

# Zylindrische Fräser NF-NV

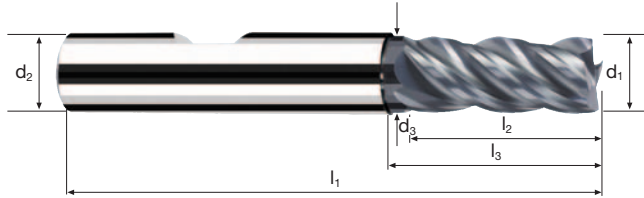
Glattschneidig, normale Ausführung mit Kurzhals



**HM**  $\lambda$  40°  
 $\gamma$  6°

45°

Vario



Schruppen



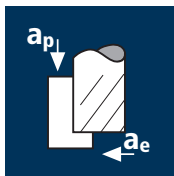
Schichten



**Rm** < 850    **Rm** 850-1100    **Rm** 1100-1300    **Inox** Stainless    **Ti** Titanium    **GG(G)** Tool Steel Nickel Alloys

Beispiel: Bestell-Nr. <b>P 45317 .100</b>										POLYCHROM	
										<b>P45317</b>	
										<b>P45217</b>	
$\emptyset$ Code	d1 e8	d2 h6	d3	l1	l2	l3	45°	$\alpha$	z		
<b>new!</b> .100	1	6	0.95	57	5	7	0.10	8.5°	4		●
<b>new!</b> .140	2	6	1.90	57	7	10	0.10	7.0°	4		●
.178*	3	3	-	45	8	-	0.10	0.0°	4		●
.180	3	6	2.80	57	8	14	0.10	4.5°	4		●
.218*	4	4	-	50	11	-	0.10	0.0°	4		●
.220	4	6	3.70	57	11	16	0.10	3.0°	4		●
.258*	5	5	-	50	13	-	0.15	0.0°	4		●
.260	5	6	4.60	57	13	18	0.15	1.5°	4		●
.300	6	6	5.50	57	13	20	0.15	0.0°	4		●
.391	8	8	7.40	63	19	26	0.15	0.0°	4		●
.450	10	10	9.20	72	22	31	0.20	0.0°	4		●
.501	12	12	11.00	83	26	37	0.20	0.0°	4		●
<b>new!</b> .570	14	14	13.00	83	26	37	0.20	0.0°	4		●
.610	16	16	15.00	92	32	43	0.20	0.0°	4		●
.682	20	20	19.00	104	38	53	0.20	0.0°	4		●
<b>new!</b> .772	25	25	24.00	121	45	64	0.20	0.0°	4		●
* nur ohne Seitenspanfläche, ohne Kurzhals											

## Anwendung



## Werkstoff

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

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

Nichtrostender Stahl  
[Cr-Ni/1.4301]

Gusseisen  
GG(G)

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> [mm/min]	Q [cm <sup>3</sup> /min]
3	4	170	0.015	4.5	1.2	18040	1080	6.0
4	4	170	0.020	6.0	1.6	13530	1080	10.5
5	4	170	0.025	7.5	2.0	10825	1085	16.5
6	4	170	0.030	9.0	2.4	9020	1080	23.5
8	4	170	0.040	12.0	3.2	6765	1080	41.5
10	4	170	0.050	15.0	4.0	5410	1080	65.0
12	4	170	0.060	18.0	4.8	4510	1080	93.5
16	4	170	0.075	24.0	6.4	3380	1015	156.0
20	4	170	0.095	30.0	8.0	2705	1030	247.0

3	4	120	0.015	4.5	1.2	12735	765	4.0
4	4	120	0.020	6.0	1.6	9550	765	7.5
5	4	120	0.025	7.5	2.0	7640	765	11.5
6	4	120	0.030	9.0	2.4	6365	765	16.5
8	4	120	0.040	12.0	3.2	4775	765	29.5
10	4	120	0.050	15.0	4.0	3820	765	46.0
12	4	120	0.060	18.0	4.8	3185	765	66.0
16	4	120	0.075	24.0	6.4	2385	715	110.0
20	4	120	0.095	30.0	8.0	1910	725	174.0

3	4	80	0.010	4.5	1.2	8490	340	2.0
4	4	80	0.015	6.0	1.6	6365	380	3.5
5	4	80	0.020	7.5	2.0	5095	410	6.0
6	4	80	0.025	9.0	2.4	4245	425	9.0
8	4	80	0.030	12.0	3.2	3185	380	14.5
10	4	80	0.040	15.0	4.0	2545	405	24.5
12	4	80	0.050	18.0	4.8	2120	425	36.5
16	4	80	0.060	24.0	6.4	1590	380	58.5
20	4	80	0.075	30.0	8.0	1275	385	92.5

3	4	135	0.015	4.5	1.2	14325	860	4.5
4	4	135	0.020	6.0	1.6	10745	860	8.5
5	4	135	0.030	7.5	2.0	8595	1030	15.5
6	4	135	0.035	9.0	2.4	7160	1000	21.5
8	4	135	0.045	12.0	3.2	5370	965	37.0
10	4	135	0.055	15.0	4.0	4295	945	56.5
12	4	135	0.065	18.0	4.8	3580	930	80.5
16	4	135	0.085	24.0	6.4	2685	915	140.5
20	4	135	0.105	30.0	8.0	2150	905	217.0

## Anwendung



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[Cr-Ni/1.4301]

Gusseisen  
GG(G)

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> [mm/min]	Q [cm <sup>3</sup> /min]
3	4	135	0.010	3.0	3	14325	575	5.0
4	4	135	0.015	4.0	4	10745	645	10.5
5	4	135	0.020	5.0	5	8595	690	17.5
6	4	135	0.025	6.0	6	7160	715	25.5
8	4	135	0.030	8.0	8	5370	645	41.5
10	4	135	0.040	10.0	10	4295	685	68.5
12	4	135	0.045	12.0	12	3580	645	93.0
16	4	135	0.055	8.0	16	2685	590	75.5
20	4	135	0.070	10.0	20	2150	600	120.0

3	4	95	0.010	3.0	3	10080	405	3.5
4	4	95	0.015	4.0	4	7560	455	7.5
5	4	95	0.020	5.0	5	6050	485	12.0
6	4	95	0.025	6.0	6	5040	505	18.0
8	4	95	0.030	8.0	8	3780	455	29.0
10	4	95	0.040	10.0	10	3025	485	48.5
12	4	95	0.045	12.0	12	2520	455	65.5
16	4	95	0.055	8.0	16	1890	415	53.0
20	4	95	0.070	10.0	20	1510	425	85.0

3	4	65	0.010	2.1	3	6895	275	1.5
4	4	65	0.010	2.8	4	5175	205	2.5
5	4	65	0.015	3.5	5	4140	250	4.5
6	4	65	0.020	4.2	6	3450	275	7.0
8	4	65	0.025	8.0	8	2585	260	16.5
10	4	65	0.030	10.0	10	2070	250	25.0
12	4	65	0.040	12.0	12	1725	275	39.5
16	4	65	0.045	8.0	16	1295	235	30.0
20	4	65	0.055	10.0	20	1035	230	46.0

3	4	115	0.010	3.0	3	12200	490	4.5
4	4	115	0.015	4.0	4	9150	550	9.0
5	4	115	0.025	5.0	5	7320	730	18.5
6	4	115	0.025	6.0	6	6100	610	22.0
8	4	115	0.035	8.0	8	4575	640	41.0
10	4	115	0.040	10.0	10	3660	585	58.5
12	4	115	0.050	12.0	12	3050	610	88.0
16	4	115	0.065	8.0	16	2290	595	76.0
20	4	115	0.080	10.0	20	1830	585	117.0