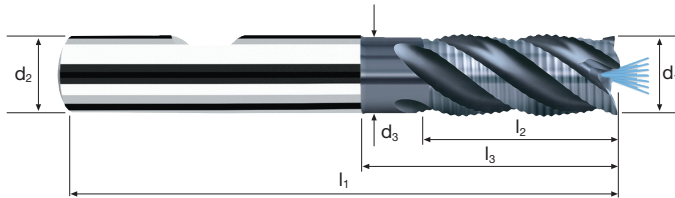


# Zylindrische Fräser NB-RPS SupraCarb®

Profiliert, normale Ausführung mit Kurzhalbs,  
Hochleistungs-Eintauchstirn mit zentralem Luft-/Kühlkanal

**HM**  
**MG10**     $\lambda$  **38°**  
                   $\gamma$  **0°**



Schuppen



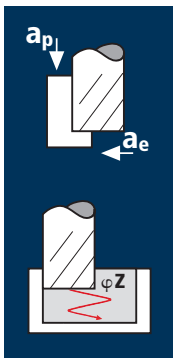
Schichten



<b>Rm</b> < 850	<b>Rm</b> 850-1100	<b>Rm</b> 1100-1300						<b>Inox</b> Stainless	<b>Ti</b> Titanium	<b>GG(G)</b> Tool Steel
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										POLYCHROM	
										P8402	
										P8302	
Beispiel: Bestell-Nr.    Beschichtung    Artikel-Nr.    α-Code											
<b>P</b> <b>8402</b> <b>220</b>											
Ø Code	d1 e8	d2 h5	d3	l1	l2	l3	r	α	z		
<b>220</b>	4	6	3.7	57	11	16	0.10	3.0°	3	●	
<b>260</b>	5	6	4.6	57	13	18	0.10	1.5°	4	●	
<b>300</b>	6	6	5.5	57	13	20	0.10	0.0°	4	●	
<b>391</b>	8	8	7.4	63	19	26	0.15	0.0°	4	●	
<b>450</b>	10	10	9.2	72	22	31	0.20	0.0°	4	●	
<b>501</b>	12	12	11.0	83	26	37	0.20	0.0°	4	●	
<b>610</b>	16	16	15.0	92	32	43	0.20	0.0°	4	●	
<b>682</b>	20	20	19.0	104	38	53	0.20	0.0°	4	●	

## Anwendung



## Werkstoff

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

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

Titanlegierungen ausg.  
>300 HB  
[Ti6Al4V]

Nichtrostender Stahl  
[Cr-Ni/1.4301]

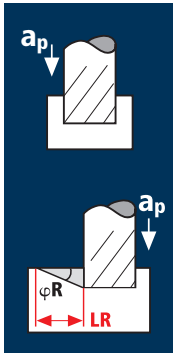
d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>z</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>f</sub> / v <sub>fZ</sub> [mm/min]	Q [cm <sup>2</sup> /min]	φZ [°]	φA [°]
4	3	180	0.020	6.0	2.4	14325	860	10.0	20°	Siehe ToolExpert HelixRamp (www.fraisa.com)
5	4	180	0.025	7.5	3.0	11460	1145	20.5	20°	
6	4	180	0.030	9.0	3.6	9550	1145	29.5	20°	
8	4	180	0.040	12.0	4.8	7160	1145	53.0	20°	
10	4	180	0.050	15.0	6.0	5730	1145	82.5	20°	
12	4	180	0.055	18.0	7.2	4775	1050	109.0	20°	
16	4	180	0.055	24.0	9.6	3580	790	145.5	20°	
20	4	180	0.060	30.0	12.0	2865	690	198.5	20°	

4	3	130	0.020	6.0	2.4	10345	620	7.0	18°	Siehe ToolExpert HelixRamp (www.fraisa.com)
5	4	130	0.025	7.5	3.0	8275	830	15.0	18°	
6	4	130	0.030	9.0	3.6	6895	825	21.5	18°	
8	4	130	0.040	12.0	4.8	5175	830	38.0	18°	
10	4	130	0.050	15.0	6.0	4140	830	60.0	18°	
12	4	130	0.055	18.0	7.2	3450	760	79.0	18°	
16	4	130	0.055	24.0	9.6	2585	570	105.0	18°	
20	4	130	0.060	30.0	12.0	2070	495	142.5	18°	

4	3	45	0.015	6.0	2.4	3580	160	2.0	12°	Siehe ToolExpert HelixRamp (www.fraisa.com)
5	4	45	0.020	7.5	3.0	2865	230	4.0	12°	
6	4	45	0.025	9.0	3.6	2385	240	6.0	12°	
8	4	45	0.030	12.0	4.8	1790	215	10.0	12°	
10	4	45	0.040	15.0	6.0	1430	230	16.5	12°	
12	4	45	0.045	18.0	7.2	1195	215	22.5	12°	
16	4	45	0.045	24.0	9.6	895	160	29.5	12°	
20	4	45	0.050	30.0	12.0	715	145	42.0	12°	

4	3	60	0.015	6.0	2.4	4775	215	2.5	12°	Siehe ToolExpert HelixRamp (www.fraisa.com)
5	4	60	0.020	7.5	3.0	3820	305	5.5	12°	
6	4	60	0.025	9.0	3.6	3185	320	8.5	12°	
8	4	60	0.030	12.0	4.8	2385	285	13.0	12°	
10	4	60	0.040	15.0	6.0	1910	305	22.0	12°	
12	4	60	0.045	18.0	7.2	1590	285	29.5	12°	
16	4	60	0.045	24.0	9.6	1195	215	39.5	12°	
20	4	60	0.050	30.0	12.0	955	190	54.5	12°	

## Anwendung



## Werkstoff

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

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

Titanlegierungen ausg.  
>300 HB  
[Ti6Al4V]

Nichtrostender Stahl  
[Cr-Ni/1.4301]

d1 [mm]	z	v <sub>c</sub> [m/min]	f <sub>z</sub> [mm]	a <sub>p</sub> [mm]	a <sub>e</sub> [mm]	n [min <sup>-1</sup> ]	v <sub>f</sub> / v <sub>fR</sub> [mm/min]	Q [cm <sup>2</sup> /min]	φR [°]	LR [mm]
4	3	150	0.020	5.0	4	11935	715	11.5	20°	13.7
5	4	150	0.025	6.3	5	9550	955	24.0	20°	17.2
6	4	150	0.030	7.5	6	7960	955	34.5	20°	20.6
8	4	150	0.040	10.0	8	5970	955	61.0	20°	27.5
10	4	150	0.050	12.5	10	4775	955	95.5	20°	34.3
12	4	150	0.055	15.0	12	3980	875	126.0	20°	41.2
16	4	150	0.055	20.0	16	2985	655	167.5	20°	54.9
20	4	150	0.060	25.0	20	2385	570	228.0	20°	68.7

4	3	80	0.020	5.0	4	6365	380	6.0	20°	13.7
5	4	80	0.025	6.3	5	5095	510	13.0	20°	17.2
6	4	80	0.030	7.5	6	4245	510	18.5	20°	20.6
8	4	80	0.040	10.0	8	3185	510	32.5	20°	27.5
10	4	80	0.050	12.5	10	2545	510	51.0	20°	34.3
12	4	80	0.055	15.0	12	2120	465	67.0	20°	41.2
16	4	80	0.055	20.0	16	1590	350	89.5	20°	54.9
20	4	80	0.060	25.0	20	1275	305	122.0	20°	68.7

4	3	35	0.015	5.0	4	2785	125	2.0	14°	20.1
5	4	35	0.020	6.3	5	2230	180	4.5	14°	25.1
6	4	35	0.025	7.5	6	1855	185	6.5	14°	30.1
8	4	35	0.030	10.0	8	1395	165	10.5	14°	40.1
10	4	35	0.040	12.5	10	1115	180	18.0	14°	50.1
12	4	35	0.045	15.0	12	930	165	24.0	14°	60.2
16	4	35	0.045	20.0	16	695	125	32.0	14°	80.2
20	4	35	0.050	25.0	20	555	110	44.0	14°	100.3

4	3	50	0.015	5.0	4	3980	180	3.0	14°	20.1
5	4	50	0.020	6.3	5	3185	255	6.5	14°	25.1
6	4	50	0.025	7.5	6	2655	265	9.5	14°	30.1
8	4	50	0.030	10.0	8	1990	240	15.5	14°	40.1
10	4	50	0.040	12.5	10	1590	255	25.5	14°	50.1
12	4	50	0.045	15.0	12	1325	240	34.5	14°	60.2
16	4	50	0.045	20.0	16	995	180	46.0	14°	80.2
20	4	50	0.050	25.0	20	795	160	64.0	14°	100.3