Table - Averaged Cutting data for FFX4 fast feed cutters

Workpiece material						Insert type	Carbide grade	D.O.C. ap [mm]	Cutting speed Vc, [m/min]	Feed Fz [mm/tooth]	Coolant
ISO class DIN/ISO 513	Description	ISCAR mat. group*	Hardness, HB	Typical representstive AISI/SAE/ASTM	DIN W.-Nr.						
P	Non-alloy steel	1-5	130-180	1020	1.0402	T/RM-T	IC808	0.20-0.80	150-220	0.40-1.00	Dry
							IC830		140-200	0.40-1.20	Dry/Wet
	Low alloy steel	6-8	260-300	4340	1.6582		IC808		140-200	0.40-0.90	Dry/Wet
							IC830		120-180	0.40-1.10	Dry/Wet
		9	HRC 35-42**	3135	1.5710		IC808		130-180	0.40-0.80	Dry
							IC830		120-160	0.40-1.00	Dry/Wet
	High alloy steel	10-11	200-220	H13	1.2344		IC808		120-170	0.40-0.80	Dry
							IC830		100-150	0.40-0.90	Dry/Wet
	Ferritic/martensitic stainless steel	12-13	200	420	1.4021		IC808		110-160	0.40-0.80	Dry
							IC830		100-150	0.40-0.90	Dry/Wet
M	Austenitic stainless steel	14	200	304L	1.4306	HP/RM-HP	IC830	0.20-0.80	80-120	0.20-0.80	Wet
							IC840		80-140	0.20-0.80	
							IC5820		100-160	0.20-0.70	
							IC882		80-130	0.20-0.80	
K	Grey cast iron	15-16	250	Class 40	0.6025 (GG25)	T/RM-T	IC810	0.20-0.80	150-220	0.40-1.20	Dry
	Nodular cast iron	17-18	200	Class 65-45-12	0.7050 (GGG50)		IC810		120-200	0.40-1.20	
S	High temperature alloys	33-35	340	Inconel 718	2.4668	HP/RM-HP	IC882	0.20-0.80	20-30	0.20-0.70	Wet
							IC5820		25-35	0.20-0.60	
							IC840		25-35	0.20-0.60	
							IC830		25-30	0.20-0.70	
		36-37	HRC 30-32	AMS R56400	3.7165 (Ti6Al4V ELI)		IC882		25-35	0.20-0.70	
							IC5820		25-40	0.20-0.60	
							IC840		25-35	0.20-0.60	
							IC830		20-30	0.20-0.70	
H	Hardened steel	38	HRC 45-49	HARDOX 450 plate		T/RM-T	IC808	0.20-0.80	50-75	0.20-0.50	Dry

* ISCAR material group in accordance with VDI 3323 standard
** Quenched and tempered
For machining in unstable conditions, the recommended cutting data should be reduced by 20-30%