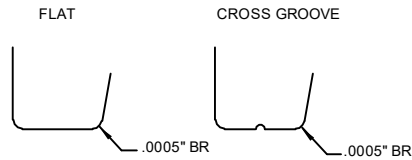
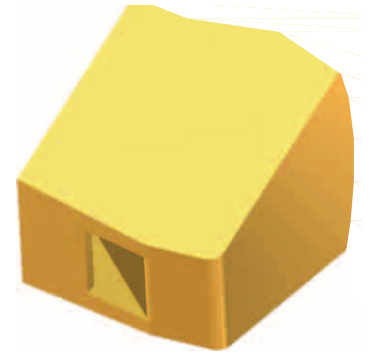
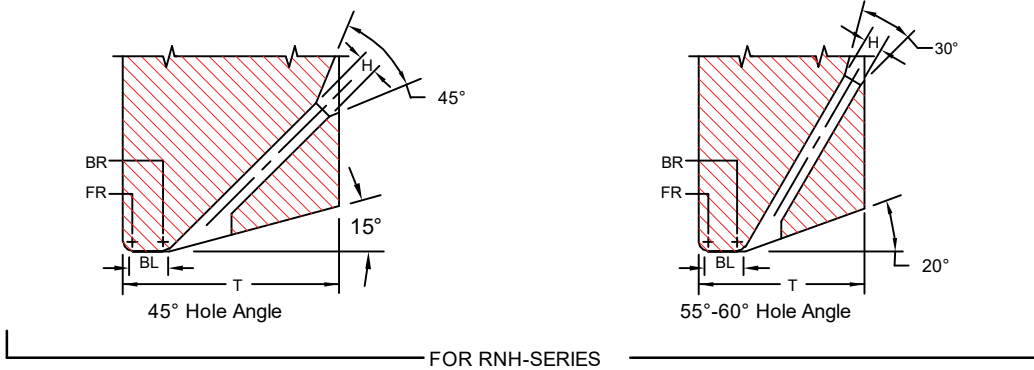


# SERIES RNH

FOR AUTOMATIC BONDERS

Double Flat, Vertical Feed for Hughes, Palomar, Hesse & Knipps and F&K Delvotec Bonders

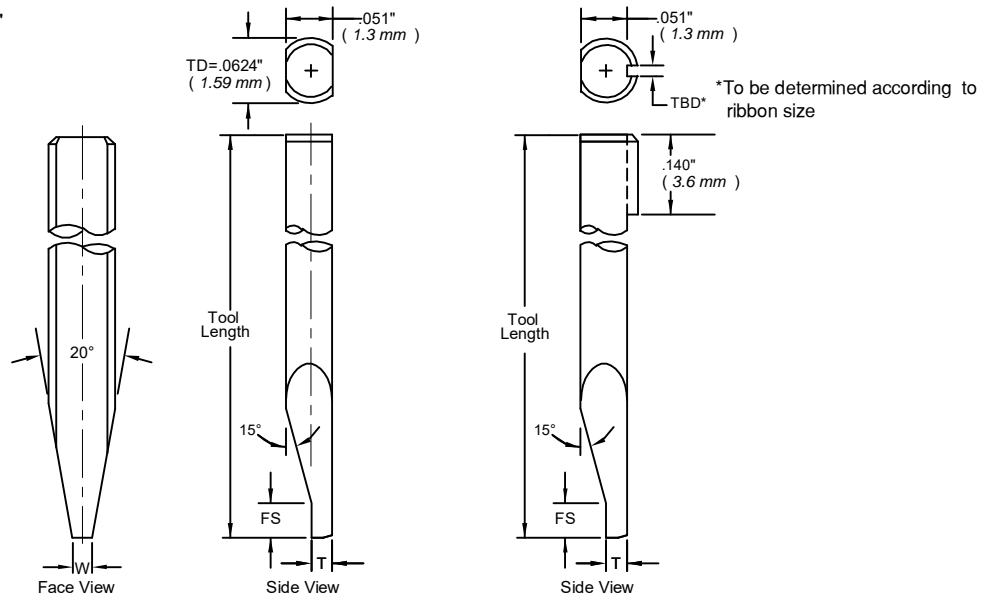


We recommend a .0005" back radius and a cross groove or a flat bond foot when ordering tools for gold wire thermosonic bonding. For more gold wire application information see **Tech Tip**

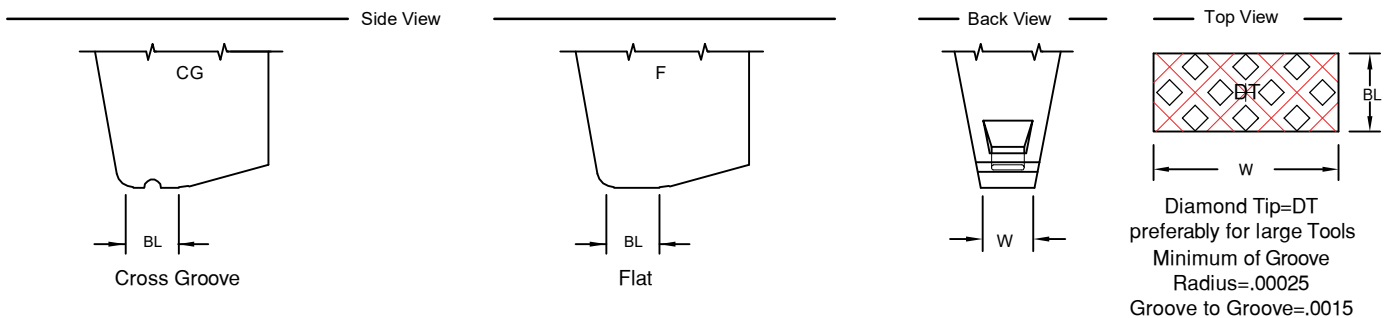
## RNH-SERIES RIBBON WIRE

Ribbon Width: .0020" through .0200"  
Ribbon Thickness: .00025" through .0020"

\* S1 Option



Standard:  $\text{Ø } 1/16$ , Hole Angle: 45°, 55°, 60°, FS=.015" (.38 mm)



# SERIES RNH

## RIBBON WIRE

### ORDERING INFORMATION

#### RIBBON BONDING WEDGES

#### FOR GOLD AND ALUMINUM WIRE

**SAMPLE PART NUMBER:** M-RNH-D-1/16-1"-45-CG-.5x5-2-M-\*

**SYMBOL EXPLANATION:** 1 2 3 4 5 6 7 8 9 10 11

1. **MATERIAL:**
  - M = Ceramic
  - C = Tungsten Carbide
  - T = Titanium
  - All other: See Material Selection Guide
2. **SERIES:** RNH
3. **FRONT/BACK RADIUS:** See Radius Option Chart  
 \*For special Radius sizes insert an X Please specify FR/BR
4. **SHANK DIA.:** Please Specify Diameter
5. **TOOL LENGTH:** Please Specify Length
6. **HOLE ANGLE:** for RNH (45°,55°,60°)
- (11) See Tool Option
- (10) **FOOT FINISH:**
  - M = Matte finish (FR, BR, & Bond Flat)
  - P = Polish finish (FR, BR, & Bond Flat)
  - MP= Polish finish (FR, BR), and Matte finish (Bond Flat)
- (9) **Bond Length:** See Standard Chart  
 Example: BL of .0020 = 2  
 Note: We do not recommend bond lengths any larger than .005".
- (8) **RIBBON SIZE:** See Standard Chart  
 Example: .0005 x .005 = .5 x 5  
 Thickness x Width
- (7) **FOOT TYPE:**
  - F = Flat
  - CG = Cross Groove
  - DT = Diamond Tip
  - (Please specify Ribbon size)

For special sizes or dimensions insert an (X) in the appropriate position of the part number then specify what (X) equals. Example: M-RNH-X-1/16-1"-45-CG-.5x5-2-M-A7 (X) FR=.0012, BR=.0007

| RADIUS OPTION CHART | OPTION LETTER |     | A     | B     | C     | D     | E     | F     | G     | H     | I     | J     | K     | L     | M     | N     |       |
|---------------------|---------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                     | FRONT RADIUS  | in. | .0005 | .0005 | .0010 | .0010 | .0015 | .0015 | .0015 | .0015 | .0015 | .0020 | .0020 | .0020 | .0020 | .0020 | .0020 |
|                     |               | μ   | 13    | 13    | 25    | 25    | 38    | 38    | 38    | 38    | 38    | 51    | 51    | 51    | 51    | 51    | 51    |
| BACK RADIUS         | in.           | 0   | .0005 | 0     | .0005 | .0010 | 0     | .0005 | .0010 | .0015 | 0     | .0005 | .0010 | .0015 | .0020 | .0020 |       |
|                     | μ             | 0   | 13    | 0     | 13    | 25    | 0     | 13    | 25    | 38    | 0     | 13    | 25    | 38    | 51    | 51    |       |

| STANDARD CHART   |                  | RNH                   |     | FOR RIBBON THICKNESS: .00025" THROUGH .0020" |        |            |        | WIDTHS: .002" THROUGH .030" |        |  |  |
|------------------|------------------|-----------------------|-----|--|--------|------------|--------|-----------------------------|--------|--|--|
| RIBBON WIDTH     | RIBBON THICKNESS | BL                    |     | T(45°)                                       |        | T(55° 60°) |        | W                           |        |  |  |
|                  |                  | in.                   | μ   | in.  | μ      | in.        | μ      | in.                         | μ      |  |  |
| <b>Tolerance</b> |                  | ±.0002                |     | ±.0005                                       |        | ±.0005     |        | ±.0002                      |        |  |  |
| .0020            | 51               | .00025 through .00125 | 6.4 | ±.0010                                       | ±.0025 | ±.0090     | ±.0229 | ±.0080                      | ±.0203 |  |  |
|                  |                  |                       |     | .0015  | .0038  | .0100      | .0254  | .0080                       | .0203  |  |  |
|                  |                  |                       |     | .0020  | .0051  | .0110      | .0279  | .0090                       | .0229  |  |  |
|                  |                  |                       |     | .0025  | .0064  | .0115      | .0292  | .0100                       | .0254  |  |  |
| .0030            | 76               | .00025 through .00125 | 6.4 | .0010  | .0025  | .0090      | .0229  | .0080                       | .0203  |  |  |
|                  |                  |                       |     | .0015  | .0038  | .0100      | .0254  | .0080                       | .0203  |  |  |
|                  |                  |                       |     | .0020  | .0051  | .0110      | .0279  | .0090                       | .0229  |  |  |
|                  |                  |                       |     | .0025  | .0064  | .0115      | .0292  | .0100                       | .0254  |  |  |
| .0040            | 102              | .00025 through .00125 | 6.4 | .0020  | .0051  | .0110      | .0279  | .0090                       | .0229  |  |  |
|                  |                  |                       |     | .0025  | .0064  | .0115      | .0292  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0030  | .0076  | .0115      | .0292  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0035  | .0089  | .0120      | .0305  | .0100                       | .0254  |  |  |
| .0050            | 127              | .0005 through .0020   | 13  | .0025  | .0064  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0030  | .0076  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0035  | .0089  | .0125      | .0318  | .0110                       | .0279  |  |  |
|                  |                  |                       |     | .0040  | .0102  | .0125      | .0318  | .0110                       | .0279  |  |  |
| .0070            | 178              | .0005 through .0020   | 13  | .0025  | .0064  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0030  | .0076  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0035  | .0089  | .0125      | .0318  | .0110                       | .0279  |  |  |
|                  |                  |                       |     | .0040  | .0102  | .0125      | .0318  | .0110                       | .0279  |  |  |
| .0100            | 254              | .0005 through .0020   | 13  | .0025  | .0064  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0030  | .0076  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0035  | .0089  | .0125      | .0318  | .0110                       | .0279  |  |  |
|                  |                  |                       |     | .0040  | .0102  | .0125      | .0318  | .0110                       | .0279  |  |  |
| .0120            | 305              | .0005 through .0020   | 13  | .0025  | .0064  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0030  | .0076  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0035  | .0089  | .0125      | .0318  | .0110                       | .0279  |  |  |
|                  |                  |                       |     | .0040  | .0102  | .0125      | .0318  | .0110                       | .0279  |  |  |
| .0150            | 381              | .0005 through .0020   | 13  | .0025  | .0064  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0030  | .0076  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0035  | .0089  | .0125      | .0318  | .0110                       | .0279  |  |  |
|                  |                  |                       |     | .0040  | .0102  | .0125      | .0318  | .0110                       | .0279  |  |  |
| .0200            | 508              | .0005 through .0020   | 13  | .0025  | .0064  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0030  | .0076  | .0120      | .0305  | .0100                       | .0254  |  |  |
|                  |                  |                       |     | .0035  | .0089  | .0125      | .0318  | .0110                       | .0279  |  |  |
|                  |                  |                       |     | .0040  | .0102  | .0125      | .0318  | .0110                       | .0279  |  |  |

\*Other sizes available upon request \*All dimensions and tolerances are for reference only  
 "T" To be determined according to the size of FR and BR and Hole Bore Length