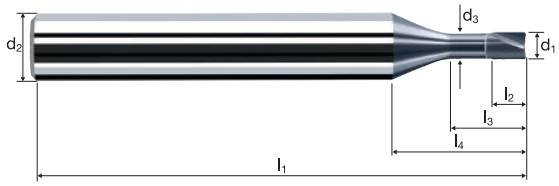
Cylindrical end mills Microcut

Shank ø 4mm, cylindrical neck, 3xd

HM XA	λ 0° γ 0°
45°	

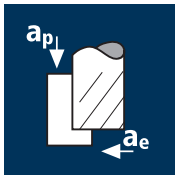
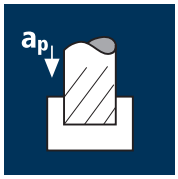


new!

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

Example: **Order-N°.** Coating **X** Article-N°. **6802** ø-Code **020**

Ø Code	d_1 0/-0.01	d_2 h4	d_3	l_1	l_2	l_3	l_4	45°	α	z	X-AL	X6802
020	0.20	4.00	0.18	50	0.16	0.60	11.55	-	9.5°	2		●
030	0.30	4.00	0.25	50	0.24	0.90	11.47	-	9.4°	2		●
040	0.40	4.00	0.35	50	0.32	1.20	11.49	-	9.1°	2		●
050	0.50	4.00	0.45	50	0.40	1.50	8.28	-	12.1°	2		●
060	0.60	4.00	0.55	50	0.48	1.80	8.40	-	11.6°	2		●
080	0.80	4.00	0.75	50	0.64	2.40	8.62	-	10.7°	2		●
100	1.00	4.00	0.95	50	1.20	3.00	8.85	0.04	9.8°	2		●
108	1.20	4.00	1.10	50	1.44	3.60	8.96	0.04	9.1°	2		●
120	1.50	4.00	1.40	50	1.80	4.50	9.30	0.04	7.9°	2		●
140	2.00	4.00	1.90	50	2.40	6.00	9.87	0.07	6.0°	2		●
160	2.50	4.00	2.30	50	3.00	7.50	10.34	0.07	4.3°	2		●
180	3.00	4.00	2.80	50	3.60	9.00	10.91	0.07	2.8°	2		●

Application	Material	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]
	Steel 850 - 1100 N/mm²	0.20	2	26	0.001	0.100	0.020	41380	116	0.3
		0.40	2	53	0.003	0.200	0.040	42175	236	1.9
		0.50	2	66	0.004	0.350	0.100	42015	294	10.3
		0.80	2	106	0.006	0.560	0.160	42175	472	42.4
		1.00	2	130	0.007	0.700	0.200	41380	579	81.1
		1.50	2	130	0.011	1.500	0.450	27585	579	391.1
		2.00	2	130	0.014	2.000	0.600	20690	579	695.2
		2.50	2	130	0.018	2.500	0.750	16550	579	1086.2
		3.00	2	130	0.021	3.000	0.900	13795	579	1564.4
	Steel 1100 - 1300 N/mm²	0.20	2	26	0.001	0.100	0.020	41380	99	0.2
		0.40	2	53	0.002	0.200	0.040	42175	202	1.6
		0.50	2	66	0.003	0.350	0.100	42015	252	8.8
		0.80	2	100	0.005	0.560	0.160	39790	382	34.3
		1.00	2	100	0.006	0.700	0.200	31830	382	53.5
		1.50	2	100	0.009	1.500	0.450	21220	382	257.9
		2.00	2	100	0.012	2.000	0.600	15915	382	458.4
		2.50	2	100	0.015	2.500	0.750	12730	382	716.1
		3.00	2	100	0.018	3.000	0.900	10610	382	1031.4
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	0.20	2	26	0.001	0.100	0.020	41380	83	0.2
		0.40	2	53	0.002	0.200	0.040	42175	169	1.4
		0.50	2	66	0.003	0.350	0.100	42015	210	7.4
		0.80	2	80	0.004	0.560	0.160	31830	255	22.8
		1.00	2	80	0.005	0.700	0.200	25465	255	35.7
		1.50	2	80	0.008	1.500	0.450	16975	255	171.9
		2.00	2	80	0.010	2.000	0.600	12730	255	305.5
		2.50	2	80	0.013	2.500	0.750	10185	255	477.4
		3.00	2	80	0.015	3.000	0.900	8490	255	687.7
	Titanium alloys > 300 HB [Ti6Al4V]	0.20	2	26	0.001	0.100	0.020	41380	83	0.2
		0.40	2	50	0.002	0.200	0.040	39790	159	1.3
		0.50	2	50	0.003	0.350	0.100	31830	159	5.6
		0.80	2	50	0.004	0.560	0.160	19895	159	14.3
		1.00	2	50	0.005	0.700	0.200	15915	159	22.3
		1.50	2	50	0.008	1.500	0.450	10610	159	107.5
		2.00	2	50	0.010	2.000	0.600	7960	159	191.1
		2.50	2	50	0.013	2.500	0.750	6365	159	298.3
		3.00	2	50	0.015	3.000	0.900	5305	159	429.9
Application	Material	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]
	Steel 850 - 1100 N/mm²	0.20	2	26	0.001	0.040	0.200	41380	93	0.8
		0.40	2	53	0.002	0.080	0.400	42175	186	6.0
		0.50	2	66	0.003	0.150	0.500	42015	235	17.7
		0.80	2	106	0.004	0.240	0.800	42175	378	72.6
		1.00	2	111	0.006	0.300	1.000	35330	396	118.7
		1.50	2	111	0.008	0.600	1.500	23555	396	356.2
		2.00	2	111	0.011	0.800	2.000	17665	396	633.1
		2.50	2	111	0.014	1.000	2.500	14135	396	989.5
		3.00	2	111	0.017	1.200	3.000	11775	396	1424.2
	Steel 1100 - 1300 N/mm²	0.20	2	26	0.001	0.040	0.200	41380	79	0.7
		0.40	2	53	0.002	0.080	0.400	42175	160	5.2
		0.50	2	66	0.002	0.150	0.500	42015	202	15.2
		0.80	2	85	0.004	0.240	0.800	33820	260	49.9
		1.00	2	85	0.005	0.300	1.000	27055	260	77.9
		1.50	2	85	0.007	0.600	1.500	18040	260	233.8
		2.00	2	85	0.010	0.800	2.000	13530	260	415.7
		2.50	2	85	0.012	1.000	2.500	10825	260	649.5
		3.00	2	85	0.014	1.200	3.000	9020	260	935.3
	Inox normal [Cr-Ni/1.4301] [Cr-Ni-Mo/1.4571]	0.20	2	26	0.001	0.040	0.200	41380	66	0.6
		0.40	2	53	0.002	0.080	0.400	42175	135	4.3
		0.50	2	66	0.002	0.150	0.500	42015	168	12.6
		0.80	2	68	0.003	0.240	0.800	27055	173	33.3
		1.00	2	68	0.004	0.300	1.000	21645	173	52.0
		1.50	2	68	0.006	0.600	1.500	14430	173	155.9
		2.00	2	68	0.008	0.800	2.000	10825	173	277.1
		2.50	2	68	0.010	1.000	2.500	8660	173	433.0
		3.00	2	68	0.012	1.200	3.000	7215	173	623.5
	Titanium alloys > 300 HB [Ti6Al4V]	0.20	2	26	0.001	0.040	0.200	41380	66	0.6
		0.40	2	43	0.002	0.080	0.400	34220	110	3.5
		0.50	2	43	0.002	0.150	0.500	27375	110	8.2
		0.80	2	43	0.003	0.240	0.800	17110	110	21.0
		1.00	2	43	0.004	0.300	1.000	13685	110	32.9
		1.50	2	43	0.006	0.600	1.500	9125	110	98.6
		2.00	2	43	0.008	0.800	2.000	6845	110	175.2
		2.50	2	43	0.010	1.000	2.500	5475	110	273.8
		3.00	2	43	0.012	1.200	3.000	4560	109	393.9