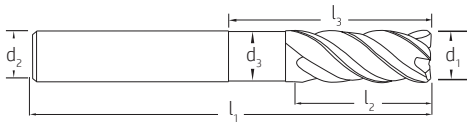


ICE MILL

4 Flute 35°/38° Helix & Unequal Pitch Endmills, Corner Chamfer

EMC 030

TP



Technical Info. Page No. 130

Steels <45HRC	Stainless Steels -	Cast Irons <390 HB	Hardened Steels -	Titaniums -	Super Alloys -	Aluminiums -
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d ₁	d ₁	d ₂	d ₃	l ₂	l ₃	l ₁	CCx45°	z	EDP No. HA	EDP No. HB
	tol.	h6	-0.2	±0.50	±0.50	±0.80	-0.05		AlCrN	AlCrN
1.00	-0.010	6	0.80	2.50	5	57	0.07	4	EMCA 0300M 0100	EMCA 0301M 0100
2.00	-0.020	6	1.80	5.00	10	57	0.10	4	EMCA 0300M 0200	EMCA 0301M 0200
3.00	-0.025	6	2.80	8.00	15	57	0.10	4	EMCA 0300M 0300	EMCA 0301M 0300
4.00	-0.025	6	3.80	11.00	17	57	0.15	4	EMCA 0300M 0400	EMCA 0301M 0400
5.00	-0.025	6	4.80	13.00	19	57	0.15	4	EMCA 0300M 0500	EMCA 0301M 0500
6.00	-0.025	6	5.80	13.00	21	57	0.20	4	EMCA 0300M 0600	EMCA 0301M 0600
8.00	-0.025	8	7.60	19.00	27	63	0.20	4	EMCA 0300M 0800	EMCA 0301M 0800
10.00	-0.035	10	9.50	22.00	32	72	0.30	4	EMCA 0300M 1000	EMCA 0301M 1000
12.00	-0.035	12	11.50	26.00	38	83	0.35	4	EMCA 0300M 1200	EMCA 0301M 1200
14.00	-0.035	14	13.50	26.00	38	83	0.35	4	EMCA 0300M 1400	EMCA 0301M 1400
16.00	-0.035	16	15.50	32.00	44	92	0.40	4	EMCA 0300M 1600	EMCA 0301M 1600
18.00	-0.035	18	17.50	32.00	44	92	0.40	4	EMCA 0300M 1800	EMCA 0301M 1800
20.00	-0.035	20	19.50	38.00	54	104	0.50	4	EMCA 0300M 2000	EMCA 0301M 2000
25.00	-0.035	25	24.50	45.00	65	121	0.60	4	EMCA 0300M 2500	EMCA 0301M 2500
6.0	-0.025	6	-	40.0	-	80	0.20	4	EMCA 0300X 0600	EMCA 0301X 0600
8.0	-0.025	8	-	50.0	-	100	0.20	4	EMCA 0300X 0800	EMCA 0301X 0800
10.0	-0.035	10	-	50.0	-	100	0.30	4	EMCA 0300X 1000	EMCA 0301X 1000
12.0	-0.035	12	-	80.0	-	150	0.35	4	EMCA 0300X 1200	EMCA 0301X 1200
16.0	-0.035	16	-	80.0	-	150	0.40	4	EMCA 0300X 1600	EMCA 0301X 1600
20.0	-0.035	20	-	80.0	-	150	0.50	4	EMCA 0300X 2000	EMCA 0301X 2000

STEELS

INOX

SUPERNOX

CHIPSPLITTERS

Aluminiums

ROCKSTARS

MICRO MILLS

UNIVERSAL

DRILLS

STEELS

INOX

SUPRNOX

CHIPSPLITTERS

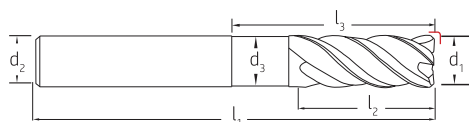
Aluminums

ROCKSTARS

MICRO MILLS

UNIVERSAL

DRILLS



Technical Info. Page No. 130

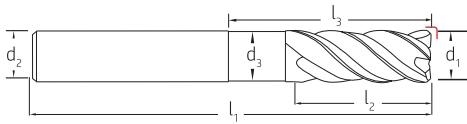
Steels <45HRC		Stainless Steels -		Cast Irons <390 HB		Hardened Steels -		Titaniums -		Super Alloys -		Aluminums -	
d ₁	d ₁	d ₂	d ₃	l ₂	l ₃	l ₁	r	z	EDP No. HA		EDP No. HB		
tol.		h6	-0.2	±0.50	±0.50	±0.80	±0.015		AlCrN		AlCrN		
3.0	-0.025	6	2.8	8.0	15	57	0.30	4	EMRA 0300M 0300 030		EMRA 0301M 0300 030		
3.0	-0.025	6	2.8	8.0	15	57	0.50	4	EMRA 0300M 0300 050		EMRA 0301M 0300 050		
4.0	-0.025	6	3.8	11.0	17	57	0.30	4	EMRA 0300M 0400 030		EMRA 0301M 0400 030		
4.0	-0.025	6	3.8	11.0	17	57	0.50	4	EMRA 0300M 0400 050		EMRA 0301M 0400 050		
4.0	-0.025	6	3.8	11.0	17	57	1.00	4	EMRA 0300M 0400 100		EMRA 0301M 0400 100		
5.0	-0.025	6	4.8	13.0	19	57	0.30	4	EMRA 0300M 0500 030		EMRA 0301M 0500 030		
5.0	-0.025	6	4.8	13.0	19	57	0.50	4	EMRA 0300M 0500 050		EMRA 0301M 0500 050		
5.0	-0.025	6	4.8	13.0	19	57	1.00	4	EMRA 0300M 0500 100		EMRA 0301M 0500 100		
6.0	-0.025	6	5.8	13.0	21	57	0.20	4	EMRA 0300M 0600 020		EMRA 0301M 0600 020		
6.0	-0.025	6	5.8	13.0	21	57	0.30	4	EMRA 0300M 0600 030		EMRA 0301M 0600 030		
6.0	-0.025	6	5.8	13.0	21	57	0.50	4	EMRA 0300M 0600 050		EMRA 0301M 0600 050		
6.0	-0.025	6	5.8	13.0	21	57	1.00	4	EMRA 0300M 0600 100		EMRA 0301M 0600 100		
6.0	-0.025	6	5.8	13.0	21	57	2.00	4	EMRA 0300M 0600 200		EMRA 0301M 0600 200		
8.0	-0.025	8	7.6	19.0	27	63	0.50	4	EMRA 0300M 0800 050		EMRA 0301M 0800 050		
8.0	-0.025	8	7.6	19.0	27	63	1.00	4	EMRA 0300M 0800 100		EMRA 0301M 0800 100		
8.0	-0.025	8	7.6	19.0	27	63	2.00	4	EMRA 0300M 0800 200		EMRA 0301M 0800 200		
10.0	-0.035	10	9.5	22.0	32	72	0.50	4	EMRA 0300M 1000 050		EMRA 0301M 1000 050		
10.0	-0.035	10	9.5	22.0	32	72	1.00	4	EMRA 0300M 1000 100		EMRA 0301M 1000 100		

ICE MILL

4 Flute 35°/38° Helix & Unequal Pitch Endmills, Corner Radius

EMR 030

TP



Technical Info. Page No. 130

Steels <45HRC	Stainless Steels	Cast Irons <390 HB	Hardened Steels	Titaniums	Super Alloys	Aluminiums
-	-	-	-	-	-	-

d ₁	d ₁	d ₂	d ₃	l ₂	l ₃	l ₁	r	z	EDP No. HA	EDP No. HB
	tol.	h6	-0.2	±0.50	±0.50	±0.80	±0.015		AlCrN	AlCrN
10.0	-0.035	10	9.5	22.0	32	72	2.00	4	EMRA 0300M 1000 200	EMRA 0301M 1000 200
12.0	-0.035	12	11.5	26.0	38	83	0.50	4	EMRA 0300M 1200 050	EMRA 0301M 1200 050
12.0	-0.035	12	11.5	26.0	38	83	1.00	4	EMRA 0300M 1200 100	EMRA 0301M 1200 100
12.0	-0.035	12	11.5	26.0	38	83	2.00	4	EMRA 0300M 1200 200	EMRA 0301M 1200 200
16.0	-0.035	16	15.5	32.0	44	92	0.50	4	EMRA 0300M 1600 050	EMRA 0301M 1600 050
16.0	-0.035	16	15.5	32.0	44	92	1.00	4	EMRA 0300M 1600 100	EMRA 0301M 1600 100
16.0	-0.035	16	15.5	32.0	44	92	2.00	4	EMRA 0300M 1600 200	EMRA 0301M 1600 200
16.0	-0.035	16	15.5	32.0	44	92	3.00	4	EMRA 0300M 1600 300	EMRA 0301M 1600 300
20.0	-0.035	20	19.5	38.0	54	104	0.50	4	EMRA 0300M 2000 050	EMRA 0301M 2000 050
20.0	-0.035	20	19.5	38.0	54	104	1.00	4	EMRA 0300M 2000 100	EMRA 0301M 2000 100
20.0	-0.035	20	19.5	38.0	54	104	2.00	4	EMRA 0300M 2000 200	EMRA 0301M 2000 200
20.0	-0.035	20	19.5	38.0	54	104	3.00	4	EMRA 0300M 2000 300	EMRA 0301M 2000 300
25.0	-0.035	25	24.5	45.0	65	121	2.00	4	EMRA 0300M 2500 200	EMRA 0301M 2500 200
25.0	-0.035	25	24.5	45.0	65	121	3.00	4	EMRA 0300M 2500 300	EMRA 0301M 2500 300

STEELS

INOX

SUPERNOX

CHIPSPLITTERS

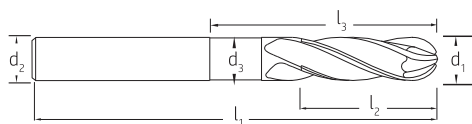
Aluminiums

ROCKSTARS

MICRO MILLS

UNIVERSAL

DRILLS



Technical Info. Page No. 130

Steels <45HRC		Stainless Steels -		Cast Irons <390 HB		Hardened Steels -		Titaniums -		Super Alloys -		Aluminiums -	
d ₁	d ₁	d ₂	d ₃	l ₂	l ₃	l ₁	r	z	EDP No. HA		EDP No. HB		
tol.		h6	-0.2	±0.50	±0.50	±0.80	±0.015		AlCrN		AlCrN		
3.00	-0.025	6	2.80	8.00	15	57	1.50	4	EMBA 0300M 0300		EMBA 0301M 0300		
4.00	-0.025	6	3.80	11.00	17	57	2.00	4	EMBA 0300M 0400		EMBA 0301M 0400		
5.00	-0.025	6	4.80	13.00	19	57	2.50	4	EMBA 0300M 0500		EMBA 0301M 0500		
6.00	-0.025	6	5.80	13.00	21	57	3.00	4	EMBA 0300M 0600		EMBA 0301M 0600		
8.00	-0.025	8	7.60	19.00	27	63	4.00	4	EMBA 0300M 0800		EMBA 0301M 0800		
10.00	-0.035	10	9.50	22.00	32	72	5.00	4	EMBA 0300M 1000		EMBA 0301M 1000		
12.00	-0.035	12	11.50	26.00	38	83	6.00	4	EMBA 0300M 1200		EMBA 0301M 1200		
16.00	-0.035	16	15.50	32.00	44	92	8.00	4	EMBA 0300M 1600		EMBA 0301M 1600		
20.00	-0.035	20	19.50	38.00	54	104	10.00	4	EMBA 0300M 2000		EMBA 0301M 2000		

	MATERIAL		Hardness	ap max xD	ae max xD	Vc (m/min)	fz (mm/z) Ø									
	SLOTTING						3	4	5	6	8	10	12	14	16	20
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	1	1	120-150	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.070	0.080	0.100
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	1	1	80-100	0.110	0.015	0.019	0.022	0.028	0.034	0.039	0.044	0.049	0.059
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	≤ 1	1	80-100	0.011	0.014	0.018	0.021	0.028	0.035	0.042	0.049	0.056	0.070
	M	Stainless Steel : Easy To Machine	<750 N/mm²													
		Stainless Steel : Difficult To Machine	<950 N/mm²													
	K	Cast Irons, Grey, Spher., Melleable	<300 HB	1	1	80-120	0.110	0.015	0.019	0.022	0.028	0.034	0.039	0.044	0.049	0.059
	N	Aluminium, Aluminiums Alloys	<6% Si													
	S	Titanium , Titanium Alloys	<1100N/mm²													
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	0.5	1	30-40	0.009	0.012	0.012	0.017	0.022	0.026	0.030	0.034	0.038	0.046
																
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	1	0.3	150-180	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.070	0.080	0.100
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	1	0.3	100-150	0.012	0.016	0.020	0.024	0.032	0.040	0.048	0.056	0.064	0.080
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²													
	M	Stainless Steel : Easy To Machine	<750 N/mm²													
		Stainless Steel : Difficult To Machine	<950 N/mm²													
	K	Cast Irons, Grey, Spher., Melleable	<300 HB	1	0.3	100-150	0.014	0.018	0.022	0.026	0.034	0.041	0.047	0.052	0.058	0.071
	N	Aluminiums, Aluminiums Alloys	<6% Si													
	S	Titanium , Titanium Alloys	<1100N/mm²													
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	1	0.3	40-45	0.017	0.022	0.027	0.032	0.042	0.050	0.057	0.064	0.064	0.078
																
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²													
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²													
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²													
	M	Stainless Steel : Easy To Machine	<750 N/mm²													
		Stainless Steel : Difficult To Machine	<950 N/mm²													
	K	Cast Irons, Grey, Spher., Melleable	<300 HB													
	N	Aluminiums, Aluminiums Alloys	<6% Si													
	S	Titanium , Titanium Alloys	<1100N/mm²													
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²													
																
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	5°	0.3	120	0.010	0.012	0.015	0.018	0.024	0.030	0.032	0.035	0.040	0.048
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	4°	0.3	80	0.009	0.011	0.014	0.016	0.021	0.026	0.029	0.033	0.037	0.045
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	3°	0.3	70	0.010	0.012	0.015	0.018	0.024	0.030	0.032	0.035	0.040	0.048
	M	Stainless Steel : Easy To Machine	<750 N/mm²													
		Stainless Steel : Difficult To Machine	<950 N/mm²													
	K	Cast Irons, Grey, Spher., Melleable	<300 HB													
	N	Aluminiums, Aluminiums Alloys	<6% Si													
	S	Titanium , Titanium Alloys	<1100N/mm²													
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²													
																
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²													
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²													
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²													
	M	Stainless Steel : Easy To Machine	<750 N/mm²													
		Stainless Steel : Difficult To Machine	<950 N/mm²													
	K	Cast Irons, Grey, Spher., Melleable	<300 HB													
	N	Aluminiums, Aluminiums Alloys	<6% Si													
	S	Titanium , Titanium Alloys	<1100N/mm²													
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²													
																
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	2	0.1	200				0.061	0.079	0.095	0.108	0.122	0.135	0.164
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	2	0.1	130				0.055	0.071	0.085	0.097	0.109	0.122	0.148
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	2	0.1	80				0.049	0.063	0.076	0.086	0.097	0.108	0.131
	M	Stainless Steel : Easy To Machine	<750 N/mm²													
		Stainless Steel : Difficult To Machine	<950 N/mm²													
	K	Cast Irons, Grey, Spher., Melleable	<300 HB	2	0.1	130				0.055	0.071	0.085	0.097	0.109	0.122	0.148
	N	Aluminiums, Aluminiums Alloys	<6% Si													
	S	Titanium , Titanium Alloys	<1100N/mm²													
	S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	1.5	0.1	50				0.067	0.087	0.104	0.119	0.134	0.149	0.181

Technical Data provided should be considered advisory only as variations may be necessary depending on the particular application