

## F100 Series - Compression Router

### APPLICATION

CNC and Robotic routing of carbon fiber (CFRP)

### TOOL GEOMETRY

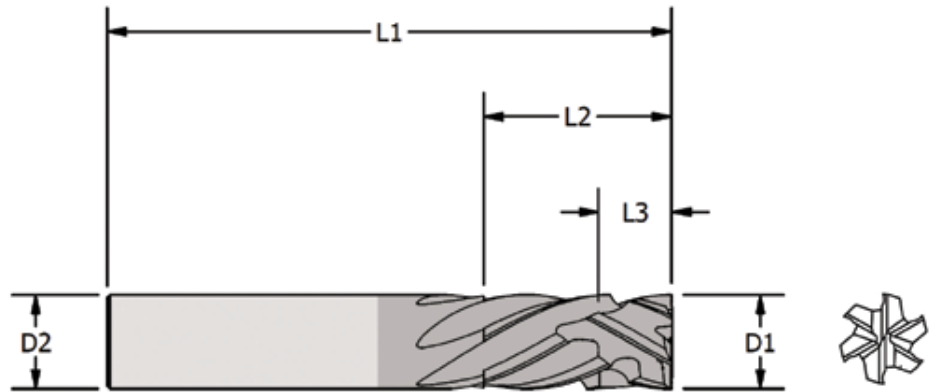
Right and left hand flute compression helix, end cutting

### TOOL MATERIAL

Solid carbide (CVD) diamond coated

### OD TOLERANCE

D1: +0" / - .002"



| Diameter (D1) |       | Overall Length | Flute Length | Center Line of Overlap | Shank Diameter | Diamond Coating | Number of Flutes | Part ID    |
|---------------|-------|----------------|--------------|------------------------|----------------|-----------------|------------------|------------|
| mm            | inch  | L1             | L2           | L3                     | D2             | Y/N             |                  |            |
| 3.175         | 0.125 | 2.0            | 0.5          | 0.225                  | 0.125          | Y               | 4                | F100-04088 |
| 6.350         | 0.250 | 3.0            | 1.0          | 0.330                  | 0.250          | Y               | 4                | F100-10026 |
| 6.350         | 0.250 | 3.0            | 1.5          | 0.330                  | 0.250          | Y               | 4                | F100-10027 |
| 6.350         | 0.250 | 4.0            | 2.0          | 0.330                  | 0.250          | Y               | 4                | F100-10028 |
| 9.525         | 0.375 | 3.0            | 1.0          | 0.395                  | 0.375          | Y               | 6                | F100-09577 |
| 9.525         | 0.375 | 4.0            | 1.5          | 0.395                  | 0.375          | Y               | 6                | F100-10029 |
| 9.525         | 0.375 | 4.0            | 2.0          | 0.395                  | 0.375          | Y               | 6                | F100-10030 |
| 9.525         | 0.375 | 5.0            | 2.5          | 0.395                  | 0.375          | Y               | 6                | F100-10031 |
| 12.700        | 0.500 | 3.0            | 1.0          | 0.395                  | 0.500          | Y               | 6                | F100-09238 |
| 12.700        | 0.500 | 4.0            | 1.5          | 0.395                  | 0.500          | Y               | 6                | F100-09950 |
| 12.700        | 0.500 | 4.0            | 2.0          | 0.395                  | 0.500          | Y               | 6                | F100-09951 |
| 12.700        | 0.500 | 5.0            | 2.5          | 0.395                  | 0.500          | Y               | 6                | F100-10032 |

# COMPOSITE ROUTING

## F101 Series - Slow Spiral Router

### APPLICATION

CNC and Robotic routing of carbon fiber (CFRP)

### TOOL GEOMETRY

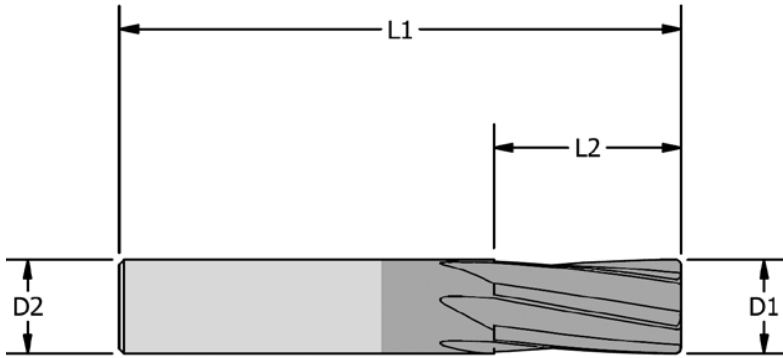
Right hand reduced helix, end cutting

### TOOL MATERIAL

Solid carbide (CVD) diamond coated

### OD TOLERANCE

D1: + 0" / - .002"



| Diameter (D1) |       | Overall Length | Flute Length | Shank Diameter | Diamond Coating | Number of Flutes | Part ID    |
|---------------|-------|----------------|--------------|----------------|-----------------|------------------|------------|
| mm            | inch  | L1             | L2           | D2             | Y/N             |                  |            |
| 3.175         | 0.125 | 2.0            | 0.5          | 0.125          | Y               | 4                | F101-10989 |
| 6.350         | 0.250 | 3.0            | 1.0          | 0.250          | Y               | 6                | F101-09952 |
| 6.350         | 0.250 | 3.0            | 1.5          | 0.250          | Y               | 6                | F101-10034 |
| 6.350         | 0.250 | 4.0            | 2.0          | 0.250          | Y               | 6                | F101-09953 |
| 9.525         | 0.375 | 3.0            | 1.0          | 0.375          | Y               | 8                | F101-05888 |
| 9.525         | 0.375 | 4.0            | 1.5          | 0.375          | Y               | 8                | F101-10033 |
| 9.525         | 0.375 | 4.0            | 2.0          | 0.375          | Y               | 8                | F101-09955 |
| 12.700        | 0.500 | 3.0            | 1.0          | 0.500          | Y               | 8                | F101-10457 |
| 12.700        | 0.500 | 4.0            | 1.5          | 0.500          | Y               | 8                | F101-10035 |
| 12.700        | 0.500 | 4.0            | 2.0          | 0.500          | Y               | 8                | F101-09956 |

\*Custom geometries and coatings available upon request.



## F102 Series - Special Purpose Router

### APPLICATION

CNC and Robotic routing of carbon fiber (CFRP)

### TOOL GEOMETRY

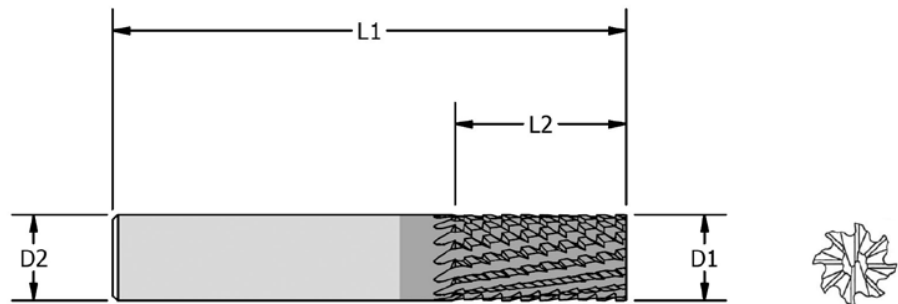
Right hand helix with cross cut chip breaker, end cutting

### TOOL MATERIAL

Solid carbide (CVD) diamond coated

### OD TOLERANCE

D1: + 0" / - .002"



| Diameter (D1) |       | Overall Length | Flute Length | Shank Diameter | Diamond Coating | Number of Flutes | Part ID    |
|---------------|-------|----------------|--------------|----------------|-----------------|------------------|------------|
| mm            | inch  | L1             | L2           | D2             | Y/N             |                  |            |
| 3.175         | 0.125 | 2.0            | 0.5          | 0.125          | Y               | 6                | F102-10990 |
| 6.350         | 0.250 | 3.0            | 1.0          | 0.250          | Y               | 8                | F102-10285 |
| 9.525         | 0.375 | 3.0            | 1.0          | 0.375          | Y               | 12               | F102-10286 |
| 12.700        | 0.500 | 3.0            | 1.0          | 0.500          | Y               | 14               | F102-09636 |

# COMPOSITE ROUTING

## F103 Series - Diamond Cut Router

### APPLICATION

CNC, Robotic, and Hand routing of carbon fiber (CFRP), fiberglass, and plastic

### TOOL GEOMETRY

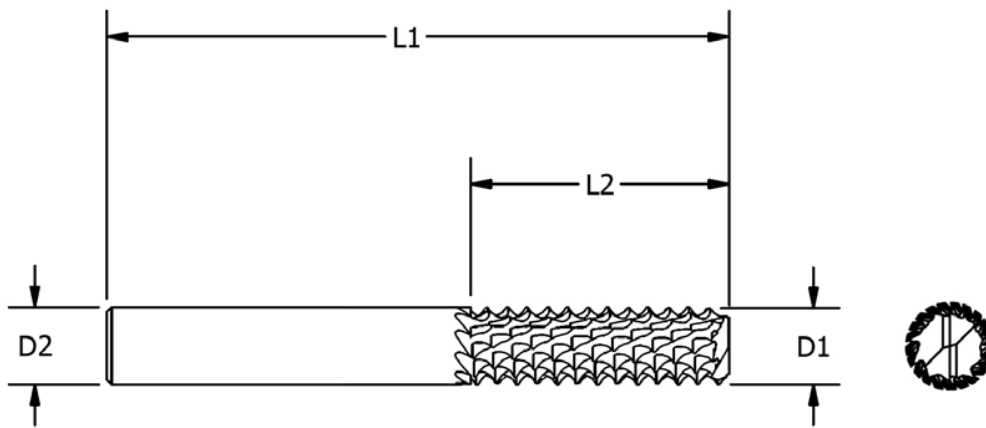
Diamond cut flutes, end cutting

### TOOL MATERIAL

Solid carbide uncoated  
(Diamond coating available upon request)

### OD TOLERANCE

D1: + 0" / - .003"



| Diameter (D1) |       | Overall Length | Flute Length | Shank Diameter | Diamond Coating | Number of Flutes | Part ID    |
|---------------|-------|----------------|--------------|----------------|-----------------|------------------|------------|
| mm            | inch  | L1             | L2           | D2             | Y/N             |                  |            |
| 3.175         | 0.125 | 2.0            | 0.5          | 0.125          | N               | 7                | F103-11180 |
| 6.350         | 0.250 | 3.0            | 1.0          | 0.250          | N               | 9                | F103-11226 |
| 9.525         | 0.375 | 3.0            | 1.0          | 0.375          | N               | 11               | F103-11230 |
| 12.700        | 0.500 | 3.0            | 1.0          | 0.500          | N               | 17               | F103-11250 |

\*Custom geometries and coatings available upon request.

## F104 Series - Kevlar Router

### APPLICATION

CNC and Robotic routing of Kevlar and carbon fiber (CFRP)

### TOOL GEOMETRY

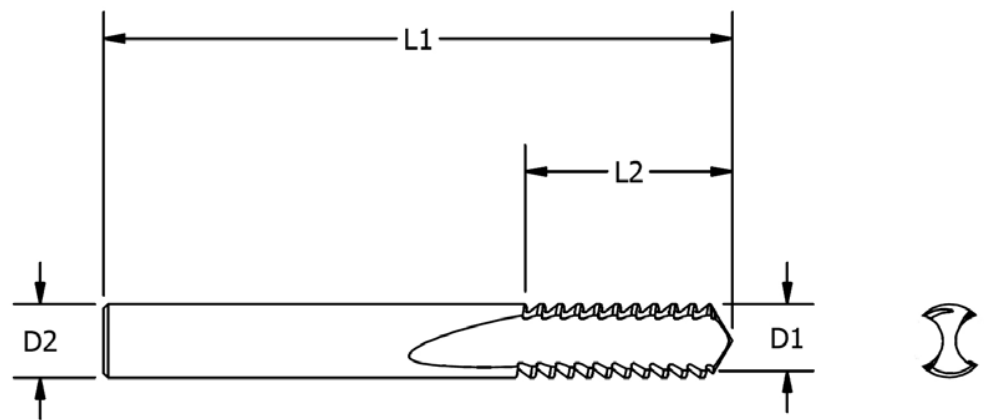
2 flutes with opposing cutting forces, end cutting

### TOOL MATERIAL

Solid carbide

### OD TOLERANCE

D1: + 0" / - .002"



| Diameter (D1) |       | Overall Length | Flute Length | Shank Diameter | Diamond Coating | Number of Flutes | Part ID    |
|---------------|-------|----------------|--------------|----------------|-----------------|------------------|------------|
| mm            | inch  | L1             | L2           | D2             | Y/N             |                  |            |
| 3.175         | 0.125 | 2.0            | 0.5          | 0.125          | N               | 2                | F104-11169 |
| 6.350         | 0.250 | 3.0            | 1.0          | 0.250          | N               | 2                | F104-11185 |
| 9.525         | 0.375 | 3.0            | 1.0          | 0.375          | N               | 2                | F104-11186 |
| 12.700        | 0.500 | 3.0            | 1.0          | 0.500          | N               | 2                | F104-11187 |