

Averaged cutting data for RDS cutters

Workpiece material						Insert type	Carbide grade	D.O.C. Ap [mm]	Cutting speed v _c [m/min]	Feed f _z [mm/teeth]	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	IC808	0.20-2.50	150-220	0.10-0.35	Dry
						HP	IC5500		150-260		
	Low alloy steel	6-8	260-300	4340	1.6582	T	IC808		140-180	0.10-0.30	
		9	HRC 35-42**	3135	1.5710			130-170			
	High alloy steel	10-11	200-220	H13	1.2344			120-170			
Ferritic/martensitic stainless steel	12-13	200	420	1.4021	HP	IC5500	0.20-2.50	150-280	0.10-0.30	Dry	
						IC830		140-180		Dry/Wet	
M	Austenitic steel	14	200	304L	1.4306	HP	IC882	0.20-2.50	70-140	0.10-0.30	Wet
						IC830	80-140				
S	Temperature alloys	33-35	340	Inconel 718	2.4668	HP	IC882	0.20-2.50	20-35	0.10-0.30	Wet
							IC830		20-40		
	36-37	HRC 32-30	AMS R56400	3.7165 (Ti6Al4V ELI)	IC882		30-55				
					IC830		30-50				
H	Hardened steel	38	HRC 45-49	HARDOX 450 plate		T	IC808	0.20-2.50	45-65	0.10-0.30	Dry
			HRC 58-62	D2	1.2379				45-65		

* 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%