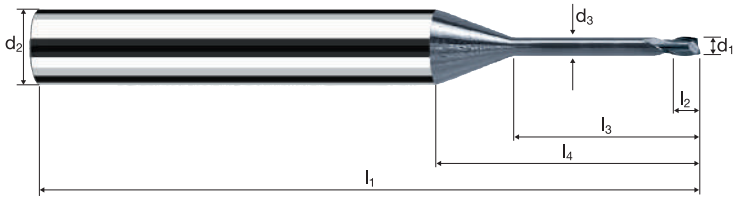
Cylindrical end mills MicroX

Shank ø 6mm, cylindrical neck, 8xd

HM
XA

λ 25°
γ -10°

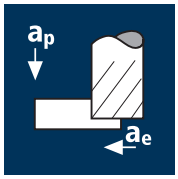
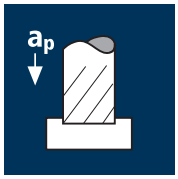
45°



Rm < 850	Rm 850-1100	Rm 1100-1300	Rm 1300-1500	HRC 48-56	HRC 56-60	HRC > 60	Inox Stainless	Ti Titanium	Cobalt-Chrome Copper

Example: **Order-N°.** Coating **X** Article-N°. **6506** 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 X6506
020	0.20	6.00	0.18	57	0.12	1.60	18.22	-	13.5°	2	●
030	0.30	6.00	0.25	57	0.18	2.40	18.64	-	12.5°	2	●
040	0.40	6.00	0.35	57	0.24	3.20	19.16	-	12.0°	2	●
050	0.50	6.00	0.45	57	0.30	4.00	14.51	-	11.0°	2	●
060	0.60	6.00	0.55	57	0.36	4.80	15.13	-	10.5°	2	●
080	0.80	6.00	0.75	57	0.48	6.40	16.35	-	9.5°	2	●
100	1.00	6.00	0.95	61	1.00	8.00	18.08	0.07	8.5°	2	●
108	1.20	6.00	1.10	61	1.20	9.60	19.40	0.07	7.5°	2	●
120	1.50	6.00	1.40	61	1.50	12.00	21.24	0.07	6.5°	2	●
140	2.00	6.00	1.90	66	2.00	16.00	24.31	0.10	5.0°	2	●
160	2.50	6.00	2.30	69	2.50	20.00	27.56	0.10	4.0°	2	●
180	3.00	6.00	2.80	75	3.00	24.00	30.63	0.10	3.0°	2	●

Application	Material	d1 [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]
	Hardened tool steel 42 - 48 HRC	0.20	2	26	0.001	0.004	0.040	41380	105	0.0
		0.40	2	53	0.003	0.008	0.080	42175	215	0.1
		0.50	2	66	0.004	0.010	0.100	42015	320	0.3
		0.80	2	106	0.005	0.016	0.160	42175	425	1.1
		1.00	2	132	0.006	0.020	0.200	42015	530	2.1
		1.50	2	140	0.010	0.030	0.300	29710	600	5.4
		2.00	2	140	0.013	0.040	0.400	22280	560	9.0
		2.50	2	140	0.016	0.050	0.500	17825	585	14.6
		3.00	2	140	0.019	0.060	0.600	14855	560	20.2
	Hardened tool steel 48 - 52 HRC	0.20	2	26	0.001	0.004	0.040	41380	100	0.0
		0.40	2	53	0.002	0.008	0.080	42175	200	0.1
		0.50	2	66	0.004	0.010	0.100	42015	305	0.3
		0.80	2	106	0.005	0.016	0.160	42175	405	1.0
		1.00	2	120	0.006	0.020	0.200	38195	460	1.8
		1.50	2	120	0.010	0.030	0.300	25465	490	4.4
		2.00	2	120	0.012	0.040	0.400	19100	460	7.3
		2.50	2	120	0.016	0.050	0.500	15280	475	11.9
		3.00	2	120	0.018	0.060	0.600	12730	460	16.5
	Hardened tool steel 52 - 56 HRC	0.20	2	26	0.001	0.004	0.040	41380	85	0.0
		0.40	2	53	0.002	0.008	0.080	42175	170	0.1
		0.50	2	66	0.003	0.010	0.100	42015	250	0.3
		0.80	2	100	0.004	0.016	0.160	39790	320	0.8
		1.00	2	100	0.005	0.020	0.200	31830	320	1.3
		1.50	2	100	0.008	0.030	0.300	21220	340	3.1
		2.00	2	100	0.010	0.040	0.400	15915	320	5.1
		2.50	2	100	0.013	0.050	0.500	12730	330	8.3
		3.00	2	100	0.015	0.060	0.600	10610	320	11.5
	Hardened tool steel 56 - 60 HRC	0.20	2	26	0.001	0.004	0.040	41380	75	0.0
		0.40	2	53	0.002	0.008	0.080	42175	150	0.1
		0.50	2	60	0.003	0.010	0.100	38195	205	0.2
		0.80	2	60	0.004	0.016	0.160	23875	170	0.4
		1.00	2	60	0.004	0.020	0.200	19100	170	0.7
		1.50	2	60	0.007	0.030	0.300	12730	185	1.7
		2.00	2	60	0.009	0.040	0.400	9550	170	2.8
		2.50	2	60	0.012	0.050	0.500	7640	180	4.5
		3.00	2	60	0.014	0.060	0.600	6365	170	6.2
	Hardened tool steel 42 - 48 HRC	0.20	2	26	0.001	0.002	0.200	41380	90	0.0
		0.40	2	53	0.002	0.003	0.400	42175	185	0.2
		0.50	2	66	0.003	0.004	0.500	42015	275	0.6
		0.80	2	106	0.004	0.006	0.800	42175	370	1.8
		1.00	2	120	0.005	0.008	1.000	38195	420	3.4
		1.50	2	120	0.009	0.012	1.500	25465	450	8.1
		2.00	2	120	0.011	0.016	2.000	19100	420	13.4
		2.50	2	120	0.014	0.020	2.500	15280	435	21.8
		3.00	2	120	0.016	0.023	3.000	12730	420	29.0
	Hardened tool steel 48 - 52 HRC	0.20	2	26	0.001	0.002	0.200	41380	90	0.0
		0.40	2	53	0.002	0.003	0.400	42175	185	0.2
		0.50	2	66	0.003	0.004	0.500	42015	275	0.6
		0.80	2	100	0.004	0.006	0.800	39790	350	1.7
		1.00	2	100	0.005	0.008	1.000	31830	350	2.8
		1.50	2	100	0.009	0.012	1.500	21220	375	6.7
		2.00	2	100	0.011	0.016	2.000	15915	350	11.2
		2.50	2	100	0.014	0.020	2.500	12730	365	18.2
		3.00	2	100	0.016	0.023	3.000	10610	350	24.2
	Hardened tool steel 52 - 56 HRC	0.20	2	26	0.001	0.002	0.200	41380	85	0.0
		0.40	2	53	0.002	0.003	0.400	42175	170	0.2
		0.50	2	66	0.003	0.004	0.500	42015	250	0.5
		0.80	2	80	0.004	0.006	0.800	31830	255	1.2
		1.00	2	80	0.005	0.008	1.000	25465	255	2.0
		1.50	2	80	0.008	0.012	1.500	16975	270	4.9
		2.00	2	80	0.010	0.016	2.000	12730	255	8.1
		2.50	2	80	0.013	0.020	2.500	10185	265	13.2
		3.00	2	80	0.015	0.023	3.000	8490	255	17.6
	Hardened tool steel 56 - 60 HRC	0.20	2	26	0.001	0.002	0.200	41380	75	0.0
		0.40	2	40	0.002	0.003	0.400	31830	115	0.1
		0.50	2	40	0.003	0.004	0.500	25465	140	0.3
		0.80	2	40	0.004	0.006	0.800	15915	115	0.6
		1.00	2	40	0.004	0.008	1.000	12730	115	0.9
		1.50	2	40	0.007	0.012	1.500	8490	120	2.2
		2.00	2	40	0.009	0.016	2.000	6365	115	3.7
		2.50	2	40	0.012	0.020	2.500	5095	120	6.0
		3.00	2	40	0.014	0.023	3.000	4245	115	7.9