
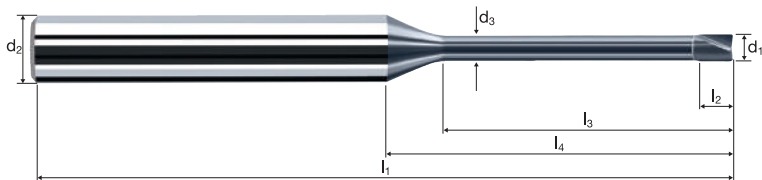


Cylindrical end mills Microcut

Shank \varnothing 4mm, cylindrical neck, 15xd

HM	λ	0°
XA	γ	0°
		

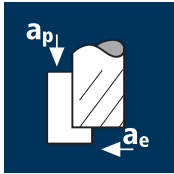
new!



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56	HRC 56-60	Inox Stainless	Ti Titanium	Cobalt-Chrome Gold / Platinum Copper
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Example: Order-Nº. X 6811 100											X-AL
											X6811
\varnothing Code	d_1 0/-0.01	d_2 h4	d_3	l_1	l_2	l_3	l_4	45°	α	z	
100	1.00	4.00	0.95	50	1.20	15.00	20.85	0.04	4.3°	2	●
120	1.50	4.00	1.40	57	1.80	22.50	27.30	0.04	2.8°	2	●
140	2.00	4.00	1.90	61	2.40	30.00	33.87	0.07	1.9°	2	●
180	3.00	4.00	2.80	75	3.60	45.00	46.91	0.07	0.8°	2	●

Application



Material

Steel
850 - 1100 N/mm²



d_1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min ⁻¹]	v_f [mm/min]	Q [mm ³ /min]
1.00	2	53	0.007	0.200	0.100	16870	236	4.7
1.50	2	53	0.011	0.300	0.150	11245	236	10.6
2.00	2	53	0.014	0.400	0.200	8435	236	18.9
3.00	2	53	0.021	0.600	0.300	5625	236	42.6

Steel
1100 - 1300 N/mm²



1.00	2	41	0.006	0.200	0.100	13050	157	3.2
1.50	2	41	0.009	0.300	0.150	8700	157	7.1
2.00	2	41	0.012	0.400	0.200	6525	157	12.6
3.00	2	41	0.018	0.600	0.300	4350	157	28.2

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



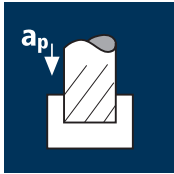
1.00	2	33	0.005	0.200	0.100	10505	95	1.9
1.50	2	33	0.007	0.300	0.150	7005	95	4.3
2.00	2	33	0.009	0.400	0.200	5250	95	7.6
3.00	2	33	0.014	0.600	0.300	3500	95	17.0

Titanium alloys
> 300 HB
[Ti6Al4V]



1.00	2	20	0.005	0.200	0.100	6365	57	1.2
1.50	2	20	0.007	0.300	0.150	4245	57	2.6
2.00	2	20	0.009	0.400	0.200	3185	57	4.6
3.00	2	20	0.014	0.600	0.300	2120	57	10.3

Application



Material

Steel
850 - 1100 N/mm²



d_1 [mm]	z	v_c [m/min]	f_z [mm]	a_p [mm]	a_e [mm]	n [min ⁻¹]	v_f [mm/min]	Q [mm ³ /min]
1.00	2	48	0.006	0.100	1.000	15280	171	17.1
1.50	2	48	0.008	0.150	1.500	10185	171	38.5
2.00	2	48	0.011	0.200	2.000	7640	171	68.5
3.00	2	48	0.017	0.300	3.000	5095	171	154.1

Steel
1100 - 1300 N/mm²



1.00	2	37	0.005	0.100	1.000	11775	113	11.3
1.50	2	37	0.007	0.150	1.500	7850	113	25.5
2.00	2	37	0.010	0.200	2.000	5890	113	45.3
3.00	2	37	0.014	0.300	3.000	3925	113	101.7

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



1.00	2	29	0.004	0.100	1.000	9230	67	6.7
1.50	2	29	0.005	0.150	1.500	6155	67	15.0
2.00	2	29	0.007	0.200	2.000	4615	67	26.6
3.00	2	29	0.011	0.300	3.000	3075	66	59.8

Titanium alloys
> 300 HB
[Ti6Al4V]



1.00	2	18	0.004	0.100	1.000	5730	41	4.2
1.50	2	18	0.005	0.150	1.500	3820	41	9.3
2.00	2	18	0.007	0.200	2.000	2865	41	16.5
3.00	2	18	0.011	0.300	3.000	1910	41	37.2