

Recommended Machining Conditions for FFT3-03 Fast Feed Endmills

Workpiece Material						Carbide Grade	D.O.C. a_p (mm)	Cutting Speed v_c (m/min)	Feed f_z (mm/tooth)	Coolant
ISO Class DIN/ ISO 513	Description	ISCAR Mat. Group*	Hardness, HB	AISI/SAE/ASTM	DIN W.-Nr.					
P	non-alloy steel and cast steel, free cutting steel	1-5	130-180	1020	1.0402	IC808	0.20-0.60	120-200	0.30-0.80	dry/wet
						IC830		110-180	0.30-0.80	
	low alloy and cast steel (less than 5% of alloying elements)	6-8	260-300	4340	1.6582	IC808		100-180	0.30-0.70	
						IC830		90-160	0.30-0.70	
	high alloyed steel, cast steel and tool steel	10-11	200-220	H13	1.2344	IC808		100-160	0.30-0.60	
						IC830		90-150	0.30-0.60	
	stainless steel and cast steel	12-13	200	420	1.4021	IC808		80-150	0.30-0.60	
						IC830		70-140	0.30-0.60	
M	stainless steel and cast steel	14	200	304L	1.4306	IC830	0.20-0.60	80-120	0.20-0.60	dry
						IC5820		100-160	0.20-0.50	
						IC882		80-130	0.20-0.50	
K	gray cast iron (GG)	15-16	250	class 40	0.6025 (GG25)	IC808	0.20-0.60	150-200	0.30-0.60	dry
	nodular cast iron (GGG)	17-18	200	class 65-45-12	0.7050 (GGG50)	IC808		140-180	0.30-0.60	
S	high temperature alloys and titanium	33-35	340	Inconel 718	2.4668	IC882	0.2-0.50	20-30	0.20-0.40	wet
						IC5820		25-35	0.20-0.40	
						IC808		25-35	0.20-0.40	
						IC830		25-30	0.20-0.40	
		36-37	HRC 30-32	AMS R56400	3.7165 (Ti6Al4V ELI)	IC882		25-35	0.20-0.50	
						IC5820		25-40	0.20-0.50	
						IC808		25-35	0.20-0.50	
						IC830		20-30	0.20-0.50	
H	hardened steel	38	HRC 45-49	HARDOX 450 plate		IC808	0.20-0.50	50-75	0.20-0.40	dry/wet
	chilled cast iron	40	400	Ni-hard 1	0.9625			80-100	0.20-0.50	
	cast iron	41	500	A532 IID	0.9645			50-75	0.20-0.40	

* 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%

Application Range FFT3-03

