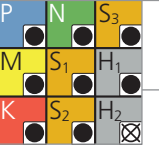


# Typ B - Vorschlichten

$v_c$  [m/min]  
 $f_z$  [mm]  
 $d_{eff}$  [mm]

ANWENDUNGSEMPFEHLUNG

● Sehr gut geeignet | ◐ Gut geeignet | ○ bedingt geeignet | ☒ Nicht empfohlen



## FRÄSEN MIT INTEGRIERTER KÜHLUNG | SCHNITTDATENÜBERSICHT

Werkstoffgruppe	Werkstoff	Wr. Nr.	DIN	AISI/ASTM/UNS	0.3 mm		0.4 mm 1/64"		0.5 mm		0.6 mm		Ød1																																																																																	
					$v_c$	$d_{eff}$	$f_z$	$v_c$	$d_{eff}$	$f_z$	$v_c$	$d_{eff}$	$f_z$	$v_c$	$d_{eff}$	$f_z$	0.8 mm 1/32"		1.0 mm		1.2 mm		1.5 mm 1/16"		1.8 mm		2.0 mm		2.5 mm 3/32"		3.0 mm 1/8"		4.0 mm 5/32"		6.0 mm 3/16-7/32-1/4"		8.0 mm																																																									
P	Stähle unlegiert Rm < 800 N/mm²	1.0301	C10	AISI 1010	55	0.29	0.005	73	0.39	0.007	92	0.48	0.010	100	0.60	0.012	100	0.80	0.014	140	1.00	0.015	140	1.20	0.017	200	1.50	0.024	200	1.80	0.026	220	2.00	0.034	220	2.50	0.036	240	3.00	0.046	260	4.00	0.050	260	6.00	0.050	260	8.00	0.050																																													
		1.0401	C15	AISI 1015																																																																																										
		1.1191	C45E/CK45	AISI 1045																																																																																										
		1.0044	S275JR	AISI 1020																																																																																										
		1.0715	11SMn30	AISI 1215																																																																																										
		1.5752	15NiCr13	ASTM 3415																																																																																										
	Stähle niedriglegiert Rm > 900 N/mm²	1.7131	16MnCr5	AISI 5115	55	0.29	0.004	73	0.39	0.006	92	0.48	0.009	100	0.60	0.011	100	0.80	0.012	140	1.00	0.014	140	1.20	0.016	200	1.50	0.022	200	1.80	0.024	220	2.00	0.032	220	2.50	0.034	240	3.00	0.044	260	4.00	0.048	260	6.00	0.048	260	8.00	0.048																																													
		1.3505	100Cr6	AISI 52100																																																																																										
		1.7225	42CrMo4	AISI 4140																																																																																										
		1.2842	90MnCrV8	AISI O2																																																																																										
		1.2379	X153CrMoV12	AISI D2																																																																																										
		1.2436	X210CrW12	AISI D4/D6																																																																																										
Werkzeugstähle hochlegiert Rm < 1200 N/mm²	1.3343	HS6-5-2C	AISI M2	55	0.29	0.004	73	0.39	0.006	92	0.48	0.008	100	0.60	0.009	100	0.80	0.011	140	1.00	0.011	140	1.20	0.013	200	1.50	0.020	200	1.80	0.022	220	2.00	0.030	220	2.50	0.032	240	3.00	0.040	260	4.00	0.042	260	6.00	0.042	260	8.00	0.042																																														
	1.3355	HS18-0-1	AISI T1																																																																																											
	1.4016	X6Cr17	AISI 430																																																																																											
	1.4105	X6CrMoS17	AISI 430F																																																																																											
	1.4034	X46Cr13	AISI 420C																																																																																											
	1.4112	X90CrMoV18	AISI 440B																																																																																											
M	Rostfreie Stähle-ferritisch	1.4542	X5CrNiCuNb 16-4	AISI 630	55	0.29	0.004	73	0.39	0.006	92	0.48	0.009	100	0.60	0.010	100	0.80	0.012	140	1.00	0.015	140	1.20	0.017	200	1.50	0.022	200	1.80	0.024	220	2.00	0.032	220	2.50	0.034	240	3.00	0.044	260	4.00	0.046	260	6.00	0.046	260	8.00	0.046																																													
		1.4545	X5CrNiCuNb 15-5	ASTM 15-5PH																																																																																										
	Rostfreie Stähle-martensitisch	1.4301	X5CrNi 18-10	AISI 304																																														55	0.29	0.004	73	0.39	0.006	92	0.48	0.008	100	0.60	0.010	100	0.80	0.011	140	1.00	0.012	140	1.20	0.014	200	1.50	0.016	200	1.80	0.018	220	2.00	0.030	220	2.50	0.032	240	3.00	0.040	260	4.00	0.044	260	6.00	0.044	260	8.00	0.044
		1.4435	X2CrNiMo 18-14-3	AISI 316L																																																																																										
		1.4441	X2CrNiMo 18-15-3	AISI 316LM																																																																																										
		1.4539	X1NiCrMoCu25-20-5	AISI 904L																																																																																										
K	Gusseisen	0.6020	GG20	ASTM 30	55	0.29	0.003	73	0.39	0.005	92	0.48	0.006	100	0.60	0.008	100	0.80	0.009	120	1.00	0.011	120	1.20	0.022	140	1.50	0.024	140	1.80	0.026	160	2.00	0.028	160	2.50	0.036	180	3.00	0.043	200	4.00	0.050	200	6.00	0.052	200	8.00	0.052																																													
		0.6030	GG30	ASTM 40B																																																																																										
		0.7040	GGG40	ASTM60-40-18																																																																																										
		0.7060	GGG60	ASTM80-60-03																																																																																										
N	Aluminium Knetlegierungen	3.2315	AlMgSi1	ASTM 6351	55	0.29	0.006	73	0.39	0.008	92	0.48	0.012	100	0.60	0.014	100	0.80	0.016	140	1.00	0.018	140	1.20	0.020	200	1.50	0.026	200	1.80	0.028	220	2.00	0.036	220	2.50	0.040	240	3.00	0.058	260	4.00	0.060	260	6.00	0.060	260	8.00	0.060																																													
		3.4365	AlZnMgCu1.5	ASTM 7075																																																																																										
	Aluminium Druckgusslegierungen	3.2163	GD-ALSi9Cu3	ASTM A380																																														55	0.29	0.006	73	0.39	0.008	92	0.48	0.012	100	0.60	0.014	100	0.80	0.016	140	1.00	0.018	140	1.20	0.020	200	1.50	0.026	200	1.80	0.028	220	2.00	0.036	220	2.50	0.040	240	3.00	0.058	260	4.00	0.060	260	6.00	0.060	260	8.00	0.060
		3.2381	GD-ALSi10Mg	UNS A03590																																																																																										
	Kupfer	2.004	Cu-OF / CW008A	UNS C10100																																														55	0.29	0.006	73	0.39	0.008	92	0.48	0.014	100	0.60	0.016	100	0.80	0.018	140	1.00	0.020	140	1.20	0.022	200	1.50	0.026	200	1.80	0.028	220	2.00	0.036	220	2.50	0.040	240	3.00	0.058	260	4.00	0.060	260	6.00	0.060	260	8.00	0.060
		2.0065	Cu-ETP / CW004A	UNS C11000																																																																																										
	Messing bleifrei	2.0321	CuZn37 CW508L	UNS C27400																																														55	0.29	0.006	73	0.39	0.008	92	0.48	0.014	100	0.60	0.016	100	0.80	0.018	140	1.00	0.020	140	1.20	0.022	200	1.50	0.026	200	1.80	0.028	220	2.00	0.036	220	2.50	0.040	240	3.00	0.058	260	4.00	0.060	260	6.00	0.060	260	8.00	0.060
		2.036	CuZn40 CW509L	UNS C28000																																																																																										
	Messing, Bronze Rm < 400 N/mm²	2.0401	CuZn39Pb3	UNS C38500																																														55	0.29	0.006	73	0.39	0.008	92	0.48	0.014	100	0.60	0.016	100	0.80	0.018	140	1.00	0.020	140	1.20	0.022	200	1.50	0.026	200	1.80	0.028	220	2.00	0.036	220	2.50	0.040	240	3.00	0.058	260	4.00	0.060	260	6.00	0.060	260	8.00	0.060
		2.102	CuSn6	UNS C51900																																																																																										
	Bronze Rm < 600 N/mm²	2.0966	CuAl10Ni5Fe4	UNS C63000																																														55	0.29	0.006	73	0.39	0.008	92	0.48	0.012	100	0.60	0.014	100	0.80	0.016	140	1.00	0.018	140	1.20	0.020	200	1.50	0.026	200	1.80	0.028	220	2.00	0.036	220	2.50	0.040	240	3.00	0.058	260	4.00	0.060	260	6.00	0.060	260	8.00	0.060
		2.096	CuAl9Mn2	UNS C63200																																																																																										
S1	Hitzebeständige Stähle	2.4856		Inconel 625	55	0.29	0.003	73	0.39	0.004	92	0.48	0.004	100	0.60	0.005	100	0.80	0.006	120	1.00	0.007	120	1.20	0.008	130	1.50	0.009	130	1.80	0.010	140	2.00	0.010	140	2.50	0.012	150	3.00	0.015	170	4.00	0.020	170	6.00	0.020	170	8.00	0.020																																													
		2.4668		Inconel 718																																																																																										
		2.4617	NiMo28	Hastelloy B-2																																																																																										
		2.4665	NiCr22Fe18Mo	Hastelloy X																																																																																										
S2	Titan rein	3.7035	Gr.2	ASTM B348	55	0.29	0.004	73	0.39	0.004	92	0.48	0.008	100	0.60	0.009	100	0.80	0.011	120	1.00	0.016	120	1.20	0.018	130	1.50	0.020	130	1.80	0.022	140	2.00	0.028	140	2.50	0.030	150	3.00	0.040	170	4.00	0.044	170	6.00	0.044	170	8.00	0.044																																													
		3.7065	Gr.4	ASTM B348																																																																																										
S2	Titan Legierungen	3.7165	TiAl6V4	ASTM B348	55	0.29	0.004	73	0.39	0.004	92	0.48	0.008	100	0.60	0.009	100	0.80	0.011	120	1.00	0.016	120	1.20	0.018	130	1.50	0.020	130	1.80	0.022	140	2.00	0.028	140	2.50	0.030	150	3.00	0.040	170	4.00	0.044	170	6.00	0.044	170	8.00	0.044																																													
		9.9367	TiAl6Nb7	ASTM F1295																																																																																										
S3	CrCo-Legierungen	2.4964	CoCr20W15Ni	Haynes 25	55	0.29																																																																																								