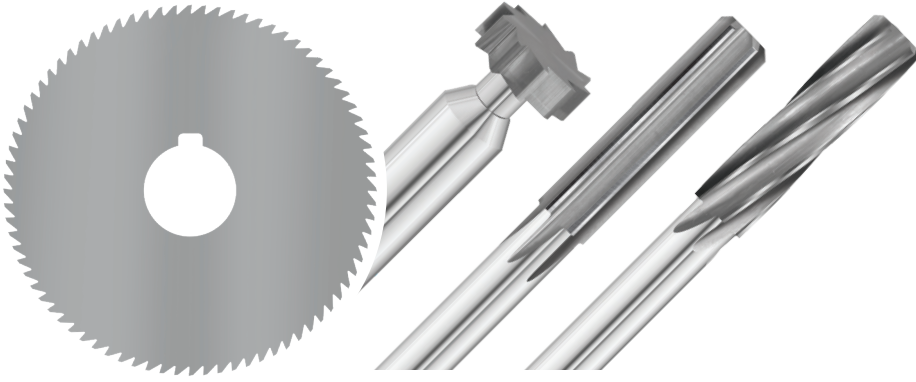


FULLERTON



JIT SERVICES

989.799.4550 | 800.248.8315
sales@fullertontool.com
fullertontool.com



JIT Reamers

1410 JIT Decimal Size Reamers



Straight Flutes For all types of general reaming applications.



RH Spiral Flutes For blind holes and abrasive, ductile materials. Do not use for holes with interruptions unless material is reasonably soft.



LH Spiral Flutes Produces better finishes on hard materials such as heat-treated steels. Shear action is excellent for holes with interruptions, e.g., keyways, elongated slots, etc.



CHAMFER



COATING



STUB



IMPERIAL



VARIABLE

- Straight Flute Standard Sizes available in 1400 Series Stub
- Available with Coatings at Tolerances as Low as .0001" (Additional Charges May Apply)
- Manufactured using Female and Male Centers for improved concentricity
- Male Centers on items up to .1124" (2.86mm)

SAME DAY DELIVERY IF ORDERED BY 11AM EST ADD 20% TO PRICE.

TOLERANCE:		
SHANK DIAMETER:	+ .0005"	- .0005"
	+ .013MM	- .013MM
CUTTING DIAMETER:		
UP TO .2500"	+ .0002"	- .0000"
OVER .2501"	+ .0003"	- .0000"
UP TO 6.35MM	+ .005MM	- .000MM
OVER 6.351MM	+ .008MM	- .000MM
.0001" TOLERANCES AVAILABLE (+20%)		



3:00 PM EST
ORDER DEADLINE

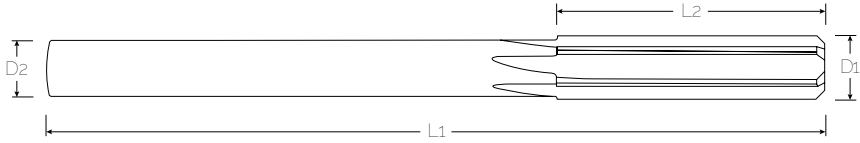
JIT
SERVICES

24-HOUR
JUST IN TIME
DELIVERY

12
PIECES
OR LESS
ALL STYLES

LIVE
CHAT

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SIZE RANGE D1	STYLE	L2	D2	L1	FLUTES	EDP Number		
						ST	RH	LH
.0312 - .0394	STB	3/8	.0312	1 1/2	4	1410S01	1410R01	1410L01
.0395 - .0484	STB	3/8	.0312	1 1/2	4	1410S02	1410R02	1410L02
.0485 - .0574	STB	3/8	.0469	1 1/2	4	1410S03	1410R03	1410L03
.0575 - .0654	STB	3/8	.0469	1 1/2	4	1410S04	1410R04	1410L04
.0655 - .0804	STB	1/2	.0625	2	4	1410S05	1410R05	1410L05
.0805 - .0964	STB	1/2	.0781	2	4	1410S06	1410R06	1410L06
.0965 - .1124	STB	5/8	.0938	2 1/4	4	1410S07	1410R07	1410L07
.1125 - .1284	STB	5/8	.1094	2 1/4	4	1410S08	1410R08	1410L08
.1285 - .1444	STB	3/4	.1250	2 1/2	4	1410S09	1410R09	1410L09
.1445 - .1594	STB	3/4	.1406	2 1/2	4	1410S10	1410R10	1410L10
.1595 - .1744	STB	7/8	.1562	2 3/4	4	1410S11	1410R11	1410L11
.1745 - .1914	STB	7/8	.1719	2 3/4	4	1410S12	1410R12	1410L12
.1915 - .2234	STB	1	.1875	3	6	1410S13	1410R13	1410L13
.2235 - .2544	STB	1	.2188	3	6	1410S14	1410R14	1410L14
.2545 - .2844	STB	1 1/8	.2500	3 1/4	6	1410S15	1410R15	1410L15
.2845 - .3164	STB	1 1/8	.2812	3 1/4	6	1410S16	1410R16	1410L16
.3165 - .3484	STB	1 1/4	.3125	3 1/2	6	1410S17	1410R17	1410L17
.3485 - .3794	STB	1 1/4	.3438	3 1/2	6	1410S18	1410R18	1410L18
.3795 - .4104	STB	1 1/2	.3750	4	6	1410S19	1410R19	1410L19
.4105 - .4414	STB	1 1/2	.4062	4	6	1410S20	1410R20	1410L20
.4415 - .4724	STB	1 1/2	.4375	4	6	1410S21	1410R21	1410L21
.4725 - .5054	STB	1 1/2	.4688	4	6	1410S22	1410R22	1410L22

Due to temperatures reached in the coating process, Fullerton Tool cannot guarantee concentricity on reamers with Cutting Diameter .3485" and over.

JIT Reamers

1450 JIT Decimal Size Reamers



Straight Flutes For all types of general reaming applications.



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LH Spiral Flutes Produces better finishes on hard materials such as heat-treated steels. Shear action is excellent for holes with interruptions, e.g., keyways, elongated slots, etc.



CHAMFER



COATING



STANDARD



IMPERIAL



- Straight Flute Standard Sizes available in 1400 Series Standard
- Available with Coatings at Tolerances as Low as .0001" (Additional Charges May Apply)
- Steel Shanks on items with Cutting Diameter .3485" and over Female Centers.

SAME DAY DELIVERY IF ORDERED BY 11AM EST ADD 20% TO PRICE.

TOLERANCE:		
1/2" DIAMETER SHANK:	+.0000"	-.0005"
	+.013MM	-.013MM
CUTTING HEAD DIAMETER:		
3/8" - 3/4" DIA	+.0100"	-.0150"
7/8" - 1 1/2" DIA	+.0120"	-.0170"
FACE WIDTH:	+.0000"	-.0005"
NECK LENGTH:	1/4"	



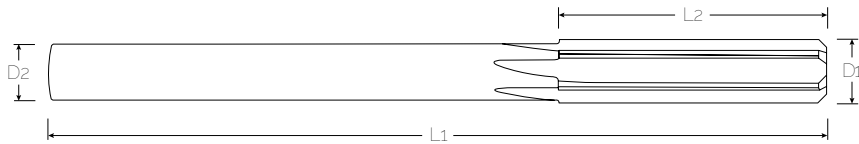
JIT SERVICES

24-HOUR
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DELIVERY

12
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ALL STYLES

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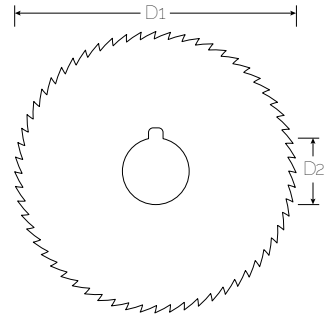
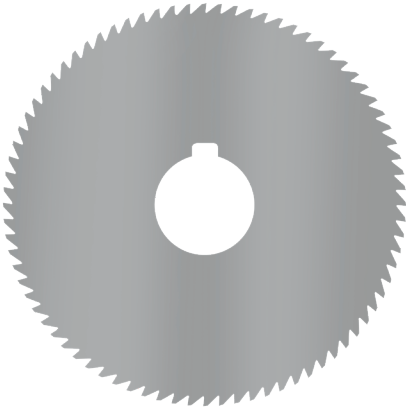


SIZE RANGE D1	STYLE	L2	D2	L1	FLUTES	STEEL SHANK	EDP Number		
							D1	RH	LH
.1105 - .1284	SD	7/8	.1094	3 1/2	4		1450S01	1450R01	1450L01
.1285 - .1444	SD	7/8	.1250	3 1/2	4		1450S02	1450R02	1450L02
.1445 - .1594	SD	1	.1406	4	4		1450S03	1450R03	1450L03
.1595 - .1744	SD	1	.1562	4	4		1450S04	1450R04	1450L04
.1745 - .1914	SD	1 1/8	.1719	4 1/2	4		1450S05	1450R05	1450L05
.1915 - .2234	SD	1 1/4	.1875	5	6		1450S06	1450R06	1450L06
.2235 - .2544	SD	1 1/2	.2188	6	6		1450S07	1450R07	1450L07
.2545 - .2844	SD	1 1/2	.2500	6	6		1450S08	1450R08	1450L08
.2845 - .3164	SD	1 5/8	.2812	6	6		1450S09	1450R09	1450L09
.3165 - .3484	SD	1 5/8	.3125	6	6		1450S10	1450R10	1450L10
.3485 - .3794	SD	1 3/4	.3438	7	6	✓	1450S11	1450R11	1450L11
.3795 - .4104	SD	1 3/4	.3750	7	6	✓	1450S12	1450R12	1450L12
.4105 - .4414	SD	1 3/4	.4062	7	6	✓	1450S13	1450R13	1450L13
.4415 - .4724	SD	1 3/4	.4375	8	6	✓	1450S14	1450R14	1450L14
.4725 - .5054	SD	1 3/4	.4688	8	6	✓	1450S15	1450R15	1450L15
.5055 - .5360	SD	1 7/8	.5000	9	6	✓	1450S16	1450R16	1450L16
.5361 - .5670	SD	1 7/8	.5000	9	6	✓	1450S16B	1450R16B	1450L16B
.5671 - .5990	SD	1 7/8	.5625	9	6	✓	1450S17	1450R17	1450L17
.5991 - .6300	SD	1 7/8	.5625	9	6	✓	1450S17B	1450R17B	1450L17B
.6301 - .6630	SD	2	.6250	9 1/2	6	✓	1450S18	1450R18	1450L18
.6631 - .6930	SD	2	.6250	9 1/2	6	✓	1450S18B	1450R18B	1450L18B
.6931 - .7250	SD	2	.6875	9 1/2	6	✓	1450S19	1450R19	1450L19
.7251 - .7560	SD	2	.6875	9 1/2	6	✓	1450S19B	1450R19B	1450L19B
.7561 - .7870	SD	2	.7500	10	8	✓	1450S20	1450R20	1450L20
.7871 - .8190	SD	2	.7812	10	8	✓	1450S21	1450R21	1450L21
.8191 - .8500	SD	2	.8125	10	8	✓	1450S22	1450R22	1450L22
.8501 - .8820	SD	2	.8438	10	8	✓	1450S23	1450R23	1450L23
.8821 - .9120	SD	2	.8750	10	8	✓	1450S24	1450R24	1450L24
.9121 - .9440	SD	2	.9062	10	8	✓	1450S25	1450R25	1450L25
.9441 - .9760	SD	2	.9375	10	8	✓	1450S26	1450R26	1450L26
.9761 - 1.0100	SD	2	.9688	10	8	✓	1450S27	1450R27	1450L27

Due to temperatures reached in the coating process, Fullerton Tool cannot guarantee concentricity on reamers with Cutting Diameter .3485" and over.

2450 Saws

2450 JIT Solid Carbide Saws



For Size Ranges: .25 - 3"

1-12 pieces, 24- Hours
13-25 pieces, 48-Hours
26-49 pieces, 5 Working Days
50+ pieces, Contact Fullerton Tool

For Size Ranges: > 3"

1-6 pieces, 24- Hours
7-12 pieces, 48-Hours
13-25 pieces, 5 Working Days
26-49 pieces, 10 Working Days
50+ pieces, Contact Fullerton Tool



1/4 - 6" Outside Diameters (OD) Available
1/8 - 1" Inside Diameter Available Depending on OD Size
.0060 - .2500" Thickness Available Depending on OD Size
.0005" Concavity per Inch of Diameter for Clearance

TOLERANCE:		
CUTTING DIAMETER:	+ .0150"	- .0150"
HOLE DIAMETER:	+ .0005"	- .0000"
THICKNESS:	+ .00025"	- .00025"

**12
PIECES
OR LESS**
ALL STYLES



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D1	SIZE RANGE	D2	TEETH	EDP Number
				UC
1/4	.0100 - .0350	1/8	12	2450001
5/16	.0100 - .0350	1/8	12	2450002
3/8	.0060 - .0259	1/8	14	2450003
	.0260 - .0630	1/8	14	2450004
1/2	.0060 - .0349	3/16	14	2450005
	.0350 - .0630	3/16	14	2450006
5/8	.0060 - .0149	1/4	16	2450007
	.0150 - .0409	1/4	16	2450008
3/4	.0410 - .0630	1/4	16	2450009
	.0060 - .0149	1/4	18	2450010
	.0150 - .0409	1/4	18	2450011
	.0410 - .0639	1/4	18	2450012
1	.0640 - .0949	1/4	18	2450013
	.0950 - .1300	1/4	18	2450014
	.0100 - .0199	1/4	20	2450015
	.0200 - .0409	1/4	20	2450018
	.0410 - .0639	1/4	20	2450021
	.0640 - .0949	1/4	20	2450024
	.0950 - .1300	1/4	20	2450027
	.0100 - .0199	5/16	20	2450016
	.0200 - .0409	5/16	20	2450019
	.0410 - .0639	5/16	20	2450022
	.0640 - .0949	5/16	20	2450025
	.0950 - .1300	5/16	20	2450028
	.0100 - .0199	3/8	20	2450017
	.0200 - .0409	3/8	20	2450020
.0410 - .0639	3/8	20	2450023	
.0640 - .0949	3/8	20	2450026	
.0950 - .1300	3/8	20	2450029	
1 1/4	.0100 - .0199	5/16	24	2450031
	.0200 - .0459	5/16	24	2450034
	.0460 - .0639	5/16	24	2450037
	.0640 - .0949	5/16	24	2450040
	.0950 - .1300	5/16	24	2450043
	.0100 - .0199	3/8	24	2450030
	.0200 - .0459	3/8	24	2450033
	.0460 - .0639	3/8	24	2450036
	.0640 - .0949	3/8	24	2450039
	.0950 - .1300	3/8	24	2450042
	.0100 - .0199	1/2	24	2450032
	.0200 - .0459	1/2	24	2450035
	.0460 - .0639	1/2	24	2450038

EDP offering continued on next page.

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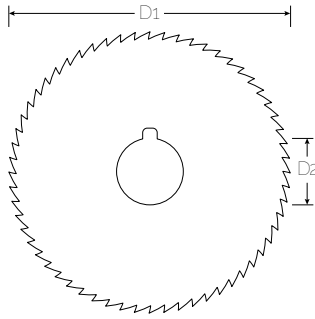
2450 Saws

2450 JIT Solid Carbide Saws

D1	SIZE RANGE	D2	TEETH	EDP Number
				UC
1 1/4	.0640 - .0949	1/2	24	2450041
	.0950 - .1300	1/2	24	2450044
1 1/2	.0100 - .0199	1/2	36	2450045
	.0200 - .0459	1/2	36	2450046
	.0460 - .0639	1/2	36	2450047
	.0640 - .0949	1/2	36	2450048
	.0950 - .1300	1/2	36	2450049
1 3/4	.0100 - .0199	1/2	38	2450050
	.0200 - .0459	1/2	38	2450051
	.0460 - .0639	1/2	38	2450052
	.0640 - .0949	1/2	38	2450053
	.0950 - .1300	1/2	38	2450054
2	.0100 - .0199	1/2	40	2450055
	.0200 - .0459	1/2	40	2450057
	.0460 - .0639	1/2	40	2450059
	.0640 - .0949	1/2	40	2450061
	.0950 - .1300	1/2	40	2450063
	.0100 - .0199	1	40	2450056
	.0200 - .0459	1	40	2450058
	.0460 - .0639	1	40	2450060
	.0640 - .0949	1	40	2450062
	.0950 - .1300	1	40	2450064
2 1/4	.0100 - .0199	5/8	44	2450065
	.0200 - .0459	5/8	44	2450067
	.0460 - .0639	5/8	44	2450069
	.0640 - .0949	5/8	44	2450071
	.0950 - .1300	5/8	44	2450073
	.0100 - .0199	1	44	2450066
	.0200 - .0459	1	44	2450068
	.0460 - .0639	1	44	2450070
	.0640 - .0949	1	44	2450072
	.0950 - .1300	1	44	2450074



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D1	SIZE RANGE	D2	TEETH	EDP Number	
				UC	
2 1/2	.0100 - .0199	1	48		2450075
	.0200 - .0459	1	48		2450076
	.0460 - .0639	1	48		2450077
	.0640 - .0949	1	48		2450078
	.0950 - .1300	1	48		2450079
2 3/4	.0100 - .0199	1	60		2450080
	.0200 - .0459	1	60		2450081
	.0460 - .0649	1	60		2450082
	.0650 - .0949	1	60		2450083
	.0950 - .1300	1	60		2450084
3	.0100 - .0199	1	72		2450085
	.0200 - .0459	1	72		2450086
	.0460 - .0649	1	72		2450087
	.0650 - .0949	1	72		2450088
	.0950 - .1259	1	72		2450089
	.1260 - .1889	1	72		2450090
	.1890 - .2500	1	72		2450091
3 1/2	.0200 - .0399	1	76		2450092
	.0400 - .0649	1	76		2450093
	.0650 - .0949	1	76		2450094
	.0950 - .1300	1	76		2450095
	.0200 - .0399	1	80		2450096
4	.0400 - .0639	1	80		2450097
	.0640 - .0949	1	80		2450098
	.0950 - .1259	1	80		2450099
	.1260 - .1889	1	80		2450100
	.1890 - .2500	1	80		2450101
5	.0450 - .0639	1	100		2450102
	.0640 - .0949	1	100		2450103
	.0950 - .1300	1	100		2450104
6	.0450 - .0639	1	120		2450105
	.0640 - .0949	1	120		2450106
	.0950 - .1300	1	120		2450107

JIT Keyseat Cutters

4375 | 4375E Keyseat Cutters



Straight Flutes

1/2" Diameter Steel Shank

1 1/8 - 1 1/2" Cutter Diameter are Solid Carbide Dura Carb III

Need a different size? We can alter our Keyseat Cutter face widths per your requirements. Contact us at **800.248.8315** or **sales@fullertontool.com** for more information.



COATING



IMPERIAL



VARIABLE

TOLERANCE:		
1/2" DIAMETER SHANK:	+ .0000"	- .0005"
	+ .013MM	- .013MM
CUTTING HEAD DIAMETER:		
3/8" - 3/4" DIA	+ .0100"	- .0150"
7/8" - 1 1/2" DIA	+ .0120"	- .0170"
FACE WIDTH:	+ .0000"	- .0005"
NECK LENGTH:	1/4"	



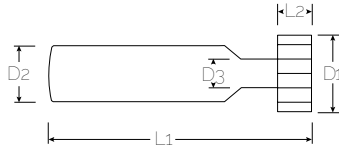
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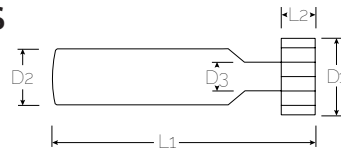


D1	AMERICAN STANDARDS NUMBER	L2	D3	D2	L1	FLUTES	SOLID CARBIDE SHANK	EDP Number
								UC
3/8		1/32	.2030	1/2	2 1/32	8		43900
		3/64	.2030	1/2	2 3/64	8		43901
	203	1/16	.2030	1/2	2 1/16	8		43302
	303	3/32	.2030	1/2	2 3/32	8		43303
	403	1/8	.2030	1/2	2 1/8	8		43403
1/2		1/32	.2500	1/2	2 1/32	10		43902
		3/64	.2500	1/2	2 3/64	10		43903
	204	1/16	.2500	1/2	2 1/16	10		43240
		5/64	.2500	1/2	2 5/64	10		43904
	304	3/32	.2500	1/2	2 3/32	10		43304
	404	7/64	.2500	1/2	2 7/64	10		43905
5/8		1/32	.2810	1/2	2 1/32	10		43906
		3/64	.2810	1/2	2 3/64	10		43907
		1/16	.2810	1/2	2 1/16	10		43908
		5/64	.2810	1/2	2 5/64	10		43909
	305	3/32	.2810	1/2	2 3/32	10		43305
		7/64	.2810	1/2	2 7/64	10		43910
	405	1/8	.2810	1/2	2 1/8	10		43405
		9/64	.2810	1/2	2 9/64	10		43911
	505	5/32	.2810	1/2	2 5/32	10		43505
	605	3/16	.2810	1/2	2 3/16	10		43605
3/4		1/32	.2810	1/2	2 1/32	10		43912
		3/64	.2810	1/2	2 3/64	10		43913
		1/16	.2810	1/2	2 1/16	10		43914
		5/64	.2810	1/2	2 5/64	10		43915
		3/32	.2810	1/2	2 3/32	10		43916
		7/64	.2810	1/2	2 7/64	10		43917
	406	1/8	.2810	1/2	2 1/8	10		43406
		9/64	.2810	1/2	2 9/64	10		43918
	506	5/32	.2810	1/2	2 5/32	10		43506
	606	3/16	.2810	1/2	2 3/16	10		43606
		13/64	.2810	1/2	2 13/64	10		43919
		7/32	.2810	1/2	2 7/32	10		43920
		15/64	.2810	1/2	2 15/64	10		43921
	806	1/4	.2810	1/2	2 1/4	10		43806

EDP offering continued on next page.

JIT Keyseat Cutters

4375 | 4375E Keyseat Cutters



D1	AMERICAN STANDARDS NUMBER	L2	D3	D2	L1	FLUTES	SOLID CARBIDE SHANK	EDP Number
								UC
7/8		1/16	.2810	1/2	2 1/16	12		43922
		1/8	.2810	1/2	2 1/8	12		43923
	507	5/32	.2810	1/2	2 5/32	12		43507
	607	3/16	.2810	1/2	2 3/16	12		43607
	707	7/32	.2810	1/2	2 7/32	12		43707
	807	1/4	.2810	1/2	2 1/4	12		43807
1		1/32	.2810	1/2	2 1/32	12		43924
		3/64	.2810	1/2	2 3/64	12		43925
		1/16	.2810	1/2	2 1/16	12		43926
		5/64	.2810	1/2	2 5/64	12		43927
		3/32	.2810	1/2	2 3/32	12		43928
		1/8	.2810	1/2	2 1/8	12		43929
		5/32	.2810	1/2	2 5/32	12		43930
	608	3/16	.2810	1/2	2 3/16	12		43608
	708	7/32	.2810	1/2	2 7/32	12		43708
	808	1/4	.2810	1/2	2 1/4	12		43808
1 1/8		1/8	.2810	1/2	2 1/8	14	✓	43931
	609	3/16	.2810	1/2	2 3/16	14	✓	43609
	709	7/32	.2810	1/2	2 7/32	14	✓	43709
	809	1/4	.2810	1/2	2 1/4	14	✓	43809
1 1/4		1/32	.2810	1/2	2 1/32	14	✓	43932
		1/16	.2810	1/2	2 1/16	14	✓	43933
		3/32	.2810	1/2	2 3/32	14	✓	43934
		1/8	.2810	1/2	2 1/8	14	✓	43935
		5/32	.2810	1/2	2 5/32	14	✓	43936
	610	3/16	.2810	1/2	2 3/16	14	✓	43610
	710	7/32	.2810	1/2	2 7/32	14	✓	43710
	810	1/4	.2810	1/2	2 1/4	14	✓	43810
1 1/2		1/32	.3750	1/2	2 1/32	16	✓	43937
		1/16	.3750	1/2	2 1/16	16	✓	43938
		3/32	.3750	1/2	2 3/32	16	✓	43939
		1/8	.3750	1/2	2 1/8	16	✓	43940
		3/16	.3750	1/2	2 3/16	16	✓	43941
	812	1/4	.3750	1/2	2 1/4	16	✓	43812
	1012	5/16	.3750	1/2	2 5/16	16	✓	43000
	1212	3/8	.3750	1/2	2 3/8	16	✓	43212



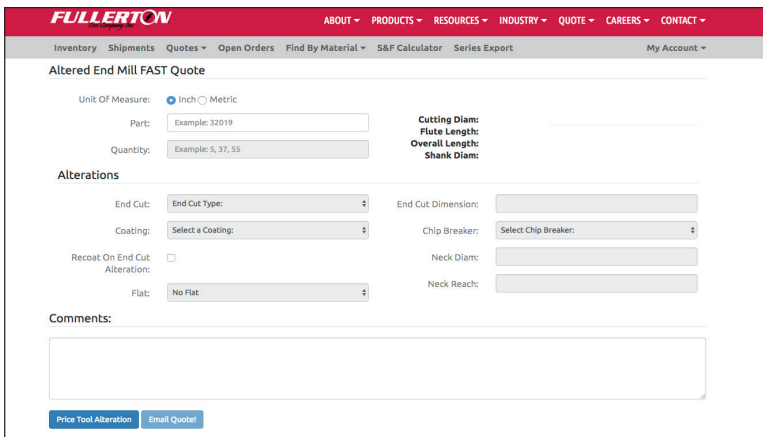
Need pricing or help finding the right size tool? Our Customer Service team is only a click away with LIVE CHAT at fullertontool.com! Customer Service can also be contacted at 800.248.8315 or sales@fullertontool.com



Altered End Mill FAST Quotes

Get Pricing Instantly with FAST Quotes!

With our new **Altered End Mill FAST Quotes** you can type in almost any standard end mill part number, make slight modifications and generate instant pricing and lead times.



The screenshot shows the 'Altered End Mill FAST Quote' tool interface. At the top, there is a navigation bar with 'FULLERTON' and various menu items: ABOUT, PRODUCTS, RESOURCES, INDUSTRY, QUOTE, CAREERS, CONTACT. Below this is a secondary navigation bar with links: Inventory, Shipments, Quotes, Open Orders, Find By Material, S&P Calculator, Series Export, and My Account. The main content area is titled 'Altered End Mill FAST Quote' and contains several input fields and dropdown menus. On the left, there are fields for 'Unit Of Measure' (radio buttons for Inch and Metric), 'Part' (with an example '32019'), and 'Quantity' (with an example '5, 37, 55'). On the right, there are fields for 'Cutting Diam:', 'Flute Length:', 'Overall Length:', and 'Shank Diam:'. Below these are 'Alterations' options: 'End Cut:' with a dropdown for 'End Cut Type', 'Coating:' with a dropdown for 'Select a Coating', 'Reccoat On End Cut Alteration:' with a checkbox, and 'Flat:' with a dropdown for 'No Flat'. On the right side of the alterations, there are fields for 'End Cut Dimension:', 'Chip Breaker:' with a dropdown for 'Select Chip Breaker', 'Neck Diam:', and 'Neck Reach:'. At the bottom, there is a 'Comments:' text area and two buttons: 'Price Tool Alteration' and 'Email Quote!'.

Make the following modifications to Fullerton standard end mills:

- Corner Radius
- Neck Relief
- Coatings
- Weldon Flats
- Chipbreakers

Need more than slight alterations? Our **Special End Mills FAST Quote** tool will also generate instant pricing and turnaround time.

You can find both of those quoting tools under FAST Quotes in the top grey bar of our website when logged in. You must have a Fullerton account to access **FAST Quotes**. If you don't have an account already, you can visit fullertontool.com and select **Login/Sign Up**.

Speeds & Feeds

Saw Speeds & Feeds

SFM (ft/min)		Low SI Aluminum <10% (1200-1500) SFM (ft/min)	High SI Aluminum >10% (750-1000) SFM (ft/min)	Composites (0-0) SFM (ft/min)	Plastics (1500-2000) SFM (ft/min)	Brass & Copper (400-550) SFM (ft/min)	Graphite (0-0) SFM (ft/min)	Cast Iron (150-350) SFM (ft/min)	Hardened Steel > 48RC (60-140) SFM (ft/min)	Mild Steels < 48 RC (150-400) SFM (ft/min)	Stainless Steels (75-175) SFM (ft/min)	Super Alloys (50-150) SFM (ft/min)	Titanium (75-200) SFM (ft/min)
Diameter	# of Teeth	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting
		Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough
1/4	12	.0040	-	.0040	.0040	.0040	.0040	.0030	.0020	.0020	.0020	.0020	.0020
5/16	12	.0042	-	.0042	.0042	.0042	.0042	.0033	.0021	.0021	.0021	.0021	.0021
3/8	14	.0045	-	.0045	.0045	.0045	.0045	.0035	.0022	.0022	.0022	.0022	.0022
1/2	14	.0048	-	.0048	.0048	.0048	.0048	.0038	.0023	.0023	.0023	.0023	.0023
5/8	16	.0050	-	.0050	.0050	.0050	.0050	.0040	.0024	.0024	.0024	.0024	.0024
3/4	18	.0052	-	.0052	.0052	.0052	.0052	.0042	.0025	.0025	.0025	.0025	.0025
1	20	.0055	-	.0055	.0055	.0055	.0055	.0045	.0026	.0026	.0026	.0026	.0026
1 1/4	24	.0058	-	.0058	.0058	.0058	.0058	.0049	.0027	.0027	.0027	.0027	.0027
1 1/2	36	.0060	-	.0060	.0060	.0060	.0060	.0050	.0028	.0028	.0028	.0028	.0028
1 3/4	38	.0062	-	.0062	.0062	.0062	.0062	.0052	.0029	.0029	.0029	.0029	.0029
2	40	.0065	-	.0065	.0065	.0065	.0065	.0055	.0030	.0030	.0030	.0030	.0030
2 1/4	44	.0068	-	.0068	.0068	.0068	.0068	.0058	.0033	.0033	.0031	.0031	.0031
2 1/2	48	.0070	-	.0070	.0070	.0070	.0070	.0060	.0035	.0035	.0032	.0032	.0032
2 3/4	60	.0072	-	.0072	.0072	.0072	.0072	.0062	.0038	.0038	.0033	.0033	.0033
3	72	.0075	-	.0075	.0075	.0075	.0075	.0065	.0040	.0040	.0034	.0034	.0034
3 1/2	76	.0078	-	.0078	.0078	.0078	.0078	.0068	.0042	.0042	.0035	.0035	.0035
4	80	.0080	-	.0080	.0080	.0080	.0080	.0070	.0045	.0045	.0037	.0037	.0037
5	100	.0080	-	.0080	.0080	.0080	.0080	.0070	.0048	.0048	.0039	.0039	.0039
6	120	.0080	-	.0080	.0080	.0080	.0080	.0070	.0050	.0050	.0040	.0040	.0040

IPT (in/tooth)

Keyseat Cutter Speeds & Feeds

SFM (ft/min)		Low SI Aluminum <10% (1200-1500) SFM (ft/min)	High SI Aluminum >10% (750-1000) SFM (ft/min)	Composites (0-0) SFM (ft/min)	Plastics (1500-2000) SFM (ft/min)	Brass & Copper (400-550) SFM (ft/min)	Graphite (0-0) SFM (ft/min)	Cast Iron (150-350) SFM (ft/min)	Hardened Steel > 48RC (60-140) SFM (ft/min)	Mild Steels < 48 RC (150-400) SFM (ft/min)	Stainless Steels (75-175) SFM (ft/min)	Super Alloys (50-150) SFM (ft/min)	Titanium (75-200) SFM (ft/min)
Diameter	# of Teeth	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting	Slotting
		Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough	Rough
10	8	.0325	.0307	-	.0332	.0352	-	.0582	.1558	.0727	.0540	.0686	.0665
12	10	.0305	.0343	-	.0296	.0366	-	.0437	.1140	.0532	.0406	.0460	.0455
15	10	.0293	.0322	-	.0286	.0342	-	.0374	.0987	.0457	.0356	.0364	.0361
20	10	.0280	.0320	-	.0278	.0321	-	.0332	.0887	.0399	.0332	.0315	.0296
22	12	.0235	.0270	-	.0232	.0269	-	.0280	.0754	.0345	.0283	.0255	.0251
25	12	.0300	.0345	-	.0300	.0338	-	.0332	.0887	.0399	.0328	.0302	.0286
28	14	.0248	.0293	-	.0240	.0278	-	.0272	.0680	.0285	.0267	.0214	.0214
31	14	.0242	.0284	-	.0228	.0260	-	.0237	.0643	.0254	.0230	.0212	.0213
38	16	.0204	.0224	-	.0190	.0215	-	.0192	.0490	.0187	.0178	.0166	.0187

MMPT (mm/tooth)



Reamer Speeds & Feeds

Material	Speed SFM	Feed (IPR)			SMPM	Feed (MMPR)		
		.1250	.2500	.5000		3.00mm	6.00mm	12.00mm
High Si Aluminum >10%	75-200	.0040	.0080	.0120	22-60	.1016	.2032	.3048
Low Si Aluminum <10%	100-300	.0050	.0100	.0150	30-91	.1270	.2540	.3810
Composites	-	-	-	-	-	-	-	-
Plastics	-	-	-	-	-	-	-	-
Brass & Copper	75-150	.0030	.0040	.0060	22-45	.0762	.1016	.1524
Graphite	-	-	-	-	-	-	-	-
Cast Iron								
Soft	75-150	.0050	.0080	.0120	22-45	.1270	.2032	.3048
Medium	60-100	.0050	.0080	.0120	18-30	.1270	.2032	.3048
Malleable	40-100	.0030	.0060	.0100	12-30	.0762	.1524	.2540
Bronze	65-125	.0030	.0040	.0060	19-38	.0762	.1016	.1524
Hardened Steels	30-90	.0020	.0020	.0040	9-27	.0508	.0508	.1016
Steels								
Low Carbon	60-125	.0030	.0060	.0100	18-28	.0762	.1524	.2540
Medium Carbon	100-150	.0030	.0050	.0080	30-45	.0762	.1270	.2032
Stainless Steels								
Free Machining	50-90	.0050	.0080	.0120	15-27	.1270	.2032	.3048
Work Machining	30-75	.0030	.0060	.0100	9-22	.0762	.1524	.2540
Super Alloys	40-80	.0025	.0035	.0055	12-24	.0635	.0889	.1397
Titanium								
Soft	50-125	.0030	.0060	.0100	15-38	.0762	.1524	.2540
Hard	20-60	.0020	.0040	.0080	6-18	.0508	.1016	.2032

The parameters listed for tool series that are stocked uncoated are based on running an uncoated tool. If a coating is applied to the tools, the SMM can be increased by approximately 25%. All speed and feed recommendations should be considered only as a starting point. Start with conservative speeds and feeds while analyzing the rigidity of the process. Then cautiously progress incrementally to achieve optimum performance.

FULLERTON

TOOL COMPANY

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Calculate optimal settings instantly from the convenience of your phone or tablet, regardless if you're slotting, peel milling or trichoidal milling. Available for Android & iOS, it will soon be your favorite resource when tooling up a machine.

ABOUT FULLERTON TOOL COMPANY

Fullerton Tool Company is a third-generation, family owned business that specializes in the design and production of solid carbide cutting tools for a wide variety of industries. Founded in 1942, the company manufactures high quality end mills, drills, reamers, burrs, saws, keyseat cutters and PCD tooling. Fullerton's Advanced Solutions Team (FAST) is the foundation of the company's commitment to continuously improve, innovate and provide vast product diversity. Fullerton is an ISO 9001:2015 certified company.



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