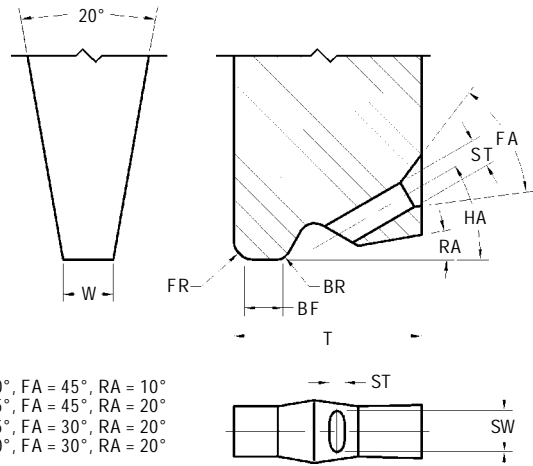
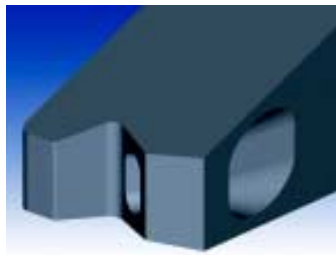


RIBBON WIRE BONDING TOOLS



RW30 HA = 30°, FA = 45°, RA = 10°
 RW45 HA = 45°, FA = 45°, RA = 20°
 RW55 HA = 55°, FA = 30°, RA = 20°
 RW60 HA = 60°, FA = 30°, RA = 20°

STANDARD DIMENSIONS

Tool Styles	Slot Width/Bond Flat SW / BF	Ribbon Width RW	Ribbon Thickness RT	Slot Width SW	Slot Thickness ST	Bond Foot BF	Foot Width W	Clearance 30° & 45° Slots C	Clearance 55° Slots C	Tip Thickness 30° Slots T	Tip Thickness 45° Slots T	Tip Thickness 55°/60° Slots T
		in / μm Ref	in / μm Ref	in / μm ±.0003/8	in / μm ±.0003/8	in / μm ±.0002/5	in / μm ±.0002/5	in / μm Ref	in / μm Ref	in / μm ±.0005/13	in / μm ±.0005/13	in / μm ±.0005/13
0420*		.0020 / 51	.0005 / 13	.0040 / 102	.0025 / 64	.0020 / 51	.0055 / 140	.0020 / 51	.0030 / 76	.0160 / 406	.0140 / 356	.0120 / 305
0425		.0020 / 51	to	.0040 / 102	.0025 / 64	.0020 / 51	.0055 / 140	.0020 / 51	.0030 / 76	.0160 / 406	.0140 / 356	.0120 / 305
0430		.0020 / 51	.0010 / 25	.0040 / 102	.0025 / 64	.0020 / 51	.0055 / 140	.0020 / 51	.0030 / 76	.0160 / 406	.0140 / 356	.0120 / 305
0520		.0030 / 76		.0050 / 127	.0025 / 64	.0020 / 51	.0065 / 165	.0020 / 51	.0030 / 76	.0160 / 406	.0140 / 356	.0120 / 305
0525*		.0030 / 76		.0050 / 127	.0025 / 64	.0025 / 64	.0065 / 165	.0020 / 51	.0030 / 76	.0160 / 406	.0140 / 356	.0120 / 305
0530		.0030 / 76		.0050 / 127	.0025 / 64	.0030 / 76	.0065 / 165	.0020 / 51	.0030 / 76	.0180 / 457	.0150 / 381	.0140 / 356
0540		.0030 / 76	.0005 / 13	.0050 / 127	.0025 / 64	.0040 / 102	.0065 / 165	.0020 / 51	.0030 / 76	.0180 / 457	.0150 / 381	.0140 / 356
0620		.0040 / 102	to	.0060 / 152	.0025 / 64	.0020 / 51	.0075 / 191	.0020 / 51	.0030 / 76	.0160 / 406	.0140 / 356	.0120 / 305
0625		.0040 / 102	.0010 / 25	.0060 / 152	.0025 / 64	.0025 / 64	.0075 / 191	.0020 / 51	.0030 / 76	.0160 / 406	.0140 / 356	.0120 / 305
0630*		.0040 / 102		.0060 / 152	.0025 / 64	.0030 / 76	.0075 / 191	.0020 / 51	.0030 / 76	.0160 / 406	.0150 / 381	.0140 / 356
0640		.0040 / 102		.0060 / 152	.0025 / 64	.0040 / 102	.0075 / 191	.0020 / 51	.0030 / 76	.0160 / 406	.0150 / 381	.0140 / 356
0725		.0050 / 127		.0070 / 178	.0030 / 76	.0025 / 64	.0085 / 216	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
0730		.0050 / 127		.0070 / 178	.0030 / 76	.0030 / 76	.0085 / 216	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
0740		.0050 / 127	.0005 / 13	.0070 / 178	.0030 / 76	.0040 / 102	.0085 / 216	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406
0750		.0050 / 127	to	.0070 / 178	.0030 / 76	.0050 / 127	.0085 / 216	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406
1125		.0070 / 178	.0020 / 51	.0110 / 279	.0030 / 76	.0025 / 64	.0125 / 318	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406
1130		.0070 / 178		.0110 / 279	.0030 / 76	.0030 / 76	.0125 / 318	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406
1140*		.0070 / 178		.0110 / 279	.0030 / 76	.0040 / 102	.0125 / 318	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406
SW / BF	Ref	Ref	±.0005/13	±.0003/8	±.0002/5	±.0005/13	Ref	Ref	±.0005/13	±.0005/13	±.0005/13	
1425	.0100 / 254			.0140 / 356	.0030 / 76	.0025 / 64	.0155 / 394	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
1430	.0100 / 254			.0140 / 356	.0030 / 76	.0030 / 76	.0155 / 394	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
1440	.0100 / 254			.0140 / 356	.0030 / 76	.0040 / 102	.0155 / 394	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
1625	.0120 / 305			.0160 / 406	.0030 / 76	.0025 / 64	.0175 / 445	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
1630	.0120 / 305			.0160 / 406	.0030 / 76	.0030 / 76	.0175 / 445	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
1640*	.0120 / 305	.0005 / 13		.0160 / 406	.0030 / 76	.0040 / 102	.0175 / 445	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406
1650	.0120 / 305	to		.0160 / 406	.0030 / 76	.0050 / 127	.0175 / 445	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406
1925	.0150 / 381	.0020 / 51		.0190 / 483	.0030 / 76	.0025 / 64	.0205 / 521	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
1930	.0150 / 381			.0190 / 483	.0030 / 76	.0030 / 76	.0205 / 521	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
1940*	.0150 / 381			.0190 / 483	.0030 / 76	.0040 / 102	.0205 / 521	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406
2425	.0200 / 508			.0240 / 610	.0030 / 76	.0025 / 64	.0255 / 648	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
2430	.0200 / 508			.0240 / 610	.0030 / 76	.0030 / 76	.0255 / 648	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0140 / 356
2440	.0200 / 508			.0240 / 610	.0030 / 76	.0040 / 102	.0255 / 648	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406
2450*	.0200 / 508			.0240 / 610	.0030 / 76	.0050 / 127	.0255 / 648	.0025 / 64	.0040 / 102	.0210 / 533	.0180 / 457	.0160 / 406

- * Most commonly specified
- Standard FR and BR : FR = .0010" / 25μm and BR = .0003" / 8μm is standard.
- Max Ribbon size for a vertical shank (1/16) is .012" / 305μm ribbon.

RIBBON WIRE TOOLS - GENERAL GUIDELINES ON HOW TO ORDER

STYLE		FEED ANGLE
RW = RIBBON WIRE	SLIMLINE BACK	30°, 45°, 55°, 60°

MATERIAL	HOLE / BOND FLAT	TOOL LENGTH (TL)
C Cermet composite for Gold Wire (recommended for Low Temperature bonding)	Will rely on specific application requirements (wire diameter used, bond pad size) – see dimension Table	S = .437 / 11.1 mm
TI Titanium Carbide Composite for Gold Wire		¾ = .750 / 19.05 mm
W Tungsten Carbide Ultra Fine Grain for Aluminum Wire		L = .828 / 21.0 mm 1.00 = 1.00 / 25.4 mm Longer lengths are available consult Bonder manufacturer for specifications.

FOOT OPTIONS	
FM	Flat foot design with the FR, BR and BF matte. (Standard)
CGM	Cross Groove with the FR and BR matte. Not recommended for BF smaller than .0020"/50µm

HOW TO ORDER	
SPECIFY	Style – Material – Tool Diameter – Tool Length – Foot Design
EXAMPLE	RW45 - TI - 1140 - 1/16 - L - CGM RW45 - TI - 0530 - 1/16 - L - FM