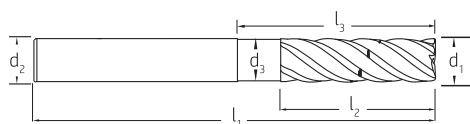


NTC MILL

5 Flute 40° Helix & Unequal Pitch Endmills with Chipsplitters
Corner Chamfer

NTC 031
NTC 041
NTC 051



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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

3xd										
6.0	-0.025	6	5.8	18.0	25	62	0.20	5	NTCA 0310P 0600	NTCA 0311P 0600
8.0	-0.025	8	7.6	24.0	30	68	0.20	5	NTCA 0310P 0800	NTCA 0311P 0800
10.0	-0.035	10	9.5	30.0	35	80	0.30	5	NTCA 0310P 1000	NTCA 0311P 1000
12.0	-0.035	12	11.5	36.0	45	93	0.35	5	NTCA 0310P 1200	NTCA 0311P 1200
16.0	-0.035	16	15.5	48.0	55	108	0.40	5	NTCA 0310P 1600	NTCA 0311P 1600
20.0	-0.035	20	19.5	60.0	70	126	0.50	5	NTCA 0310P 2000	NTCA 0311P 2000

4xd										
6.0	-0.025	6	5.8	24.0	29	70	0.20	5	NTCA 0410P 0600	NTCA 0411P 0600
8.0	-0.025	8	7.6	32.0	37	79	0.20	5	NTCA 0410P 0800	NTCA 0411P 0800
10.0	-0.035	10	9.5	40.0	45	90	0.30	5	NTCA 0410P 1000	NTCA 0411P 1000
12.0	-0.035	12	11.5	48.0	53	97	0.35	5	NTCA 0410P 1200	NTCA 0411P 1200
16.0	-0.035	16	15.5	64.0	69	129	0.40	5	NTCA 0410P 1600	NTCA 0411P 1600
20.0	-0.035	20	19.5	80.0	85	151	0.50	5	NTCA 0410P 2000	NTCA 0411P 2000

5xd										
6.0	-0.025	6	5.8	30.0	35	78	0.20	5	NTCA 0510P 0600	NTCA 0511P 0600
8.0	-0.025	8	7.6	40.0	45	90	0.20	5	NTCA 0510P 0800	NTCA 0511P 0800
10.0	-0.035	10	9.5	50.0	55	100	0.30	5	NTCA 0510P 1000	NTCA 0511P 1000
12.0	-0.035	12	11.5	60.0	65	120	0.35	5	NTCA 0510P 1200	NTCA 0511P 1200
16.0	-0.035	16	15.5	80.0	85	149	0.40	5	NTCA 0510P 1600	NTCA 0511P 1600
20.0	-0.035	20	19.5	100.0	105	175	0.50	5	NTCA 0510P 2000	NTCA 0511P 2000

STEELS

INOX

SUPERNOX

CHIPSPLITTERS

Aluminiums

ROCKSTARS

MICRO MILLS

UNIVERSAL

DRILLS

	MATERIAL		Hardness	ap max xD	ae max xD	Vc (m/min)	fz (mm/z) Ø					
	TROCHOIDAL MILLING [NTC 0310P] [3xd]					6	8	10	12	16	20	
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	3	0.03-0.14	240-400	0.038-0.081	0.050-0.108	0.070-0.150	0.083-0.177	0.101-0.216	0.126-0.270
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	3	0.03-0.14	210-350	0.038-0.081	0.050-0.108	0.063-0.135	0.070-0.150	0.076-0.162	0.101-0.216
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	3	0.03-0.14	240-400	0.032-0.069	0.045-0.146	0.063-0.135	0.076-0.162	0.088-0.189	0.113-0.243
M	Stainless Steel : Easy To Machine	<750 N/mm²										
	Stainless Steel : Difficult To Machine	<950 N/mm²	3	0.03-0.14	120-200	0.038-0.081	0.050-0.108	0.063-0.135	0.078-0.168	0.088-0.189	0.101-0.216	
K	Cast Irons, Grey, Spher., Melleable	<300 HB	3	0.03-0.14	210-350	0.038-0.081	0.050-0.108	0.063-0.135	0.070-0.150	0.076-0.162	0.101-0.216	
N	Aluminiums, Aluminiums Alloys	<6% Si										
S	Titanium , Titanium Alloys	<1100N/mm²										
S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	3	0.03-0.14	98-163	0.038-0.081	0.050-0.108	0.063-0.135	0.076-0.162	0.083-0.177	0.101-0.216	
	TROCHOIDAL MILLING [NTC 0410P] [4xd]											
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	4	0.03-0.14	182-396	0.045-0.090	0.063-0.126	0.078-0.157	0.095-0.190	0.113-0.227	0.139-0.284
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	4	0.03-0.14	154-336	0.038-0.076	0.050-0.101	0.063-0.126	0.070-0.140	0.076-0.151	0.101-0.205
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	4	0.03-0.14	176-384	0.032-0.064	0.045-0.090	0.063-0.126	0.076-0.151	0.088-0.176	0.113-0.231
M	Stainless Steel : Easy To Machine	<750 N/mm²										
	Stainless Steel : Difficult To Machine	<950 N/mm²	4	0.03-0.14	88-192	0.038-0.076	0.050-0.101	0.063-0.126	0.078-0.157	0.088-0.176	0.101-0.205	
K	Cast Irons, Grey, Spher., Melleable	<300 HB	4	0.03-0.14	154-336	0.038-0.076	0.050-0.101	0.063-0.126	0.070-0.140	0.076-0.151	0.101-0.205	
N	Aluminiums, Aluminiums Alloys	<6% Si										
S	Titanium , Titanium Alloys	<1100N/mm²										
S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	4	0.03-0.14	72-156	0.032-0.064	0.045-0.090	0.057-0.115	0.063-0.126	0.083-0.165	0.101-0.205	
	TROCHOIDAL MILLING [NTC 0510P] [5xd]											
	P	Steels, Alloy Steels and Tool Steels	<850 N/mm²	5	0.03-0.14	182-396	0.045-0.090	0.063-0.126	0.078-0.157	0.095-0.190	0.113-0.227	0.139-0.284
		Steels, Alloy Steels and Tool Steels	850-1200 N/mm²	5	0.03-0.14	154-336	0.038-0.076	0.050-0.101	0.063-0.126	0.070-0.140	0.076-0.151	0.101-0.205
		Steels, Alloy Steels and Tool Steels	<1400 N/mm²	5	0.03-0.14	176-384	0.032-0.064	0.045-0.090	0.063-0.126	0.076-0.151	0.088-0.176	0.113-0.231
M	Stainless Steel : Easy To Machine	<750 N/mm²										
	Stainless Steel : Difficult To Machine	<950 N/mm²	5	0.03-0.14	88-192	0.038-0.076	0.050-0.101	0.063-0.126	0.078-0.157	0.088-0.176	0.101-0.205	
K	Cast Irons, Grey, Spher., Melleable	<300 HB	5	0.03-0.14	154-336	0.038-0.076	0.050-0.101	0.063-0.126	0.070-0.140	0.076-0.151	0.101-0.205	
N	Aluminiums, Aluminiums Alloys	<6% Si										
S	Titanium , Titanium Alloys	<1100N/mm²										
S	HRSA (Nickel Alloys, Co. Alloys)	<1300N/mm²	5	0.03-0.14	72-156	0.032-0.064	0.045-0.090	0.057-0.115	0.063-0.126	0.083-0.165	0.101-0.205	

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