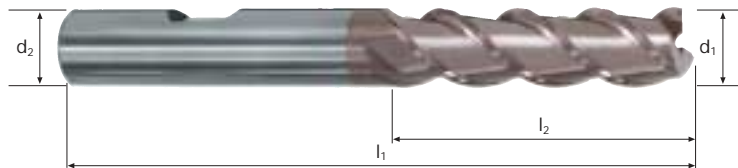


Zylindrische Fräser

Glattschneidig, mittellange Ausführung



**HM
MG10** λ 45°
 γ 15°



Schruppen



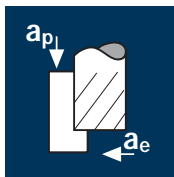
Schichten



Rm < 850 **Rm** 850-1100 **Rm** 1100-1300 **Inox** Stainless **Ti** Titanium **GG(G)** Copper

		Beschichtung		Artikel-Nr.		α-Code					UNICUT-4X	
Beispiel: Bestell-Nr.		U		5332		.140					5332	U5332
∅ Code	d1 e8	d2 h6	l1	l2	45°	α	z					
.140	2.0	6	63	12	0.10	9.5°	3	●		●		
.160	2.5	6	63	13	0.10	7.8°	3	●		●		
.180	3.0	6	63	14	0.10	6.1°	3	●		●		
.220	4.0	6	63	17	0.10	3.4°	3	●		●		
.260	5.0	6	63	19	0.15	1.5°	3	●		●		
.300	6.0	6	63	19	0.15	0.0°	3	●		●		
.331	7.0	8	72	24	0.15	1.5°	3	●		●		
.391	8.0	8	72	28	0.15	0.0°	3	●		●		
.420	9.0	10	84	28	0.20	1.0°	3	●		●		
.450	10.0	10	84	34	0.20	0.0°	3	●		●		
.501	12.0	12	97	40	0.20	0.0°	3	●		●		
.610	16.0	16	108	48	0.20	0.0°	3	●		●		
.682	20.0	20	122	56	0.20	0.0°	3	●		●		

Anwendung



Werkstoff

Stahl
< 850 N/mm²

Stahl
850 - 1100 N/mm²

Gusseisen
GG(G)

Nichtrostender Stahl
[Cr-Ni/1.4301]

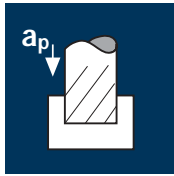
d1 [mm]	z	v _c [m/min]	f _z [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _f [mm/min]
2	3	120	0.005	5.0	0.1	19100	285
3	3	120	0.010	7.5	0.2	12735	380
4	3	120	0.010	10.0	0.2	9550	285
6	3	120	0.015	15.0	0.3	6365	285
8	3	120	0.020	20.0	0.4	4775	285
10	3	120	0.025	25.0	0.5	3820	285
12	3	120	0.030	30.0	0.6	3185	285
16	3	120	0.040	40.0	0.8	2385	285
20	3	120	0.050	50.0	1.0	1910	285

2	3	80	0.005	5.0	0.1	12735	190
3	3	80	0.010	7.5	0.2	8490	255
4	3	80	0.010	10.0	0.2	6365	190
6	3	80	0.015	15.0	0.3	4245	190
8	3	80	0.020	20.0	0.4	3185	190
10	3	80	0.025	25.0	0.5	2545	190
12	3	80	0.030	30.0	0.6	2120	190
16	3	80	0.040	40.0	0.8	1590	190
20	3	80	0.050	50.0	1.0	1275	190

2	3	160	0.005	5.0	0.1	25465	380
3	3	160	0.010	7.5	0.2	16975	510
4	3	160	0.010	10.0	0.2	12735	380
6	3	160	0.015	15.0	0.3	8490	380
8	3	160	0.020	20.0	0.4	6365	380
10	3	160	0.025	25.0	0.5	5095	380
12	3	160	0.030	30.0	0.6	4245	380
16	3	160	0.040	40.0	0.8	3185	380
20	3	160	0.050	50.0	1.0	2545	380

2	3	50	0.005	5.0	0.1	7960	120
3	3	50	0.010	7.5	0.2	5305	160
4	3	50	0.010	10.0	0.2	3980	120
6	3	50	0.015	15.0	0.3	2655	120
8	3	50	0.020	20.0	0.4	1990	120
10	3	50	0.025	25.0	0.5	1590	120
12	3	50	0.030	30.0	0.6	1325	120
16	3	50	0.040	40.0	0.8	995	120
20	3	50	0.050	50.0	1.0	795	120

Anwendung



Werkstoff

Stahl
< 850 N/mm²

Stahl
850 - 1100 N/mm²

Gusseisen
GG(G)

Nichtrostender Stahl
[Cr-Ni/1.4301]

d1 [mm]	z	v _c [m/min]	f _z [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]
2	3	100	0.005	0.4	2	15915	240	0.2
3	3	100	0.005	0.6	3	10610	160	0.3
4	3	100	0.010	0.8	4	7960	240	0.8
6	3	100	0.010	1.2	6	5305	160	1.2
8	3	100	0.015	1.6	8	3980	180	2.3
10	3	100	0.020	2.0	10	3185	190	3.8
12	3	100	0.025	2.4	12	2655	200	5.8
16	3	100	0.030	3.2	16	1990	180	9.2
20	3	100	0.040	4.0	20	1590	190	15.2

2	3	70	0.005	0.4	2	11140	165	0.1
3	3	70	0.005	0.6	3	7425	110	0.2
4	3	70	0.005	0.8	4	5570	85	0.3
6	3	70	0.010	1.2	6	3715	110	0.8
8	3	70	0.015	1.6	8	2785	125	1.6
10	3	70	0.020	2.0	10	2230	135	2.7
12	3	70	0.020	2.4	12	1855	110	3.2
16	3	70	0.030	3.2	16	1395	125	6.4
20	3	70	0.040	4.0	20	1115	135	10.8

2	3	120	0.005	0.4	2	19100	285	0.2
3	3	120	0.005	0.6	3	12735	190	0.3
4	3	120	0.010	0.8	4	9550	285	0.9
6	3	120	0.015	1.2	6	6365	285	2.1
8	3	120	0.020	1.6	8	4775	285	3.6
10	3	120	0.020	2.0	10	3820	230	4.6
12	3	120	0.025	2.4	12	3185	240	6.9
16	3	120	0.035	3.2	16	2385	250	12.8
20	3	120	0.040	4.0	20	1910	230	18.4

2	3	35	0.005	0.4	2	5570	85	0.1
3	3	35	0.005	0.6	3	3715	55	0.1
4	3	35	0.005	0.8	4	2785	40	0.1
6	3	35	0.010	1.2	6	1855	55	0.4
8	3	35	0.015	1.6	8	1395	65	0.8
10	3	35	0.020	2.0	10	1115	65	1.3
12	3	35	0.020	2.4	12	930	55	1.6
16	3	35	0.030	3.2	16	695	65	3.3
20	3	35	0.040	4.0	20	555	65	5.2