0.195	0.019	910



(800) 597-3921 or (317) 803-8000 for Application Support.
For additional suggested Speeds & Feeds: <http://delivr.com/1kppm>

