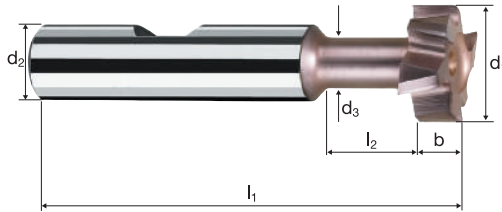


T-groove end mills

HSS

HSS-E
Co8

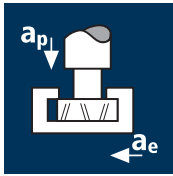
λ 12°
 γ 12°



Rm < 850	Rm 850-1100	Rm 1100-1300					Inox Stainless	Ti Titanium	GG(G) Aluminium Copper
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Example: Order-N°.									UNICUT-4X
									U0910
\emptyset Code	d_1 d11	d_2 h6	d_3	l_1	l_2	b k11	z		
100	11.00	10.00	4.00	54	8.00	4.0	4		●
120	12.50	10.00	5.00	57	9.00	6.0	4		●
140	16.00	10.00	7.00	62	12.00	8.0	4		●
160	18.00	12.00	8.00	70	15.00	8.0	6		●
180	21.00	12.00	10.00	74	19.00	9.0	6		●
200	25.00	16.00	12.00	82	21.00	11.0	6		●
220	32.00	16.00	15.00	90	27.00	14.0	6		●
240	40.00	25.00	19.00	108	30.00	18.0	8		●
260	50.00	32.00	25.00	124	40.00	22.0	8		●
500*	12.00	8.00	5.00	54	14.00	2.5	8		●
520*	16.00	8.00	6.00	56	16.00	3.0	8		●
540*	20.00	10.00	8.00	62	17.00	4.0	8		●
560*	25.00	10.00	9.00	65	19.00	5.0	10		●
580*	32.00	12.00	10.00	73	21.00	6.0	12		●
600*	40.00	12.00	11.00	77	23.00	8.0	12		●
620*	50.00	16.00	14.00	84	25.00	10.0	14		●
* Conical neck									

Application



Material

Steel
< 850 N/mm²



d1 [mm]	z	v _c [m/min]	f _t [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]
11.00	4	55	0.010	4.000	1.100	1590	65
12.50	4	55	0.010	6.000	1.250	1400	55
16.00	4	55	0.025	8.000	1.600	1095	110
18.00	6	55	0.025	8.000	1.800	975	145
21.00	6	55	0.040	9.000	2.100	835	200
25.00	6	55	0.045	11.000	2.500	700	190
32.00	6	55	0.060	14.000	3.200	545	195
40.00	8	55	0.070	18.000	4.000	440	245
50.00	8	55	0.090	22.000	5.000	350	250

Steel
850 - 1100 N/mm²



11.00	4	45	0.010	4.000	1.100	1300	50
12.50	4	45	0.010	6.000	1.250	1145	45
16.00	4	45	0.025	8.000	1.600	895	90
18.00	6	45	0.025	8.000	1.800	795	120
21.00	6	45	0.040	9.000	2.100	680	165
25.00	6	45	0.045	11.000	2.500	575	155
32.00	6	45	0.060	14.000	3.200	450	160
40.00	8	45	0.070	18.000	4.000	360	200
50.00	8	45	0.090	22.000	5.000	285	205

Steel
1100 - 1300 N/mm²



11.00	4	34	0.010	4.000	1.100	985	40
12.50	4	34	0.010	6.000	1.250	865	35
16.00	4	34	0.025	8.000	1.600	675	70
18.00	6	34	0.025	8.000	1.800	600	90
21.00	6	34	0.040	9.000	2.100	515	125
25.00	6	34	0.045	11.000	2.500	435	115
32.00	6	34	0.060	14.000	3.200	340	120
40.00	8	34	0.070	18.000	4.000	270	150
50.00	8	34	0.090	22.000	5.000	215	155

Stainless steel
[Cr-Ni/1.4301]



11.00	4	21	0.010	4.000	1.100	610	25
12.50	4	21	0.010	6.000	1.250	535	20
16.00	4	21	0.025	8.000	1.600	420	40
18.00	6	21	0.025	8.000	1.800	370	55
21.00	6	21	0.040	9.000	2.100	320	75
25.00	6	21	0.045	11.000	2.500	265	70
32.00	6	21	0.060	14.000	3.200	210	75
40.00	8	21	0.070	18.000	4.000	165	95
50.00	8	21	0.090	22.000	5.000	135	95

Cast iron
(lamellar / spheroidal)



11.00	4	42	0.010	4.000	1.100	1215	50
12.50	4	42	0.010	6.000	1.250	1070	45
16.00	4	42	0.025	8.000	1.600	835	85
18.00	6	42	0.025	8.000	1.800	745	110
21.00	6	42	0.040	9.000	2.100	635	155
25.00	6	42	0.045	11.000	2.500	535	145
32.00	6	42	0.060	14.000	3.200	420	150
40.00	8	42	0.070	18.000	4.000	335	185
50.00	8	42	0.090	22.000	5.000	265	195

Unalloyed copper



11.00	4	65	0.010	4.000	1.100	1880	75
12.50	4	65	0.010	6.000	1.250	1655	65
16.00	4	65	0.025	8.000	1.600	1295	130
18.00	6	65	0.025	8.000	1.800	1150	170
21.00	6	65	0.040	9.000	2.100	985	235
25.00	6	65	0.045	11.000	2.500	830	225
32.00	6	65	0.060	14.000	3.200	645	235
40.00	8	65	0.070	18.000	4.000	515	290
50.00	8	65	0.090	22.000	5.000	415	300

Titanium alloys
up to 300 HB
[Ti5Al2.5Sn]



11.00	4	23	0.010	4.000	1.100	665	25
12.50	4	23	0.010	6.000	1.250	585	25
16.00	4	23	0.025	8.000	1.600	460	45
18.00	6	23	0.025	8.000	1.800	405	60
21.00	6	23	0.040	9.000	2.100	350	85
25.00	6	23	0.045	11.000	2.500	295	80
32.00	6	23	0.060	14.000	3.200	230	80
40.00	8	23	0.070	18.000	4.000	185	100
50.00	8	23	0.090	22.000	5.000	145	105

Wrought aluminium
Si < 6%



11.00	4	80	0.010	4.000	1.100	2315	95
12.50	4	80	0.010	6.000	1.250	2035	80
16.00	4	80	0.025	8.000	1.600	1590	160
18.00	6	80	0.025	8.000	1.800	1415	210
21.00	6	80	0.040	9.000	2.100	1215	290
25.00	6	80	0.045	11.000	2.500	1020	275
32.00	6	80	0.060	14.000	3.200	795	285
40.00	8	80	0.070	18.000	4.000	635	355
50.00	8	80	0.090	22.000	5.000	510	365