



Average Cutting Data for FFX4 Fast Feed Cutters

Workpiece material						Insert type	Carbide grade	D.O.C. a_p (inch)	Cutting speed v_c [sfm]	Feed f_z (ipt)	Coolant
ISO class DIN/ ISO 513	Description	ISCAR mat. group*	Hardness, HB	Typical representative							
				AISI/SAE/ ASTM	DIN W.-Nr.						
P	non-alloy steel	1-5	130-180	1020	1.0402	T/RM-T	IC808	.008-.031	500-720	.0157-.039	Dry
	low alloy steel	6-8	260-300	4340	1.6582		IC830		460-660	.0157-.047	Dry/Wet
							IC808		460-660	.0157-.035	Dry/Wet
		9	HRC	3135	1.5710		IC830		400-600	.0157-.043	Dry/Wet
							IC808		430-600	.0157-.031	Dry
	high alloy steel	10-11	200-220	H13	1.2344		IC830		400-530	.0157-.039	Dry/Wet
	ferritic/martensitic stainless steel	12-13	200	420	1.4021		IC808		400-560	.0157-.031	Dry
							IC830		330-500	.0157-.035	Dry/Wet
M	austenitic stainless steel	14	200	304L	1.4306	HP/ RM-HP	IC830	.008-.031	260-400	.008-.031	Wet
							IC840		260-460	.008-.031	
							IC5820		330-530	.008-.027	
							IC882		260-430	.008-.031	
K	grey cast iron	15-16	250	Class 40	0.6025 (GG25)	T/RM-T	IC810	.008-.031	500-720	.0157-.047	Dry
	nodular cast iron	17-18	200	Class 65-45-12	0.7050 (GGG50)		IC810		400-660	.0157-.047	
S	high temperature alloys and titanium	31-32	220	330	1.486	HP/ RM-HP	IC882	.008-.031	130-200	.008-.027	Wet
							IC5820		130-210	.008-.027	
							IC840		130-210	.008-.027	
							IC830		130-230	.008-.027	
	33-35	340	Inconel 718	2.467	IC882		65-100		.008-.027		
					IC5820		80-115		.008-.027		
					IC840		80-115		.008-.027		
	36-37	30-32	AMS R56400	(Ti6Al4V ELI)	IC830		80-100		.008-.027		
					IC882		80-115		.008-.027		
					IC5820		80-130		.008-.027		
						IC840		80-115	.008-.027		
						IC830		65-100	.008-.027		
H	hardened steel	38	HRC 45-49	HARDOX 450 plate		XNMW	IC808	.008-.024	148-196	.008-.027	Dry

* ISCAR material group in accordance with VDI 3323 standard ** Quenched and tempered

For machining under unstable conditions, the recommended cutting data should be reduced by 20-30%