

# CNMG 433 NN LT 10 & LT 1000

## Speeds & Feeds

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [inch]		Feed [inch/rev]		Amax	V <sub>c</sub> [sfm]		Suggested Starting Parameters					
					min	max	min	max		min	max	D.O.C.	Feed	V <sub>c</sub>			
Steel	Non-alloyed	1	C35, Ck45, 1020,	125 HB	0.029	0.236	0.010	0.027	0.0047	590	1080	0.158	0.018	780			
		2	1045, 1060,	190 HB		0.236		0.027			910			720			
		3	28Mn6	250 HB		0.236		0.024			820			650			
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.029	0.236	0.010	0.024	0.0032	390	910	0.158	0.017	650		
			4,6		230 HB		0.189		0.024			820			590		
			5,7		280 HB		0.189		0.009			0.021			0.0032	680	490
			8		350 HB		0.165		0.009			0.021			0.0026	590	420
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.029	0.189	0.009	0.021	0.0032	220	620	0.132	0.016	450		
			10		280 HB		0.189		0.021			0.0032			490	390	
			11		320 HB		0.142		0.019			0.0021			420	320	
			11		350 HB		0.142		0.019			0.0021			360	290	
	Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.029	0.236	0.010	0.021	0.0032	550	880	0.158	0.011	620		
14			240 HB		0.236		0.021		0.0026		520	720			550		
Duplex		5	X2CrNiN23-4, S31500	290 HB	0.029	0.189	0.009	0.019	0.0021	260	490	0.132	0.013	320			
		14		310 HB		0.189		0.019		220	450			290			
Ferritic & Martensitic		6	410, X6Cr17, 17-4 PH, 430	200 HB	0.029	0.236	0.011	0.021	0.0026	550	820	0.158	0.016	620			
				42 HRc		0.189		0.021		390	620	0.118	0.014	420			
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.029	0.236	0.008	0.032	0.0053	550	820	0.158	0.018	650			
				200 HB		0.236		0.032		0.0047	520			750	590		
				250 HB		0.236		0.029		0.0047	490			680	520		
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.029	0.236	0.008	0.027	0.0040	390	820	0.158	0.016	590			
				200 HB		0.236		0.027			0.0034			750	520		
				250 HB		0.236		0.027			0.0032			620	450		
High Temp. Alloys	Fe, Ni & Co based	9	31,32	Incoloy 800	0.029	0.142	0.010	0.019	0.0018	80	140	0.106	0.015	100			
			33	Inconel 700		0.142		0.019		80	140			90			
			34	Stellite 21		0.142		0.019		70	130			90			
	Ti based	10	TiAl6V4 T40	-	0.029	0.189	0.010	0.021	0.0021	140	210	0.106	0.017	180			
				-		0.142		0.019		0.0018	110			180	140		
	Hardened Mat.	Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.029	0.118	0.005	0.016	0.0016	160	320	0.106	0.013	260		
50 HRc					0.094		0.013		0.0011		130	290	0.079	0.010	220		
55 HRc					0.071		0.011		0.0008		130	260	0.053	0.009	190		
Chilled Cast Iron		40	Ni-Hard 2	400 HB	0.029	0.094	0.005	0.013	0.0011	130	190	0.079	0.009	160			
White Cast Iron		41	G-X300CrMo15	55 HRc	0.029	0.071	0.005	0.011	0.0008	90	160	0.053	0.008	130			
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.029	0.276	0.010	0.032	0.0048	650	1310	0.158	0.020	910		



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

