

Material Group	Group No	Material Examples*	Brinell hardness	d.o.c [mm]		feed [mm/tooth]		V _c [m/min]	
				min	max	min	max	min	max
Low Carbon Steel	1	Ck 15 9SMnPb28	150	0.5	12.0	0.15	0.25	180	300
			180		12.0		0.25		260
			210		12.0		0.25		220
Alloy Steel	2	42 CrMo 4 100 Cr 6 32 NiCrMo 14.5	180	0.5	7.0	0.12	0.23	130	200
			230		7.0		0.23		180
			280	0.5	7.0	0.12	0.22	100	160
			320		7.0		0.22		140
High Alloy Steel	3	X38 CrMoV 5 X210 CrW 12 X90 CrMoV 8	220	0.5	7.0	0.12	0.18	90	130
			280		7.0		0.18		110
			320	TPKN 1603... inserts are not recommended for steels with high resistance					
			350						
Austenitic Stainless Steel	4	303 / 304 304 L	210 to 250	TPKN 1603... inserts are not recommended for stainless steels					
	5	316 / 316 L	230 to 270						
	6	316 Ti 630 (F16PH)	-----						
Ferritic Stainless Steel	7	430 / 439 / 444	Annealed						
Martensitic Stainless Steel	8	410 / 420	Annealed Treated						
Grey Cast Iron	9	EN - GJL 200	140 to 230	0.5	12.0	0.15	0.25	150	240
		EN - GJL 250							220
		EN - GJL 300							190
Nodular Cast Iron	10	EN - GJS 400	210	0.5	12.0	0.12	0.21	100	200
		EN - GJS 600	260						160
		EN - GJS 800	310						130
Nickel Based Alloys	11	Inconel 625	-----	TPKN 1603... inserts are not recommended for exotic materials					
		Inconel 718							
		Hastelloy C							
Titanium Based Alloys	12	TiAl 6 V4	-----						
		T40							

*For all material types and standards, see pages 240 to 245.

Material Group	Group No	Material Examples*	Brinell hardness	d.o.c [mm]		feed [mm/tooth]		V _c [m/min]	
				min	max	min	max	min	max
Low Carbon Steel	1	Ck 15 9SMnPb28	150	0.5	18.0	0.18	0.28	180	300
			180		18.0		0.28		260
			210		18.0		0.28		220
Alloy Steel	2	42 CrMo 4 100 Cr 6 32 NiCrMo 14.5	180	0.5	18.0	0.15	0.23	130	200
			230		18.0		0.23		180
			280	0.5	14.0	0.15	0.23	100	160
			320		14.0		0.23		140
High Alloy Steel	3	X38 CrMoV 5 X210 CrW 12 X90 CrMoV 8	220	0.5	12.0	0.12	0.18	90	130
			280		12.0		0.18		110
			320	0.5	12.0	0.12	0.18	60	95
			350		12.0		0.18		80
Austenitic Stainless Steel	4	303 / 304 304 L	210 to 250	TPKN inserts are not recommended for stainless steels.					
	5	316 / 316 L	230 to 270						
	6	316 Ti 630 (F16PH)	-----						
Ferritic Stainless Steel	7	430 / 439 / 444	Annealed						
Martensitic Stainless Steel	8	410 / 420	Annealed						
			Treated						
Grey Cast Iron	9	EN - GJL 200	140 to 230	0.5	18.0	0.18	0.28	150	240
		EN - GJL 250							220
		EN - GJL 300							190
Nodular Cast Iron	10	EN - GJS 400	210	0.5	14.0	0.15	0.23	100	200
		EN - GJS 600	260						160
		EN - GJS 800	310						130
Nickel Based Alloys	11	Inconel 625	-----	TPKN inserts are not recommended for Exotic materials.					
		Inconel 718							
		Hastelloy C							
Titanium Based Alloys	12	TiAl 6 V4	-----						
		T40							

*For all material types and standards, see pages 240 to 245.