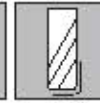
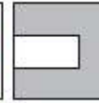
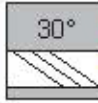
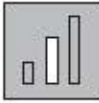


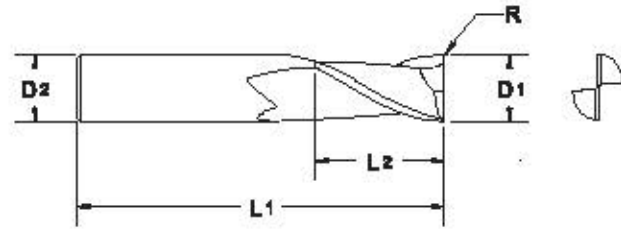
**TuffCut® GP
Series 121**

Z2



**2
Flute**

Designed for aggressive milling of most materials.



• Micro sizes available.

| Tool No. | EDP | Diameter | | | Shank | | OAL | | Flute Length | | Corner Radius | |
|----------|-------|----------|-----|---------|-------|-----|------|-------|--------------|------|---------------|----|
| | | D1 | | | D2 | | L1 | | L2 | | R | |
| | | Inch | mm | Decimal | Inch | mm | Inch | mm | Inch | mm | Inch | mm |
| 12100500 | 52101 | | | .0050 | 1/8 | | | 1-1/2 | | .015 | | |
| 12100600 | 52191 | | | .0060 | 1/8 | | | 1-1/2 | | .018 | | |
| 12100700 | 52192 | | | .0070 | 1/8 | | | 1-1/2 | | .021 | | |
| 12100780 | 52102 | | 0.2 | .0078 | | 3.0 | | 38 | | 0.6 | | |
| 12100800 | 52193 | | | .0080 | 1/8 | | | 1-1/2 | | .024 | | |
| 12100900 | 52194 | | | .0090 | 1/8 | | | 1-1/2 | | .027 | | |
| 12101000 | 52103 | | | .0100 | 1/8 | | | 1-1/2 | | .030 | | |
| 12101100 | 52195 | | | .0110 | 1/8 | | | 1-1/2 | | .033 | | |
| 12101180 | 52104 | | 0.3 | .0118 | | 3.0 | | 38 | | 0.9 | | |
| 12101200 | 52196 | | | .0120 | 1/8 | | | 1-1/2 | | .036 | | |
| 12101300 | 52197 | | | .0130 | 1/8 | | | 1-1/2 | | .039 | | |
| 12101400 | 52198 | | | .0140 | 1/8 | | | 1-1/2 | | .042 | | |
| 12101500 | 52105 | | | .0150 | 1/8 | | | 1-1/2 | | .045 | | |
| 12101560 | 12106 | 1.64 | | .0156 | 1/8 | | | 1-1/2 | | 1.32 | | |
| 12101570 | 52107 | | 0.4 | .0157 | | 3.0 | | 38 | | 1.2 | | |
| 12101600 | 52199 | | | .0160 | 1/8 | | | 1-1/2 | | .048 | | |
| 12101700 | 52250 | | | .0170 | 1/8 | | | 1-1/2 | | .051 | | |
| 12101800 | 52251 | | | .0180 | 1/8 | | | 1-1/2 | | .054 | | |
| 12101900 | 52252 | | | .0190 | 1/8 | | | 1-1/2 | | .057 | | |
| 12101960 | 52108 | | 0.5 | .0196 | | 3.0 | | 38 | | 1.5 | | |
| 12102000 | 52109 | | | .0200 | 1/8 | | | 1-1/2 | | .060 | | |
| 12102100 | 52253 | | | .0210 | 1/8 | | | 1-1/2 | | .063 | | |
| 12102200 | 52254 | | | .0220 | 1/8 | | | 1-1/2 | | .066 | | |
| 12102300 | 52255 | | | .0230 | 1/8 | | | 1-1/2 | | .069 | | |
| 12102360 | 52110 | | 0.6 | .0236 | | 3.0 | | 38 | | 1.8 | | |
| 12102400 | 52256 | | | .0240 | 1/8 | | | 1-1/2 | | .072 | | |
| 12102500 | 52111 | | | .0250 | 1/8 | | | 1-1/2 | | .075 | | |
| 12102600 | 52257 | | | .0260 | 1/8 | | | 1-1/2 | | .078 | | |
| 12102700 | 52258 | | | .0270 | 1/8 | | | 1-1/2 | | .081 | | |
| 12102750 | 52112 | | 0.7 | .0275 | | 3.0 | | 38 | | 2.1 | | |
| 12102800 | 52259 | | | .0280 | 1/8 | | | 1-1/2 | | .084 | | |
| 12102900 | 52260 | | | .0290 | 1/8 | | | 1-1/2 | | .087 | | |
| 12103000 | 52113 | | | .0300 | 1/8 | | | 1-1/2 | | .090 | | |
| 12103120 | 12114 | 1.32 | | .0312 | 1/8 | | | 1-1/2 | | 5.64 | | |

| Inch | |
|-----------------|-----------------|
| D1 | Tolerance |
| 1.64 | +0.000/-0.001 |
| 1/32 - 1/4 | +0.000/-0.002 |
| >1/4 - 1-1/4 | +0.000/-0.003 |
| D1 Micro Sizes* | Tolerance |
| .005 - .100 | +0.0005/-0.0005 |

*Inch decimal size range
.005-.100" only.

| Metric (mm) | |
|----------------|---------------|
| D1 | Tolerance h10 |
| 0.20 - 0.50 | +0.000/-0.025 |
| 0.60 - 3.00 | +0.000/-0.040 |
| >3.00 - 6.00 | +0.000/-0.048 |
| >6.00 - 10.00 | +0.000/-0.058 |
| >10.00 - 18.00 | +0.000/-0.070 |
| >18.00 - 30.00 | +0.000/-0.084 |
| 32.00 | +0.000/-0.100 |

| Inch | |
|---------|---------------|
| R | Tolerance |
| 1/8 - 1 | +0.002/-0.002 |

| Metric (mm) | |
|-------------|-------------|
| R | Tolerance |
| 3.0 - 25.0 | +0.05/-0.05 |

Series 121 coated tools
on page 294.



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