

# WNMG 431 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	0.008	0.118	0.004	0.009	0.0009	590	1080	0.079	0.007	980	
		2	1045, 1060,	190 HB		0.098		0.009	0.0008		910			850	
		3	28Mn6	250 HB		0.098		0.008	0.0007		820			780	
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.008	0.098	0.004	0.008	0.0008	390	910	0.079	0.006	850
			4,6		230 HB		0.098		0.008	0.0007		820			780
			5,7		280 HB		0.079		0.007	0.0006		680			650
			8		350 HB		0.079		0.007	0.0006		590			590
	High alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.008	0.098	0.004	0.007	0.0006	220	620	0.079	0.005	590	
				10		280 HB		0.098	0.006		0.0006			490	450
				11		320 HB		0.079	0.006		0.0005			420	390
				11		350 HB		0.079	0.006		0.0004			360	360
	Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.008	0.098	0.004	0.007	0.0005	550	880	0.079	0.005	850
240 HB					0.098		0.007		0.0004	520	720	680			
Duplex		5	X2CrNiN23-4, S31500	290 HB	0.008	0.079	0.004	0.006	0.0003	260	490	0.079	0.005	450	
				310 HB		0.079		0.006	0.0003	220	450				
Ferritic & Martensitic		6	410, X6Cr17, 17-4 PH, 430	200 HB	0.008	0.098	0.004	0.007	0.0005	550	820	0.079	0.006	780	
				42 HRc		0.079		0.006	0.0004	390	620			590	
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.008	0.118	0.003	0.008	0.0010	550	820	0.079	0.007	780	
				200 HB		0.118		0.008	0.0009	520	750			720	
				250 HB		0.118		0.008	0.0009	490	680			650	
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.008	0.098	0.003	0.007	0.0007	390	820	0.079	0.006	780	
				200 HB		0.098		0.007	0.0006		750			720	
				250 HB		0.098		0.007	0.0006		620			590	
High Temp. Alloys	Fe, Ni & Co based	9	31,32	Incoloy 800	0.008	0.079	0.004	0.006	0.0004	80	160	0.079	0.005	130	
			33	Inconel 700		250 HB		0.079	0.006	0.0004	80			160	130
			34	Stellite 21		350 HB		0.079	0.006	0.0004	70			140	110
	Ti based	10	36	TiAl6V4	-	0.008	0.079	0.004	0.006	0.0005	140	210	0.079	0.006	190
			37	T40			-		0.079	0.006	0.0004	110			190
	Hardened Mat.	Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.008	0.071	0.002	0.005	0.0003	160	320	0.059	0.004	290
50 HRc					0.059		0.004		0.0003	130	290	260			
55 HRc					0.055		0.004		0.0002	130	260	220			
Chilled Cast Iron		40	Ni-Hard 2	400 HB	0.008	0.063	0.002	0.005	0.0003	130	190	0.047	0.004	160	
White Cast Iron		41	G-X300CrMo15	55 HRc	0.008	0.055	0.002	0.004	0.0002	90	160	0.039	0.003	130	
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.008	0.157	0.004	0.012	0.0011	650	1310	0.079	0.008	1140



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

