

Table - Averaged Cutting data for FFQ8 fast feed cutters/MFQ8 Moderate feed cutters.

ISO class DIN/ISO 513	Workpiece material					Insert type	Carbide grade	Cutting speed v_c [m/min]	Fast Feed cutters (FF)		Moderate Feed (MF)		Coolant	
	Description	ISCAR mat. group*	Hardness, HB	Typical representative					D.O.C a_p [mm]	Feed f_z [mm/tooth]	D.O.C a_p [mm]	Feed f_z [mm/tooth]		
				AISI/SAE/ASTM	DIN W.-Nr.									
P	Non-alloy steel	1-5	130-180	1020	1.0402	T	IC808	150-220	0.5-1.5	0.40-1.5	0.5-3.0	0.20-1.0	Dry	
							IC830	140-200					Dry/Wet	
	Low alloy steel	6-8	260-300	4340	1.6582		IC808	140-200					Dry/Wet	
							IC830	120-180					Dry/Wet	
	High alloy steel	10-11	200-220	H13	1.2344		IC808	130-180					Dry	
							IC830	120-160					Dry/Wet	
	Ferritic/ martensitic stainless steel	12-13	200	420	1.4021		IC808	110-160					Dry	
							IC830	100-150					Dry/Wet	
M	Austenitic stainless steel	14	200	304L	1.4306	HP	IC882	70-130	0.5-1.5	0.20-0.8	0.5-3.0	0.20-0.5	Wet	
						IC808	100-160	0.20-0.5						
						IC830	80-140	0.20-0.5						
K	Grey cast iron	15-16	250	Class 40	0.6025 (GG25)	T	IC810	150-220	0.5-1.5	0.40-1.5	0.5-3.0	0.40-1.0	Dry	
	Nodular cast iron	17-18	200	Class 65-45-12	0.7050 (GGG50)		IC810	120-200						0.40-1.5
S	High temperature alloys and titanium alloys	31-32	220	330	1.4864	HP	IC882	40-60	0.5-1.5	0.20-0.8	0.5-3.0	0.20-0.5	Wet	
							IC808	40-80						0.20-0.5
							IC830	40-75						0.20-0.5
							IC882	20-30						0.20-0.5
		33-35	340	Inconel 718	2.4668		IC808	25-40						0.20-0.5
							IC830	25-35						0.20-0.5
		36-37	30-32 HRC	AMS R56400	3.717		IC882	30-50						0.20-0.5
							IC808	40-60						0.20-0.5
IC830	35-55	0.20-0.5												
H	Hardened steel	38	45-49 HRC	HARDOX 450 plate		T	IC808	50-75	0.5-1.5	0.20-0.50	0.5-3.0	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%