SNMG 120412 NN

Machining Conditions

Material Group	Group No.	Material Examples*	Brinell hardness HB	d.o.c [mm]		feed [mm/rev]		A max [mm²]	V_c [m/min]		Optimal cutting conditions	
				min	max	min	max		min	max	d.o.c	feed
Low Carbon Steel	1	Ck 15 9SMnPb28	150	0.50	5.00	0.27	0.80	3.10	180	400	2 to 5	0.50
			180		5.00		0.80	3.10		350		
			210		5.00		0.70	2.60		200		
Alloy Steel	2	42 CrMo 4 100 Cr 6 32 NiCrMo 14.5	180	0.50	5.00	0.27	0.70	2.60	120	300	2 to 5	0.45
			230		5.00		0.70	2.00		250		
			280		5.00	0.23	0.60	2.00		210		
			320		4.00		0.60	1.70		180		
High Alloy Steel	3	X38 CrMoV 5 X210 CrW 12 X90 CrMoV 8	220	0.50	5.00	0.23	0.70	2.00	70	190	2 to 5	0.40
			280		5.00		0.70	2.00		150		
			320		4.00		0.60	1.40		130		
			350		4.00		0.60	1.40		100		
Austenitic Stainless Steel	4	303 / 304 304 L	Annealed	0.50	5.00	0.26	0.52	1.70	170	270	2 to 5	0.45
	5	316 / 316 L	Annealed		5.00	0.23	0.50	1.40	170	210	2 to 5	0.38
	6	316 Ti 630 (F16PH)	Annealed		5.00	0.23	0.50	1.00	80	130	2 to 5	0.32
Ferritic Stainless Steel	7	430 / 439 / 444	Annealed	0.50	5.00	0.29	0.50	1.50	170	250	2 to 5	0.35
Martensitic Stainless Steel	8	410 / 420	Annealed	0.50	5.00	0.29	0.50	1.50	170	250	2 to 5	0.35
			Treated						120	210		
Grey Cast Iron	9	EN - GJL 200	140 to 230	0.50	5.00	0.20	1.08	3.00	170	280	2 to 5	0.60
		EN - GJL 250						2.70		250		
		EN - GJL 300						2.70		230		
Nodular Cast Iron	10	EN - GJS 400	210	0.50	5.00	0.20	0.84	2.30	120	230	2 to 5	0.50
		EN - GJS 600						2.00		190		
		EN - GJS 800						1.80		150		
Nickel Based Alloys	11	Inconel 625	--------	0.50	5.00	0.26	0.46	1.40	25	35	2 to 5	0.38
		Inconel 718						1.40		40		
		Hastelloy C						1.60		65		
Titanium Based Alloys	12	TiAl 6 V4	--------	0.50	5.00	0.23	0.50	1.60	35	60	2 to 5	0.38
		T40					0.40	1.20	28	40	2 to 5	0.32

*For all material types and standards, see pages 155 to 158.

Insert designation

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Lamina Technologies