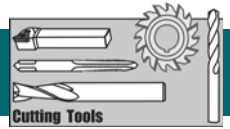


Cutting Tools



SOLID CARBIDE JOBBERS LENGTH TWIST DRILLS

118° Point, C2 Grade, Right Hand

- Precision ground to close diameter tolerances.
- Recommended for general purpose drilling in Cast Iron, Aluminum, Magnesium, Bronze, Masonite and Resin-Fiberglass Laminates.



Fractional Sizes

| Size | Flute Length | Overall Length | Model No. |
|-------|--------------|----------------|-----------|
| 1/32 | 3/8 | 1-1/8 | 342-0002 |
| 3/64 | 3/4 | 1-1/2 | 342-0003 |
| 1/16 | 3/4 | 1-1/2 | 342-0004 |
| 5/64 | 7/8 | 1-3/4 | 342-0005 |
| 3/32 | 1" | 2" | 342-0006 |
| 7/64 | 1-1/4 | 2-1/4 | 342-0007 |
| 1/8 | 1-1/4 | 2-1/4 | 342-0008 |
| 9/64 | 1-3/8 | 2-1/2 | 342-0009 |
| 5/32 | 1-3/8 | 2-1/2 | 342-0010 |
| 11/64 | 1-5/8 | 2-3/4 | 342-0011 |

| Size | Flute Length | Overall Length | Model No. |
|-------|--------------|----------------|-----------|
| 3/16 | 1-5/8 | 2-3/4 | 342-0012 |
| 13/64 | 1-3/4 | 3" | 342-0013 |
| 7/32 | 1-3/4 | 3" | 342-0014 |
| 15/64 | 2" | 3-1/4 | 342-0015 |
| 1/4 | 2" | 3-1/4 | 342-0016 |
| 17/64 | 2-1/8 | 3-1/2 | 342-0017 |
| 9/32 | 2-1/8 | 3-1/2 | 342-0018 |
| 19/64 | 2-3/8 | 3-3/4 | 342-0019 |
| 5/16 | 2-3/8 | 3-3/4 | 342-0020 |
| 21/64 | 2-1/2 | 4" | 342-0021 |

| Size | Flute Length | Overall Length | Model No. |
|-------|--------------|----------------|-----------|
| 11/32 | 2-1/2 | 4" | 342-0022 |
| 23/64 | 2-3/4 | 4-1/4 | 342-0023 |
| 3/8 | 2-3/4 | 4-1/4 | 342-0024 |
| 25/64 | 2-7/8 | 4-1/2 | 342-0025 |
| 13/32 | 2-7/8 | 4-1/2 | 342-0026 |
| 27/64 | 2-7/8 | 4-1/2 | 342-0027 |
| 7/16 | 2-7/8 | 4-1/2 | 342-0028 |
| 29/64 | 3" | 4-3/4 | 342-0029 |
| 15/32 | 3" | 4-3/4 | 342-0030 |
| 31/64 | 3" | 4-3/4 | 342-0031 |
| 1/2 | 3" | 4-3/4 | 342-0032 |

Number Sizes

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| 1 | 1-3/4 | 3" | 342-0101 |
| 2 | 1-3/4 | 3" | 342-0102 |
| 3 | 1-3/4 | 3" | 342-0103 |
| 4 | 1-3/4 | 3" | 342-0104 |
| 5 | 1-3/4 | 3" | 342-0105 |
| 6 | 1-3/4 | 3" | 342-0106 |
| 7 | 1-3/4 | 3" | 342-0107 |
| 8 | 1-3/4 | 3" | 342-0108 |
| 9 | 1-3/4 | 3" | 342-0109 |
| 10 | 1-5/8 | 2-3/4 | 342-0110 |
| 11 | 1-5/8 | 2-3/4 | 342-0111 |
| 12 | 1-5/8 | 2-3/4 | 342-0112 |
| 13 | 1-5/8 | 2-3/4 | 342-0113 |
| 14 | 1-5/8 | 2-3/4 | 342-0114 |
| 15 | 1-5/8 | 2-3/4 | 342-0115 |
| 16 | 1-5/8 | 2-3/4 | 342-0116 |
| 17 | 1-5/8 | 2-3/4 | 342-0117 |
| 18 | 1-5/8 | 2-3/4 | 342-0118 |
| 19 | 1-5/8 | 2-3/4 | 342-0119 |
| 20 | 1-3/8 | 2-1/2 | 342-0120 |
| 21 | 1-3/8 | 2-1/2 | 342-0121 |
| 22 | 1-3/8 | 2-1/2 | 342-0122 |
| 23 | 1-3/8 | 2-1/2 | 342-0123 |
| 24 | 1-3/8 | 2-1/2 | 342-0124 |
| 25 | 1-3/8 | 2-1/2 | 342-0125 |
| 26 | 1-3/8 | 2-1/2 | 342-0126 |
| 27 | 1-3/8 | 2-1/2 | 342-0127 |

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| 28 | 1-3/8 | 2-1/2 | 342-0128 |
| 29 | 1-3/8 | 2-1/2 | 342-0129 |
| 30 | 1-1/4 | 2-1/4 | 342-0130 |
| 31 | 1-1/4 | 2-1/4 | 342-0131 |
| 32 | 1-1/4 | 2-1/4 | 342-0132 |
| 33 | 1-1/4 | 2-1/4 | 342-0133 |
| 34 | 1-1/4 | 2-1/4 | 342-0134 |
| 35 | 1-1/4 | 2-1/4 | 342-0135 |
| 36 | 1-1/4 | 2-1/4 | 342-0136 |
| 37 | 1-1/4 | 2-1/4 | 342-0137 |
| 38 | 1-1/4 | 2-1/4 | 342-0138 |
| 39 | 1-1/4 | 2-1/4 | 342-0139 |
| 40 | 1" | 2" | 342-0140 |
| 41 | 1" | 2" | 342-0141 |
| 42 | 1" | 2" | 342-0142 |
| 43 | 1" | 2" | 342-0143 |
| 44 | 1" | 2" | 342-0144 |
| 45 | 7/8 | 1-3/4 | 342-0145 |
| 46 | 7/8 | 1-3/4 | 342-0146 |
| 47 | 7/8 | 1-3/4 | 342-0147 |
| 48 | 7/8 | 1-3/4 | 342-0148 |
| 49 | 7/8 | 1-3/4 | 342-0149 |
| 50 | 7/8 | 1-3/4 | 342-0150 |
| 51 | 3/4 | 1-1/2 | 342-0151 |
| 52 | 3/4 | 1-1/2 | 342-0152 |
| 53 | 3/4 | 1-1/2 | 342-0153 |
| 54 | 3/4 | 1-1/2 | 342-0154 |

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| 55 | 3/4 | 1-1/2 | 342-0155 |
| 56 | 3/4 | 1-1/2 | 342-0156 |
| 57 | 3/4 | 1-1/2 | 342-0157 |
| 58 | 3/4 | 1-1/2 | 342-0158 |
| 59 | 3/4 | 1-1/2 | 342-0159 |
| 60 | 3/4 | 1-1/2 | 342-0160 |
| 61 | 1/2 | 1-1/4 | 342-0161 |
| 62 | 1/2 | 1-1/4 | 342-0162 |
| 63 | 1/2 | 1-1/4 | 342-0163 |
| 64 | 1/2 | 1-1/4 | 342-0164 |
| 65 | 3/8 | 1-1/8 | 342-0165 |
| 66 | 3/8 | 1-1/8 | 342-0166 |
| 67 | 3/8 | 1-1/8 | 342-0167 |
| 68 | 3/8 | 1-1/8 | 342-0168 |
| 69 | 5/16 | 1" | 342-0169 |
| 70 | 5/16 | 1" | 342-0170 |
| 71 | 5/16 | 1" | 342-0171 |
| 72 | 5/16 | 1" | 342-0172 |
| 73 | 1/4 | 7/8 | 342-0173 |
| 74 | 1/4 | 7/8 | 342-0174 |
| 75 | 1/4 | 7/8 | 342-0175 |
| 76 | 1/4 | 7/8 | 342-0176 |
| 77 | 3/16 | 3/4 | 342-0177 |
| 78 | 3/16 | 3/4 | 342-0178 |
| 79 | 3/16 | 3/4 | 342-0179 |
| 80 | 3/16 | 3/4 | 342-0180 |

Letter Sizes

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| A | 2" | 3-1/4 | 342-0201 |
| B | 2" | 3-1/4 | 342-0202 |
| C | 2" | 3-1/4 | 342-0203 |
| D | 2" | 3-1/4 | 342-0204 |
| E | 2" | 3-1/4 | 342-0205 |
| F | 2" | 3-1/4 | 342-0206 |
| G | 2-1/8 | 3-1/2 | 342-0207 |
| H | 2-1/8 | 3-1/2 | 342-0208 |
| I | 2-1/8 | 3-1/2 | 342-0209 |

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| J | 2-1/8 | 3-1/2 | 342-0210 |
| K | 2-1/8 | 3-1/2 | 342-0211 |
| L | 2-1/8 | 3-1/2 | 342-0212 |
| M | 2-3/8 | 3-3/4 | 342-0213 |
| N | 2-3/8 | 3-3/4 | 342-0214 |
| O | 2-3/8 | 3-3/4 | 342-0215 |
| P | 2-3/8 | 3-3/4 | 342-0216 |
| Q | 2-1/2 | 4" | 342-0217 |
| R | 2-1/2 | 4" | 342-0218 |

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| S | 2-1/2 | 4" | 342-0219 |
| T | 2-3/4 | 4-1/4 | 342-0220 |
| U | 2-3/4 | 4-1/4 | 342-0221 |
| V | 2-3/4 | 4-1/4 | 342-0222 |
| W | 2-7/8 | 4-1/2 | 342-0223 |
| X | 2-7/8 | 4-1/2 | 342-0224 |
| Y | 2-7/8 | 4-1/2 | 342-0225 |
| Z | 2-7/8 | 4-1/2 | 342-0226 |

Metric Sizes

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| 2 | 22 | 44mm | 342-0301 |
| 2.5 | 25 | 50mm | 342-0302 |
| 3 | 32 | 57mm | 342-0303 |
| 3.5 | 35 | 63mm | 342-0304 |
| 4 | 35 | 63mm | 342-0305 |
| 4.5 | 41 | 70mm | 342-0306 |
| 5 | 44 | 75mm | 342-0307 |

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| 5.5 | 44 | 75mm | 342-0308 |
| 6 | 50 | 82mm | 342-0309 |
| 6.5 | 50 | 82mm | 342-0310 |
| 7 | 54 | 89mm | 342-0311 |
| 7.5 | 60 | 95mm | 342-0312 |
| 8 | 60 | 95mm | 342-0313 |
| 8.5 | 63 | 100mm | 342-0314 |

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| 9 | 70 | 100mm | 342-0315 |
| 9.5 | 70 | 108mm | 342-0316 |
| 10 | 73 | 114mm | 342-0317 |
| 10.5 | 73 | 114mm | 342-0318 |
| 11 | 73 | 114mm | 342-0319 |
| 11.5 | 76 | 120mm | 342-0320 |
| 12 | 76 | 120mm | 342-0321 |



Cutting Tools

CARBIDE TIPPED STRAIGHT SHANK JOBBER DRILLS

- For Cast Iron, or non-ferrous materials.



Fractional Sizes

| Size | Flute Length | Overall Length | Model No. |
|-------|--------------|----------------|-----------|
| 1/8 | 1-5/8 | 2-3/4 | 343-0008 |
| 9/64 | 1-3/4 | 2-7/8 | 343-0009 |
| 5/32 | 2" | 3-1/8 | 343-0010 |
| 11/64 | 2-1/8 | 3-1/4 | 343-0011 |
| 3/16 | 2-5/16 | 3-1/2 | 343-0012 |
| 13/64 | 2-7/16 | 3-5/8 | 343-0013 |
| 7/32 | 2-1/2 | 3-3/4 | 343-0014 |
| 15/64 | 2-5/8 | 3-7/8 | 343-0015 |
| 1/4 | 2-3/4 | 4" | 343-0016 |
| 17/64 | 2-7/8 | 4-1/8 | 343-0017 |
| 9/32 | 2-15/16 | 4-1/4 | 343-0018 |
| 19/64 | 3-1/16 | 4-3/8 | 343-0019 |
| 5/16 | 3-3/16 | 4-1/2 | 343-0020 |
| 21/64 | 3-5/16 | 4-5/8 | 343-0021 |
| 11/32 | 3-7/16 | 4-3/4 | 343-0022 |
| 23/64 | 3-1/2 | 4-7/8 | 343-0023 |
| 3/8 | 3-5/8 | 5" | 343-0024 |
| 25/64 | 3-3/4 | 5-1/8 | 343-0025 |
| 13/32 | 3-7/8 | 5-1/4 | 343-0026 |
| 27/64 | 3-15/16 | 5-3/8 | 343-0027 |
| 7/16 | 4-1/16 | 5-1/2 | 343-0028 |
| 29/64 | 4-3/16 | 5-5/8 | 343-0029 |
| 15/32 | 4-5/16 | 5-3/4 | 343-0030 |
| 31/64 | 4-3/8 | 5-7/8 | 343-0031 |
| 1/2 | 4-1/2 | 6" | 343-0032 |

Letter Sizes

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| A | 2-5/8 | 3-7/8 | 343-0201 |
| B | 2-3/4 | 4" | 343-0202 |
| C | 2-3/4 | 4" | 343-0203 |
| D | 2-3/4 | 4" | 343-0204 |
| E | 2-3/4 | 4" | 343-0205 |
| F | 2-7/8 | 4-1/8 | 343-0206 |
| G | 2-7/8 | 4-1/8 | 343-0207 |
| H | 2-7/8 | 4-1/8 | 343-0208 |
| I | 2-7/8 | 4-1/8 | 343-0209 |
| J | 2-7/8 | 4-1/8 | 343-0210 |
| K | 2-15/16 | 4-1/4 | 343-0211 |
| L | 2-15/16 | 4-1/4 | 343-0212 |
| M | 3-1/16 | 4-3/8 | 343-0213 |
| N | 3-1/16 | 4-3/8 | 343-0214 |
| O | 3-3/16 | 4-1/2 | 343-0215 |
| P | 3-5/16 | 4-5/8 | 343-0216 |
| Q | 3-7/16 | 4-3/4 | 343-0217 |
| R | 3-7/16 | 4-3/4 | 343-0218 |
| S | 3-1/2 | 4-7/8 | 343-0219 |
| T | 3-1/2 | 4-7/8 | 343-0220 |
| U | 3-5/8 | 5" | 343-0221 |
| V | 3-5/8 | 5" | 343-0222 |
| W | 3-3/4 | 5-1/8 | 343-0223 |
| X | 3-3/4 | 5-1/8 | 343-0224 |
| Y | 3-7/8 | 5-1/4 | 343-0225 |
| Z | 3-7/8 | 5-1/4 | 343-0226 |

Number Sizes

| Size | Flute Length | Overall Length | Model No. |
|------|--------------|----------------|-----------|
| 1 | 2-5/8 | 3-7/8 | 343-0101 |
| 2 | 2-5/8 | 3-7/8 | 343-0102 |
| 3 | 2-1/2 | 3-3/4 | 343-0103 |
| 4 | 2-1/2 | 3-3/4 | 343-0104 |
| 5 | 2-1/2 | 3-3/4 | 343-0105 |
| 6 | 2-1/2 | 3-3/4 | 343-0106 |
| 7 | 2-7/16 | 3-5/8 | 343-0107 |
| 8 | 2-7/16 | 3-5/8 | 343-0108 |
| 9 | 2-7/16 | 3-5/8 | 343-0109 |
| 10 | 2-7/16 | 3-5/8 | 343-0110 |
| 11 | 2-5/16 | 3-1/2 | 343-0111 |
| 12 | 2-5/16 | 3-1/2 | 343-0112 |
| 13 | 2-5/16 | 3-1/2 | 343-0113 |
| 14 | 2-3/16 | 3-3/8 | 343-0114 |
| 15 | 2-3/16 | 3-3/8 | 343-0115 |
| 16 | 2-3/16 | 3-3/8 | 343-0116 |
| 17 | 2-3/16 | 3-3/8 | 343-0117 |
| 18 | 2-1/8 | 3-1/4 | 343-0118 |
| 19 | 2-1/8 | 3-1/4 | 343-0119 |
| 20 | 2-1/8 | 3-1/4 | 343-0120 |
| 21 | 2-1/8 | 3-1/4 | 343-0121 |
| 22 | 2" | 3-1/8 | 343-0122 |
| 23 | 2" | 3-1/8 | 343-0123 |
| 24 | 2" | 3-1/8 | 343-0124 |
| 25 | 1-7/8 | 3" | 343-0125 |
| 26 | 1-7/8 | 3" | 343-0126 |
| 27 | 1-7/8 | 3" | 343-0127 |
| 28 | 1-3/4 | 2-7/8 | 343-0128 |
| 29 | 1-3/4 | 2-7/8 | 343-0129 |
| 30 | 1-5/8 | 2-3/4 | 343-0130 |
| 31 | 1-5/8 | 2-3/4 | 343-0131 |
| 32 | 1-5/8 | 2-3/4 | 343-0132 |

SOLID CARBIDE CIRCUIT BOARD DRILLS

Use for drilling epoxy resin-glass fiber circuit boards.

- Solid carbide construction offers great rigidity.
- 1/8" shank 1-1/2" overall length.
- 130° included angle drill point.
- Recommended for use under high drill temperatures and when the drill body must withstand continuous abrasion.



Fractional Sizes

| Size | Flute Length | Model No. |
|-------|--------------|-----------|
| 1/64 | 3/16 | 534-0001 |
| 1/32 | 1/4 | 534-0002 |
| 3/64 | 3/8 | 534-0003 |
| 1/16 | 3/8 | 534-0004 |
| 5/64 | 3/8 | 534-0005 |
| 3/32 | 3/8 | 534-0006 |
| 7/64 | 3/8 | 534-0007 |
| 1/8 | 3/8 | 534-0008 |
| 9/64 | .49 | 534-0009 |
| 5/32 | .49 | 534-0010 |
| 11/64 | .49 | 534-0011 |
| 3/16 | .49 | 534-0012 |
| 13/64 | .49 | 534-0013 |
| 7/32 | .49 | 534-0014 |
| 15/64 | .49 | 534-0015 |
| 1/4 | .49 | 534-0016 |

Number Sizes

| Size | Flute Length | Model No. | Size | Flute Length | Model No. | Size | Flute Length | Model No. |
|------|--------------|-----------|------|--------------|-----------|------|--------------|-----------|
| 31 | 3/8 | 534-0131 | 48 | 3/8 | 534-0148 | 65 | 3/8 | 534-0165 |
| 32 | 3/8 | 534-0132 | 49 | 3/8 | 534-0149 | 66 | 3/8 | 534-0166 |
| 33 | 3/8 | 534-0133 | 50 | 3/8 | 534-0150 | 67 | 3/8 | 534-0167 |
| 34 | 3/8 | 534-0134 | 51 | 3/8 | 534-0151 | 68 | 3/8 | 534-0168 |
| 35 | 3/8 | 534-0135 | 52 | 3/8 | 534-0152 | 69 | 3/8 | 534-0169 |
| 36 | 3/8 | 534-0136 | 53 | 3/8 | 534-0153 | 70 | 3/8 | 534-0170 |
| 37 | 3/8 | 534-0137 | 54 | 3/8 | 534-0154 | 71 | 3/8 | 534-0171 |
| 38 | 3/8 | 534-0138 | 55 | 3/8 | 534-0155 | 72 | 3/8 | 534-0172 |
| 39 | 3/8 | 534-0139 | 56 | 3/8 | 534-0156 | 73 | 3/8 | 534-0173 |
| 40 | 3/8 | 534-0140 | 57 | 3/8 | 534-0157 | 74 | 3/8 | 534-0174 |
| 41 | 3/8 | 534-0141 | 58 | 3/8 | 534-0158 | 75 | 3/8 | 534-0175 |
| 42 | 3/8 | 534-0142 | 59 | 3/8 | 534-0159 | 76 | 3/8 | 534-0176 |
| 43 | 3/8 | 534-0143 | 60 | 3/8 | 534-0160 | 77 | 3/8 | 534-0177 |
| 44 | 3/8 | 534-0144 | 61 | 3/8 | 534-0161 | 78 | 3/8 | 534-0178 |
| 45 | 3/8 | 534-0145 | 62 | 3/8 | 534-0162 | 79 | 3/8 | 534-0179 |
| 46 | 3/8 | 534-0146 | 63 | 3/8 | 534-0163 | 80 | 3/8 | 534-0180 |
| 47 | 3/8 | 534-0147 | 64 | 3/8 | 534-0164 | | | |

Metric Sizes

| Size | Flute Length | Model No. |
|------|--------------|-----------|
| .30 | 5.0mm | 534-0200 |
| .35 | 5.0mm | 534-0202 |
| .40 | 5.0mm | 534-0204 |
| .45 | 5.0mm | 534-0206 |
| .45 | 5.0mm | 534-0208 |
| .50 | 5.0mm | 534-0210 |
| .75 | 5.0mm | 534-0212 |
| 1.00 | 9.5mm | 534-0214 |
| 1.25 | 9.5mm | 534-0216 |
| 1.50 | 9.5mm | 534-0218 |
| 1.75 | 9.5mm | 534-0220 |
| 2.00 | 9.5mm | 534-0222 |
| 2.25 | 9.5mm | 534-0224 |
| 2.50 | 9.5mm | 534-0226 |
| 2.75 | 9.5mm | 534-0228 |
| 3.00 | 9.5mm | 534-0230 |