

# Zylindrische Fräser SupraCarb®

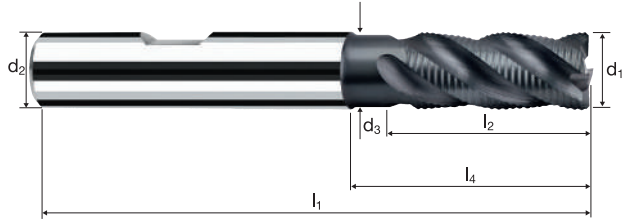
Profiliert, normale Ausführung, Kurz Hals



HM  
MG10

$\lambda$  38°  
 $\gamma$  0°

45°

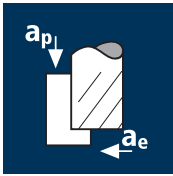


Rm < 850 Rm 850-1100 Rm 1100-1300

Inox Stainless Ti Titanium GG(G) Tool Steel

Ø Code	d <sub>1</sub> e8	d <sub>2</sub> h6	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	45°	α	z	POLYCHROM	
											P	15336
180	3.00	6.00	2.80	57	8.00	14.00	20.63	0.25	4.5°	3	●	P15336
220	4.00	6.00	3.70	57	11.00	16.00	20.95	0.30	3.0°	3	●	P15236
260	5.00	6.00	4.60	57	13.00	18.00	21.27	0.35	1.5°	4	●	
300	6.00	6.00	5.50	57	13.00	19.34	20.00	0.35	0.0°	4	●	
391	8.00	8.00	7.40	63	19.00	25.29	26.00	0.45	0.0°	4	●	
450	10.00	10.00	9.20	72	22.00	30.20	31.00	0.60	0.0°	4	●	
501	12.00	12.00	11.00	83	26.00	36.13	37.00	0.60	0.0°	4	●	
570	14.00	14.00	13.00	83	26.00	36.13	37.00	0.60	0.0°	4	●	
610	16.00	16.00	15.00	92	32.00	42.13	43.00	0.70	0.0°	4	●	
612	16.00	16.00	15.00	92	32.00	42.13	43.00	0.70	0.0°	6	●	
640	18.00	18.00	17.00	92	32.00	42.13	43.00	0.70	0.0°	4	●	
682	20.00	20.00	19.00	104	38.00	52.13	53.00	0.70	0.0°	4	●	
684	20.00	20.00	19.00	104	38.00	52.13	53.00	0.70	0.0°	6	●	

## Anwendung



## Werkstoff

Stahl  
< 850 N/mm<sup>2</sup>



d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>s</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>r</sub> [mm/min]	Q [cm <sup>3</sup> /min]
3.00	3	180	0.015	3.600	1.800	19100	860	5.6
4.00	3	180	0.020	4.800	2.400	14325	860	9.9
5.00	4	180	0.025	6.000	3.000	11460	1145	20.6
6.00	4	180	0.030	7.200	3.600	9550	1145	29.7
8.00	4	180	0.040	9.600	4.800	7160	1145	52.8
10.00	4	180	0.050	12.000	6.000	5730	1145	82.5
12.00	4	180	0.055	14.400	7.200	4775	1050	108.9
16.00	4	180	0.055	19.200	9.600	3580	790	145.2
20.00	4	180	0.060	24.000	12.000	2865	690	198.0

Stahl  
850 - 1100 N/mm<sup>2</sup>



3.00	3	130	0.015	3.600	1.800	13795	620	4.0
4.00	3	130	0.020	4.800	2.400	10345	620	7.2
5.00	4	130	0.025	6.000	3.000	8275	830	14.9
6.00	4	130	0.030	7.200	3.600	6895	830	21.5
8.00	4	130	0.040	9.600	4.800	5175	830	38.1
10.00	4	130	0.050	12.000	6.000	4140	830	59.6
12.00	4	130	0.055	14.400	7.200	3450	760	78.7
16.00	4	130	0.055	19.200	9.600	2585	570	104.9
20.00	4	130	0.060	24.000	12.000	2070	495	143.0

Titanlegierungen ausg.  
> 300 HB  
[Ti6Al4V]

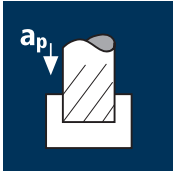


3.00	3	45	0.010	3.600	1.800	4775	145	0.9
4.00	3	45	0.015	4.800	2.400	3580	160	1.9
5.00	4	45	0.020	6.000	3.000	2865	230	4.1
6.00	4	45	0.025	7.200	3.600	2385	240	6.2
8.00	4	45	0.030	9.600	4.800	1790	215	9.9
10.00	4	45	0.040	12.000	6.000	1430	230	16.5
12.00	4	45	0.045	14.400	7.200	1195	215	22.3
16.00	4	45	0.045	19.200	9.600	895	160	29.7
20.00	4	45	0.050	24.000	12.000	715	145	41.3

Inox normal  
[Cr-Ni/1.4301]  
[Cr-Ni-Mo/1.4571]



3.00	3	60	0.010	3.600	1.800	6365	190	1.2
4.00	3	60	0.015	4.800	2.400	4775	215	2.5
5.00	4	60	0.020	6.000	3.000	3820	305	5.5
6.00	4	60	0.025	7.200	3.600	3185	320	8.3
8.00	4	60	0.030	9.600	4.800	2385	285	13.2
10.00	4	60	0.040	12.000	6.000	1910	305	22.0
12.00	4	60	0.045	14.400	7.200	1590	285	29.7
16.00	4	60	0.045	16.800	8.400	1195	215	30.3
20.00	4	60	0.050	24.000	12.000	955	190	55.0



Stahl  
< 850 N/mm<sup>2</sup>



3.00	3	150	0.015	3.000	3.000	15915	715	6.4
4.00	3	150	0.020	4.000	4.000	11935	715	11.5
5.00	4	150	0.025	5.000	5.000	9550	955	23.9
6.00	4	150	0.030	6.000	6.000	7960	955	34.4
8.00	4	150	0.040	8.000	8.000	5970	955	61.1
10.00	4	150	0.050	10.000	10.000	4775	955	95.5
12.00	4	150	0.055	12.000	12.000	3980	875	126.1
16.00	4	150	0.055	16.000	16.000	2985	655	168.1
20.00	4	150	0.060	20.000	20.000	2385	575	229.2

Stahl  
850 - 1100 N/mm<sup>2</sup>



3.00	3	80	0.015	3.000	3.000	8490	380	3.4
4.00	3	80	0.020	4.000	4.000	6365	380	6.1
5.00	4	80	0.025	5.000	5.000	5095	510	12.7
6.00	4	80	0.030	6.000	6.000	4245	510	18.3
8.00	4	80	0.040	8.000	8.000	3185	510	32.6
10.00	4	80	0.050	10.000	10.000	2545	510	50.9
12.00	4	80	0.055	12.000	12.000	2120	465	67.2
16.00	4	80	0.055	16.000	16.000	1590	350	89.6
20.00	4	80	0.060	20.000	20.000	1275	305	122.2

Titanlegierungen ausg.  
> 300 HB  
[Ti6Al4V]



3.00	3	35	0.010	3.000	3.000	3715	110	1.0
4.00	3	35	0.015	4.000	4.000	2785	125	2.0
5.00	4	35	0.020	5.000	5.000	2230	180	4.5
6.00	4	35	0.025	6.000	6.000	1855	185	6.7
8.00	4	35	0.030	8.000	8.000	1395	165	10.7
10.00	4	35	0.040	10.000	10.000	1115	180	17.8
12.00	4	35	0.045	12.000	12.000	930	165	24.1
16.00	4	35	0.045	16.000	16.000	695	125	32.1
20.00	4	35	0.050	20.000	20.000	555	110	44.6

Inox normal  
[Cr-Ni/1.4301]  
[Cr-Ni-Mo/1.4571]



3.00	3	50	0.010	3.000	3.000	5305	160	1.4
4.00	3	50	0.015	4.000	4.000	3980	180	2.9
5.00	4	50	0.020	5.000	5.000	3185	255	6.4
6.00	4	50	0.025	6.000	6.000	2655	265	9.5
8.00	4	50	0.030	8.000	8.000	1990	240	15.3
10.00	4	50	0.040	10.000	10.000	1590	255	25.5
12.00	4	50	0.045	12.000	12.000	1325	240	34.4
16.00	4	50	0.045	16.000	16.000	995	180	45.8
20.00	4	50	0.050	20.000	20.000	795	160	63.7