

Werkstoff		Material	Werkstoff-Nr. Material No.	DIN Bezeichnung Alt DIN Description Old	Rm/UTS (N/mm²)	DIN Bezeichnung Neu DIN Description New		HM-Sorte Carbide grade	Vorschub pro Zahn Feed per tooth fz (mm/min)					
									Schruppen Roughing 			Schlichten Finishing 		
									vc (m/min)	fz (mm/z)	ap SE max 6 OE max 4	vc (m/min)	fz (mm/z.)	ap
P	Unlegierter Baustahl + Automatenstahl	Plain carbon steel + free cutting steel	1.0570	St52-3	–700	S355J2G3	LCP40M LCPK30M	150–250	0,20–0,40	3,0–6,0	180–300	0,08–0,20	0,2–2,0	
			1.1730	C45	–800	C45U		180–280	0,15–0,30		200–320	0,08–0,15		
			1.0715	9SMn28	–700	11SMn30								
			1.1191	Ck45	500–950	C45E								
			1.7219	26CrMo4		26CrMo4-2								
	Vergütungsstahl, mittelfest	Heat-treatment steel, medium strength	1.7225	42CrMo4	500–950	42CrMo4	LCP40M	150–250	0,20–0,40	3,0–6,0	100–250	0,08–0,15	0,2–2,0	
			1.8159	51CrV4		51CrV4	LCPK30M	180–280	0,15–0,30		130–280	0,08–0,10		
	Stahlguss	Cast steel	1.0416	GS40	–950	GS40	LCP40M	150–250	0,20–0,40	3,0–6,0	180–300	0,08–0,20	0,2–2,0	
	Einsatzstahl	Case hardening steel	1.7131	16MnCr5	–950	16MnCr5	LCP40M	100–200	0,20–0,40	3,0–6,0	180–300	0,08–0,15	0,2–2,0	
	Rost- und säure- beständiger Stahl, ferritisch, martensitisch	Stainless steel, ferritic, martensitic	1.4006	X10Cr13	500–950	X12Cr13	LCP40M	100–200	0,20–0,40	3,0–6,0	150–250	0,08–0,15	0,2–2,0	
			1.4104	X12CrMoS17		X14CrMoS17	LCPK30M	130–220	0,15–0,30		180–300	0,08–0,10		
			1.4122	X35CrMo17		X39CrMo17-1								
	Vergütungsstahl, hochfest	Heat-treatment steel, high strength	1.7225	42CrMo4	950–1400	42CrMo4	LCP40M	100–200	0,20–0,40	3,0–6,0	150–250	0,08–0,15	0,2–2,0	
			1.6580	30CrNiMo8		30CrNiMo8	LCPK30M	130–220	0,15–0,30		180–300	0,08–0,10		
	Nitrierstahl, vergütet	Nitriding steel, heat treated	1.8504	34CrAl6	950–1400	34CrAl6	LCP40M	100–200	0,20–0,40	3,0–6,0	150–250	0,08–0,15	0,2–2,0	
			1.2344	X40CrMoV5.1	–900	X40CrMoV5-1	LCPK30M	130–220	0,15–0,30		180–300	0,08–0,10		
	Werkzeugstahl	Tool steel	1.2311	40CrMnMo7	–1100	40CrMnMo7	LCP40M LCPK30M	100–200	0,15–0,35	3,0–6,0	150–250	0,08–0,15	0,2–2,0	
			1.2312	40CrMnNiMoS8.6	–1150	40CrMnNiMoS8-6		130–220	0,15–0,30		180–300	0,08–0,10		
			1.2316	X38CrMo16	–1100	X38CrMo16								
			1.2738	45CrMnNiMo8.6.4	950–1150	45CrMnNiMo8-6-4								
			1.2343	X38CrMoV5 1	950–1400	X37CrMoV5-1								
			1.2379	X155CrVMo12 1	–950	X153CrMoV12-1								
			1.2358	60CrMoV18-5	850–1000	60CrMoV18-5								
1.2080			X210Cr12	950–1400	X210Cr12									
1.2714			55NiCrMoV7	1100–1350	55NiCrMoV7									
M			Rost- und säure- beständiger Stahl, austenitisch	Stainless steel, austenitic	1.4301	X2CrNiMo17-12-2		500–950	X5CrNiMo18-10	LCM45M LCMS35M	 80–120	0,15–0,25	1,0–3,0	 80–120
		1.4404		X6CrNiMoTi17-12-2		X2CrNiMo17-12-2	 160–220				 160–240			
		1.4571		X10CrNiMoTi18		X10CrNiMoTi18								
	Rost- und säure- beständiger Stahl, martensitisch aushärtbar	Stainless steel, martensitic steel	1.2709	X3NiCoMoTi18-9-5	800–1000	X3NiCoMoTi18-9-5	LCM45M LCMS35M	 60–100	0,20–0,40	1,0–3,0	 60–100	0,05–0,15	0,2–1,0	
1.4542			X5CrNrCuNb16-4		X5CrNrCuNb16-4	 160–220				 160–240				
1.4568			X7CrNiAl17-7		X7CrNiAl17-7									
K	Grauguss	Grey cast iron	0.6025	GG25	100–400 120–260 HB)	EN-GJL-250	LCKP10M LCPK30M	100–240	0,10–0,35	3,0–6,0	200–260	0,10–0,20	0,2–2,0	
	Legierter Grauguss	Alloyed grey cast iron	0.6678	GGL-NiCr35 2	150–250 160–230 HB)	EN-GJLA-XNiCr35-2	LCKP10M LCPK30M	100–180	0,10–0,35	3,0–6,0	160–200	0,10–0,20	0,2–2,0	
	Sphäroguss	Nodular cast iron	0.7060 0.7070	GGG60 GGG70L	400–800 120–310 HB)	EN-GJS-600-3 EN-GJS-700-2U	LCKP10M LCPK30M	100–160	0,10–0,35	3,0–6,0	140–180	0,10–0,20	0,2–2,0	
	Temperguss	Malleable cast iron	0.8155	GTS55	350–700 150–280 HB)	EN-GJMB-550-4	LCKP10M LCPK30M	100–200	0,10–0,35	3,0–6,0	160–220	0,10–0,20	0,2–2,0	
N	Aluminium-Legierungen, kurzspanend	Aluminium alloys, short chipping	3.2581	G-AlSi12	–400	G-IGK-AISi12	LCN10M	400	0,30–0,40	3,0–6,0	400	0,10–0,20	0,2–2,0	
	Aluminium-Legierungen, langspanend	Aluminium alloys, long chipping	3.3535	AlMg3	–550	AlMg3	LWN10M	500–1000	0,30–0,40	3,0–6,0	500–1000	0,10–0,20	0,2–2,0	
			3.4365	AlZnMgCu1,5		AlZnMgCu1,5								
	Kupfer-Legierungen, kurzspanend	Copper alloys, short chipping	2.0402	MS58	–500	CuZn40Pb2	LWN10M LCN10M	150–300	0,30–0,40	3,0–6,0	200–350	0,10–0,20	0,2–2,0	
	Kupfer-Legierungen, langspanend	Copper alloys, long chipping	2.0320	MS63	300–500	CuZn37	LWN10M LCN10M	250–500	0,30–0,40	3,0–6,0	300–500	0,10–0,20	0,2–2,0	
			2.0975	CuAl10Ni		CuAl10Fe5Ni5-C								
	Thermoplaste	Thermoplastics		PVC	40–70	PVC	LWN10M	180–300	0,30–0,40	3,0–6,0	200–400	0,10–0,20	0,2–2,0	
Duroplaste	Duroplastics		Bakelit, Melamin	20–40	Bakelit, Melamin	LWN10M	200–250	0,30–0,40	3,0–6,0	200–250	0,10–0,20	0,2–2,0		
S	Titan-Legierungen, mittelfest	Titanium alloys, medium strength	3.7115 3.7164	TiAl5Sn2,5 TiAl6V4	–950	TiAl5Sn2-5 Ti6AlV4	LCMS35M	 40–80	0,05–0,15	1,0–2,5	 40–80	0,05–0,10	0,2–1,0	
	Titan-Legierungen, hochfest	Titanium alloys, high strength	3.7174	TiAl6Sn2	900–1400	TiAl6V6Sn2	LCMS35M	 20–60	0,05–0,15	0,5–2,0	 30–60	0,05–0,10	0,2–1,0	
	Nickelbasis-Legierungen, mittelfest	Nickel based alloys, medium strength	2.4670	NiCr12Al6MoNb	–950	NiCr12Al6MoNb	LCMS35M	 30–80	0,05–0,15	1,0–2,5	 40–80	0,05–0,10	0,2–1,0	
	Nickelbasis-Legierungen, hochwarmfest	Heat resistant nickel based alloys, high strength	2.4668	NiCr19Fe19NbMo	900–1400	Inconel 718 NiCr19Fe19Nb5Mo3	LCMS35M	 30–80	0,05–0,15	1,0–2,5	 40–80	0,05–0,10	0,2–1,0	

Die angegebenen Schnittwerte sind Startwerte und müssen auf die vorhandenen Bedingungen abgestimmt werden.
The cutting data indicated are starting values and must be adjusted to the prevailing conditions.

 Nassbearbeitung, auf ausreichende Emulsionszuführung achten
Wet machining, sufficient emulsion volume required

 Trockenbearbeitung, Pressluftkühlung ist vorteilhaft
Dry machining, air-blast cooling is advantageous