

# Cutting Data for SD-SP Milling Heads

ISO class DIN/ ISO 513	Description	ISCAR mat. group*	Workpiece material		Cutting speed V <sub>c</sub> m/min	Feed for SP11	Feed for SP13	Feed for SP15	Feed for SP17	Feed for SP19	
			Typical representative			Hardness HB	f <sub>z</sub> mm/tooth	f <sub>z</sub> mm/tooth	f <sub>z</sub> mm/tooth	f <sub>z</sub> mm/tooth	f <sub>z</sub> mm/tooth
			AISI/SAE/ ASTM	DIN W.-Nr.							
<b>P</b>	Non-alloy steel	1	1020	1.0402	130-180	130-200	0.06-0.12	0.06-0.12	0.07-0.15	0.07-0.15	0.07-0.15
	Low alloy steel	8	4340	1.6511	260-300	120-170	0.06-0.12	0.06-0.12	0.07-0.15	0.07-0.15	0.07-0.15
	Low alloy steel	9	3135	1.5710	HRC 35-40*	80-120	0.02-0.06	0.02-0.06	0.03-0.12	0.04-0.12	0.04-0.13
	High alloy steel	10	H13	1.2344	200-220	100-140	0.04-0.07	0.04-0.07	0.04-0.12	0.04-0.12	0.05-0.13
	Martensitic s.s.	12	420	1.4021	200	100-140	0.03-0.06	0.03-0.06	0.04-0.12	0.04-0.12	0.04-0.13
<b>M</b>	Austenitic s.s.	14	304L	1.4306	200	80-120	0.02-0.06	0.02-0.06	0.03-0.10	0.03-0.12	0.03-0.12
<b>K</b>	Grey cast iron	16	Class 40	0.6025 (GG25)	250	160-200	0.05-0.12	0.05-0.12	0.05-0.20	0.06-0.20	0.06-0.20
	Nodular cast iron	17	Class 65-45-12	0.7050 (GGG50)	200	140-180	0.05-0.11	0.05-0.11	0.05-0.18	0.06-0.18	0.06-0.20
<b>S</b>	High temperature alloys	34	Inconel 718	2.4668	HRC 36-40	20-30	0.02-0.12	0.02-0.12	0.02-0.12	0.02-0.12	0.02-0.13
		37	AMS R56400	3.7165 (Ti6Al4V)	HRC 40-45	35-45	0.02-0.06	0.02-0.06	0.02-0.12	0.02-0.12	0.02-0.13

\* ISCAR material group in accordance with VDI 3323 standard

\*\* Quenched and tempered

When machining in unstable conditions, the table values should be reduced by 20-30%.