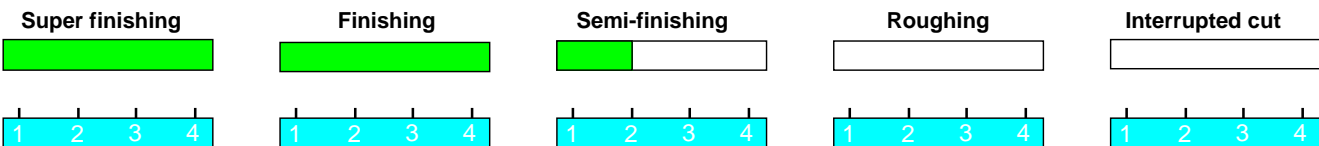


## VBMT 060404 L-NN

Material group	Group No	Material Examples	Hardness Brinell	d.o.c [mm]		feed [mm/t]		A max [mm <sup>2</sup> ]	Vc [m/min]		Recommended point		
				min	max	min	max		min	max	d.o.c	feed	
Low carbon Steel	1	XC 12 S 250 Pb	150	0.15	3	0.11	0.23	0.52	180	400	0.5 to 2	0.18	
			180		2.5		0.2	0.52		350			
			210		2.5		0.18	0.4		200			
Alloy Steel	2	42 CrMo 4 100 Cr 6 32 NiCrMo 14.5	180	0.15	2.5	0.11	0.2	0.4	120	300	0.5 to 1.5	0.15	
			230		2.5		0.2	0.34		250			
			280	2	0.1	0.18	0.34	210					
			320	2		0.16	0.28	180					
High alloy Steel	3	X38 CrMoV 5 X210 CrW 12 X90 CrMoV 8	220	0.15	2.5	0.09	0.18	0.34	70	190	0.5 to 1.5	0.12	
			280		2.5		0.16	0.3		150			
			320		2		0.14	0.24		130			
			350		2		0.14	0.21		100			
Austenitic Stainless Steel	4	303 / 304 304 L	Annealed	0.15	2.5	0.1	0.18	0.28	170	270	0.5 to 2	0.15	
	5	316 / 316 L	Annealed		2	0.09	0.16	0.21	120	210	0.5 to 2	0.12	
	6	316 Ti 630 (F16PH)	Annealed		2	0.09	0.14	0.17	70	120	0.5 to 2	0.12	
Ferritic Stainless Steel	7	430 / 439 444	Annealed	0.15	2	0.11	0.18	0.24	170	250	1 to 2.5	0.15	
Martensitic Stainless Steel	8	410 / 420	Annealed	0.15	2	0.11	0.18	0.24	170	250	1 to 2.5	0.15	
			Treated						120	210			
Grey Cast Iron	9	EN - GJL 200	140 à 230	0.15	3	0.08	0.2	0.52	170	280	0.5 to 2	0.18	
		EN - GJL 250						0.52		250			
		EN - GJL 300						0.48		230			
Nodular Cast Iron	10	EN - GJS 400	210	0.15	2.5	0.08	0.18	0.4	120	230	0.5 to 2	0.15	
		EN - GJS 600	260					0.35		190			
		EN - GJS 800	310					0.35		150			
Aluminum		Si < 4%	-----	----	----	----	----	----	----	----	----	----	
		4% < Si < 9%		----	----	----	----	----	----	----	----	----	
		Si > 9%		----	----	----	----	----	----	----	----	----	
Nickel based Alloys		Inconle 625	-----	0.15	2	0.1	0.16	0.21	25	35	0.5 to 1.5	0.12	
		Inconel 718	-----					0.21		28			40
		Hastelloy C	-----					0.24		40			65
Titanium based Alloys		TiAl 6 V4	-----	0.15	2	0.1	0.16	35	60	0.5 to 1.5	0.14		
		T40	-----				0.14		28		40	0.12	



Conclusions:

Super finishing	excellent for the application
Finishing	excellent for the application
Semi-finishing	acceptable for the application
Roughing	not recommended
Interrupted cut	not recommended