Cutting recommendations for the line
$f_z = f_{z0} \times K_{ef} \times K_s$

where
fz0 - Basic feed (Table 1),
Kef - Engagement factor (Table 2),
Ks - Stability factor (Table 3)

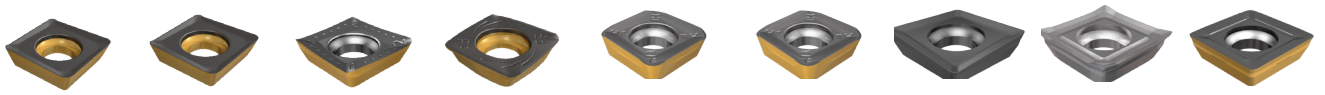

Table 1 - Basic feed, f_z0, mm/tooth

ISO	Material		Condition	Tensile Strength [N/mm²]	Hardness HB	Material No.	fz0 for Insert Size / Geometry								
							SPCT 1004... PDR	SPMR 1004... PDR	SPMT 1004...R-HP	SPMT 1004R15T-FF	SPMT 1004...R-HQ-M	SPMT 1004... TR-HQ-M	XPMT 1004...-HQ	QPMR 1004... PDN-HQ-M	QPMT1004...-PDTN-M
P	Non-alloy steel and cast steel, free cutting steel	< 0.25 % C	Annealed	420	125	1	0.11	0.11	-	1.10	0.10	0.12	0.12	0.10	0.12
		≥ 0.25 % C	Annealed	650	190	2									
		< 0.55 % C	Quenched and tempered	850	250	3									
		≥ 0.55 % C	Annealed	750	220	4									
			Quenched and tempered	1000	300	5									
	Low alloy steel and cast steel		Annealed	600	200	6	0.09	0.09	-	1.10	0.08	0.12	0.12	0.08	0.12
	(less than 5% of alloying elements)		Quenched and tempered	930	275	7									
				1000	300	8									
				1200	350	9	0.09	0.09	-	1.10	0.08	0.10	0.10	0.08	0.10
	High alloyed steel, cast steel, and tool steel		Annealed	680	200	10	0.08	0.08	-	1.00	0.07	0.10	0.10	0.07	0.10
			Quenched and tempered	1100	325	11									
	Stainless steel and cast steel		Ferritic/ martensitic	680	200	12	0.08	0.08	-	1.00	0.07	0.10	0.10	0.07	0.10
			Martensitic	820	240	13									
M	Stainless steel and cast steel		Austenitic, duplex	600	180	14	0.08	0.08	0.08	0.80	-	-	0.08	0.08	-
K	Grey cast iron (GG)		Ferritic/pearlitic		180	15			-	1.10	0.11	0.12	0.12	-	0.12
			Pearlitic / martensitic		260	16									
	Cast iron nodular (GGG)		Ferritic		160	17			-	1.10	0.11	0.12	0.12	-	0.12
			Pearlitic		250	18									
	Malleable cast iron		Ferritic		130	19									
			Pearlitic		230	20									
N	Aluminum wrought alloys		Not hardenable		60	21	-	-	-	-	-	-	0.15	0.15	-
			Hardenable		100	22									
	Aluminum cast alloys	≤12% Si	Not hardenable		75	23									
			Hardenable		90	24									
		>12% Si	High temperature		130	25									
	Copper alloys	>1% Pb	Free cutting		110	26									
			Brass		90	27									
			Electrolytic copper		100	28									
	Non metallic		Duroplastics, fiber plastics		70 Shore D	29									
			Hard rubber		55 Shore D	30									
S	High temp. alloys	Fe based	Annealed		200	31	0.06	0.06	0.06	0.4	-	-	-	0.07	-
			Hardened		280	32									
		Ni or Co based	Annealed		250	33									
			Hardened		350	34									
			Cast		320	35									
	Titanium alloys		Pure	400	190	36	0.07	0.07	0.07	0.5	-	-	-	0.09	-
			Alpha+beta alloys hardened	1050	310	37									
H	Hardened steel		Hardened		55 HRC	38	0.05	0.05	-	0.4	-	0.05	-	-	-
					60 HRC	39	-	-	-	0.2	-	-	-	-	-
	Chilled cast iron		Cast		400	40	0.05	0.05	-	0.4	-	0.05	-	-	-
	Cast iron		Hardened		55 HRC	41	0.05	0.05	-	0.4	-	0.05	-	-	-

Table 2 - Engagement factor Kef

ae/d	0.5…1	0.25 up to 0.5	less than 0.25
Ke	1	1.1	1.3

ae - Width of cut
d - cutting diameter

Table 3 - Stability factor Ks

Stability	High	Moderate	Poor
Ks	1	0.9	0.7