

APKT 1604 PDTR LT 30

Speeds & Feeds

Material Group		Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [inch]		Feed [inch/tooth]		V _c [sfm]		Suggested Starting Parameters		
						min	max	min	max	min	max	D.O.C.	Feed	V _c
Steel	Non-alloyed	1	1	C35, Ck45, 1020,	125 HB	0.020	0.590	0.007	0.013	620	1080	0.157	0.009	820
			2	1045, 1060,	190 HB		0.590		0.013		980			720
			3	28Mn6	250 HB		0.590		0.013		820			650
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.020	0.590	0.006	0.010	490	780	0.157	0.008	650
			4,6		230 HB		0.590		0.010	490	680		0.008	590
			5,7		280 HB		0.590		0.009	420	620		0.007	490
			8		350 HB		0.590		0.009	420	550		0.007	450
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.020	0.422	0.005	0.009	290	490	0.118	0.007	420
			10		280 HB		0.422		0.009	290	420		0.007	390
			11		320 HB		0.422		0.007	190	360		0.006	320
			11		350 HB		0.422		0.007	190	290		0.006	260
Stainless Steel	Austenitic	4	14	304, 316, X5CrNi18-9	180 HB	0.020	0.590	0.006	0.010	620	820	0.157	0.008	720
			14		240 HB		0.590	0.005	0.009	520	680			620
	Duplex	5	14	X2CrNiN23-4, S31500	290 HB	0.020	0.422	0.005	0.007	220	420	0.118	0.006	320
			14		310 HB		0.422		0.007	390	290			290
	Ferritic & Martensitic	6	12	410, X6Cr17, 17-4 PH, 430	200 HB	0.020	0.590	0.006	0.010	490	680	0.157	0.008	620
			13		42 HRC		0.422		0.008	290	490	0.118	0.006	420
Cast Iron	Grey	7	15	GG20, GG40, EN-GJL-250, No30B	150 HB	0.020	0.590	0.007	0.013	490	780	0.157	0.009	650
			15		200 HB		0.590		0.013		720			590
			16		250 HB		0.590		0.013		620			520
	Malleable & Nodular	8	17,19	GGG40, GGG70, 50005	150 HB	0.020	0.590	0.006	0.011	320	650	0.157	0.008	590
			17,19		200 HB		0.590		0.011		590			490
			18,20		250 HB		0.590		0.011		490			420
High Temp. Alloys	Fe, Ni & Co based	9	31,32	Incoloy 800	240 HB	0.020	0.422	0.005	0.007	80	140	0.118	0.006	100
			33	Inconel 700	250 HB		0.422		0.007		140			90
			34	Stellite 21	350 HB		0.422		0.007		140			90
	Ti based	10	36	TiAl6V4	-	0.020	0.422	0.005	0.008	130	210	0.118	0.007	180
			37	T40	-		0.422		0.007	90	180		0.006	130
Hardened Mat.	Steel	11	38	X100CrMo13, 440C, G-X260NiCr42	45 HRC	0.020	0.211	0.004	0.007	130	260	0.079	0.006	190
			38		50 HRC		0.126		0.006		220	0.059	0.005	180
			38		55 HRC		0.063		0.006		190	0.039	0.005	160
	Chilled Cast Iron		40	Ni-Hard 2	400 HB	0.020	0.169	0.004	0.007	130	260	0.059	0.006	160
	White Cast Iron		41	G-X300CrMo15	55 HRC	0.020	0.063	0.004	0.006	90	190	0.039	0.005	130
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.020	0.590	0.007	0.013	650	1310	0.157	0.010	910



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

