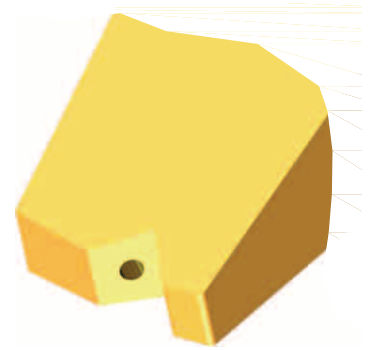
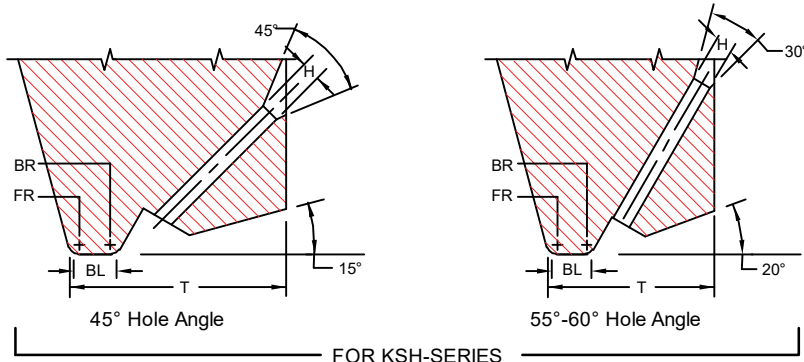


SERIES KSH

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

FOR MANUAL AND SEMI-AUTOMATIC BONDERS

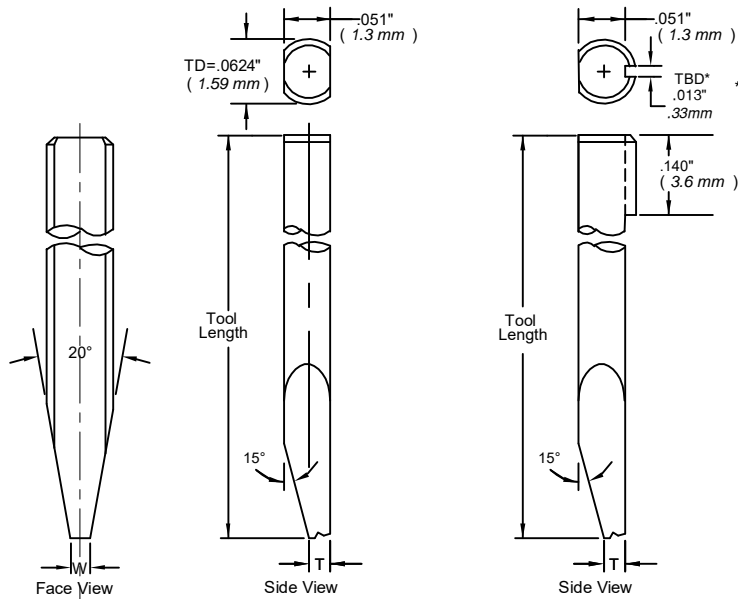


We recommend a .0005" back radius and a cross groove or a flat bond foot when ordering tools for gold wire thermosonic bonding. For more gold wire application information see **Tech Tips**

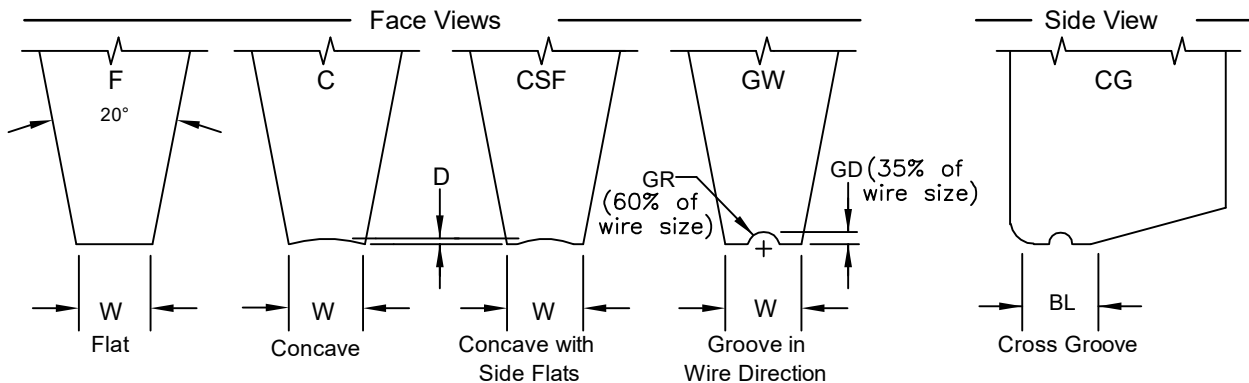
KSH-SERIES

WIRE Ø .0005" through .0020"

S1 Option



Standard: Ø 1/16, Hole Angle: 45°, 55°, 60°



SERIES KSH

SMALL WIRE

ORDERING INFORMATION
SMALL WIRE BONDING WEDGES
FOR GOLD AND ALUMINUM WIRE

SAMPLE PART NUMBER: M-KSH-D-1/16-3/4-45-CG-2020-M-*

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

1. **MATERIAL:** _____
 M = Ceramic
 C = Tungsten Carbide
 T = Titanium
 All other: See Material Selection Guide

2. **SERIES:** KSH _____

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:** 45°,55°,60 _____

(10) S1 and other Option
See Tool Options

(9) **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)

(8) **TOOL SIZE:** See Standard Chart

(7) **FOOT TYPE:**
F = Flat
C = Concave
CSF = Concave with Side Flats
 (CSF not available with ceramic tools)
CG = Cross Groove
GW = Groove in wire direction
 (Please specify wire size)

For special sizes or dimensions insert an (X) in the appropriate position of the part number then specify what (X) equals.
 Example: M-KSH-X-1/16-3/4-45-F-2020-M (X) FR=.0012, BR=.0007

STANDARD CHART		KSH SMALL WIRE: FOR WIRE DIAMETERS .0005" THROUGH .0020"												
TS	H		BL		D		T 45°		T(55° 60°)		W		SUGGESTED WD	
Units	in.	μ	in.	μ	in.	μ	in.	μ	in.	μ	in.	μ	in.	μ
Tolerance	±.0002	±5	±.0002	±5	-.0001	-2.5	±.0005	±13	±.0005	±13	±.0005	±13		
1505	.0015	38	.0005	13	.0002	5	.0090	229	.0075	191	.0025	64	.0005 through .0007	13 18
1507	.0015	38	.0007	18	.0002	5	.0090	229	.0075	191	.0025	64		
1510	.0015	38	.0010	25	.0002	5	.0100	254	.0080	203	.0025	64		
1513	.0015	38	.0013	33	.0002	5	.0100	254	.0080	203	.0025	64		
1515	.0015	38	.0015	38	.0002	5	.0100	254	.0090	229	.0025	64		
1520	.0015	38	.0020	51	.0002	5	.0110	279	.0090	229	.0025	64		
Tolerance	±.0002	±5	±.0002	±5	-.0001	-2.5	±.0005	±13	±.0005	±13	±.0002	±5		
2010	.0020	51	.0010	25	.0002	5	.0100	254	.0090	229	*.0040	102	.0007 through .0010	18 25
2015	.0020	51	.0015	38	.0002	5	.0110	279	.0090	229	.0040	102		
2020	.0020	51	.0020	51	.0002	5	.0110	279	.0100	254	.0040	102		
2025	.0020	51	.0025	64	.0002	5	.0120	305	.0100	254	.0040	102		
2030	.0020	51	.0030	76	.0002	5	.0120	305	.0110	279	.0040	102		
2520	.0025	64	.0020	51	.0002	5	.0130	330	.0110	279	.0040	102	.0013	33
2525	.0025	64	.0025	64	.0002	5	.0140	356	.0120	305	.0040	102		
2530	.0025	64	.0030	76	.0002	5	.0140	356	.0120	305	.0050	127		
2535	.0025	64	.0035	89	.0002	5	.0150	381	.0125	318	.0050	127		
2540	.0025	64	.0040	102	.0002	5	.0150	381	.0125	318	.0050	127		
3020	.0030	76	.0020	51	.0003	8	.0130	330	.0115	292	.0050	127	.0015	38
3025	.0030	76	.0025	64	.0003	8	.0140	356	.0115	292	.0050	127		
3030	.0030	76	.0030	76	.0003	8	.0140	356	.0125	318	.0050	127		
3035	.0030	76	.0035	89	.0003	8	.0150	381	.0125	318	.0050	127		
3040	.0030	76	.0040	102	.0003	8	.0150	381	.0135	343	.0050	127		
3525	.0035	89	.0025	64	.0003	8	.0140	356	.0130	330	.0060	152	.0020	51
3530	.0035	89	.0030	76	.0003	8	.0150	381	.0130	330	.0060	152		
3535	.0035	89	.0035	89	.0003	8	.0150	381	.0140	356	.0060	152		
3540	.0035	89	.0040	102	.0003	8	.0160	406	.0140	356	.0060	152		
3545	.0035	89	.0045	114	.0003	8	.0160	406	.0150	381	.0060	152		
3550	.0035	89	.0050	127	.0003	8	.0160	406	.0150	381	.0060	152		

*Other sizes available upon request *All dimensions and tolerances are for reference only
 TOOL SIZE=TS, WIRE DIAMETER=WD "T" To be determined according to the size of FR and BR and Hole Bore Length