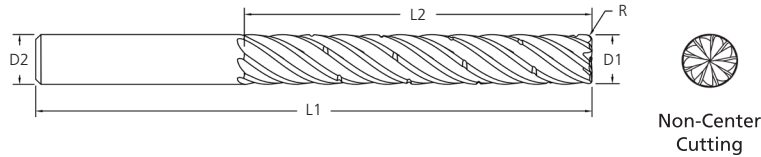




Where **high performance** is the **standard**

# TuffCut® XT9 Series 380CB



### Features

- Uneven 9 flute design
- ALtima® Xtreme coating
- Staggered chipbreaker technology

### Benefits

- High feed rates with reduced harmonics for stable machining
- Excellent high-heat and wear resistance
- Reduced cutting forces and excellent chip management

ALtima® Xtreme		Diameter			Shank		OAL		Flute Length		Corner Radius	
		D1			D2 (h6)		L1		L2		R	
Tool No.	EDP	Inch	mm	Decimal	Inch	mm	Inch	mm	Inch	mm	Inch	mm
380CBM0800-0.5RAX	38050	-	8	.3150	-	8	-	63	-	22	-	0.5
380CBM0800-1.0RAX	38051	-	8	.3150	-	8	-	63	-	22	-	1.0
380CB37511AX	38052	3/8	-	.3750	3/8	-	2-1/2	-	1	-	.010	-
380CB37512AX	38053	3/8	-	.3750	3/8	-	2-1/2	-	1	-	.015	-
380CB37513AX	38054	3/8	-	.3750	3/8	-	2-1/2	-	1	-	.020	-
380CB37514AX	38055	3/8	-	.3750	3/8	-	2-1/2	-	1	-	.030	-
380CBM1000-0.5RAX	38056	-	10	.3937	-	10	-	72	-	27	-	0.5
380CBM1000-1.0RAX	38057	-	10	.3937	-	10	-	72	-	27	-	1.0
380CBM1200-0.5RAX	38058	-	12	.4724	-	12	-	84	-	32	-	0.5
380CBM1200-1.0RAX	38059	-	12	.4724	-	12	-	84	-	32	-	1.0
380CB50011AX	38060	1/2	-	.5000	1/2	-	3	-	1-1/4	-	.010	-
380CB50012AX	38061	1/2	-	.5000	1/2	-	3	-	1-1/4	-	.015	-
380CB50013AX	38062	1/2	-	.5000	1/2	-	3	-	1-1/4	-	.020	-
380CB50014AX	38063	1/2	-	.5000	1/2	-	3	-	1-1/4	-	.030	-
380CB50016AX	38064	1/2	-	.5000	1/2	-	3	-	1-1/4	-	.060	-
380LCB5004AX	38065	1/2	-	.5000	1/2	-	3-1/2	-	1-3/4	-	.030	-
380CB62512AX	38066	5/8	-	.6250	5/8	-	3-1/2	-	1-1/4	-	.015	-
380CB62514AX	38067	5/8	-	.6250	5/8	-	3-1/2	-	1-1/4	-	.030	-
380CB62516AX	38068	5/8	-	.6250	5/8	-	3-1/2	-	1-1/4	-	.060	-
380LCB6254AX	38069	5/8	-	.6250	5/8	-	4	-	1-7/8	-	.030	-
380CBM1600-0.5RAX	38070	-	16	.6299	-	16	-	92	-	42	-	0.5
380CBM1600-1.0RAX	38071	-	16	.6299	-	16	-	92	-	42	-	1.0
380CB75012AX	38072	3/4	-	.7500	3/4	-	4	-	1-1/2	-	.015	-
380CB75014AX	38073	3/4	-	.7500	3/4	-	4	-	1-1/2	-	.030	-
380CB75016AX	38074	3/4	-	.7500	3/4	-	4	-	1-1/2	-	.060	-
380CB75018AX	38075	3/4	-	.7500	3/4	-	4	-	1-1/2	-	.120	-
380LCB7504AX	38076	3/4	-	.7500	3/4	-	5	-	2-1/4	-	.030	-
380CBM2000-0.5RAX	38077	-	20	.7874	-	20	-	104	-	52	-	0.5
380CBM2000-1.0RAX	38078	-	20	.7874	-	20	-	104	-	52	-	1.0



Where **high performance** is the **standard**

## 380CB Series Recommended Cutting Data - Profile Milling

Inch (visit [www.maford.com](http://www.maford.com) for metric speed and feed data)

Workpiece Material Group	ISO	Hardness	Coolant • Preferred o Possible x Not Possible			Profiling (ae)		End Mill Diameter (inch)			
								3/8	1/2	5/8	3/4
						5%	10%	Multiply fz by this Factor based on ae. When finishing, use the standard fz per chart below. Only add chip thinning when roughing or semi-finishing.			
			Max.	Air	MMS	vc - SFM	fz - in/tooth				
Low Carbon Steels 1018, 1020	P	up to 28 Rc	•	•	•	1475	1150	.0039	.0047	.0060	.0078
Medium Carbon Steels 1140, 1145	P	28 to 38 Rc	•	•	•	1130	900	.0039	.0047	.0060	.0078
Alloy Steels 4140, 4145	P	28 to 44 Rc	•	•	•	1035	840	.0039	.0047	.0060	.0078
Die / Tool Steels A2, D2, H13, P20	P	28 to 44 Rc	•	•	•	900	725	.0039	.0047	.0060	.0078
Stainless Steel - Easy to Machine 430F, 301, 303, 410, 416 Annealed, 420F, 430	M	up to 28 Rc	•	x	o	675	545	.0015-.0020	.0020-.0031	.0020-.0033	.0022-.0035
Stainless Steel - Austenitic 301, 302, 303 High Tensile, 304, 304L, 305, 420, 15-5PH, 17-4PH, 17-7PH	M	up to 28 Rc	•	x	o	525	430	.0015-.0020	.0020-.0031	.0020-.0033	.0022-.0035
Stainless Steel - Difficult to Machine 302B, 304B, 309, 310, 316, 316B, 316L, 316Ti, 317, 317L, 321	M	up to 28 Rc	•	x	o	410	330	.0015-.0020	.0020-.0031	.0020-.0033	.0022-.0035
Stainless Steel - Difficult to Machine 17-4 PH, PH13-8Mo, Nitronics	M	over 28 Rc	•	x	o	525	430	.0015-.0020	.0020-.0031	.0020-.0033	.0022-.0035
Cobalt Chrome Alloys	M		•	x	o	410	325	.0020	.0031	.0033	.0035
Duplex (22%)	M		•	x	o	245	195	.0020	.0031	.0033	.0035
Super Duplex (25%)	M	•	x	o	245	195	.0020	.0031	.0033	.0035	
High Temp Alloys	S	up to 42 Rc	•	x	x	180	150	.0015-.0020	.0020-.0031	.0020-.0033	.0022-.0035
Inconel	S		•	x	x	180	150	.0010-.0016	.0010-.0016	.0010-.0017	.0011-.0018
Titanium Alloys 6Al-4V, 5Al-2.5 Sn, 6Al-2 Sn-4Zr-6Mo, 3Al-8V-6Cr4Mo-4Zr, 10V-2Fe-3Al, 13V-11Cr-3Al	S	up to 42 Rc	•	x	x	375	350	.0010-.0016	.0010-.0016	.0010-.0017	.0011-.0018
Cast-Iron - Gray CG, ASTM A48, CLASS 20, 25, 30, 35, SAE J431C, GRADES G1800, G3000, G3500, GG 10, 15, 20, 25, 30, 35, 40	K	up to 240 HB	•	o	o	1625	1295	.0039	.0047	.0060	.0078
Cast Iron - Ductile & Malleable CGI 60-40-18, 65-45-12, D4018, D4512, D5506, 32510, 35108, M3210, M4504, M5503, 250, 300, 350, 400, 450	K	over 240 HB	•	o	o	675	540	.0031	.0039	.0047	.0078
Hardened Steels	H	40-50 Rc	•	o	o	610	495	.0024	.0030	.0040	.0048
Hardened Steels		50-55 Rc	•	o	o	510	410	.0016	.0018	.0024	.0028
Hardened Steels		>55 Rc	•	o	o	330	310	.0010	.0015	.0018	.0021

**Spindle Maximum** - Should the calculated spindle speed be more than your actual spindle maximum, use this formula:  
 (Calculated Feed x Spindle Maximum)/Calculated Speed



ISO 9001:2015 Certified

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