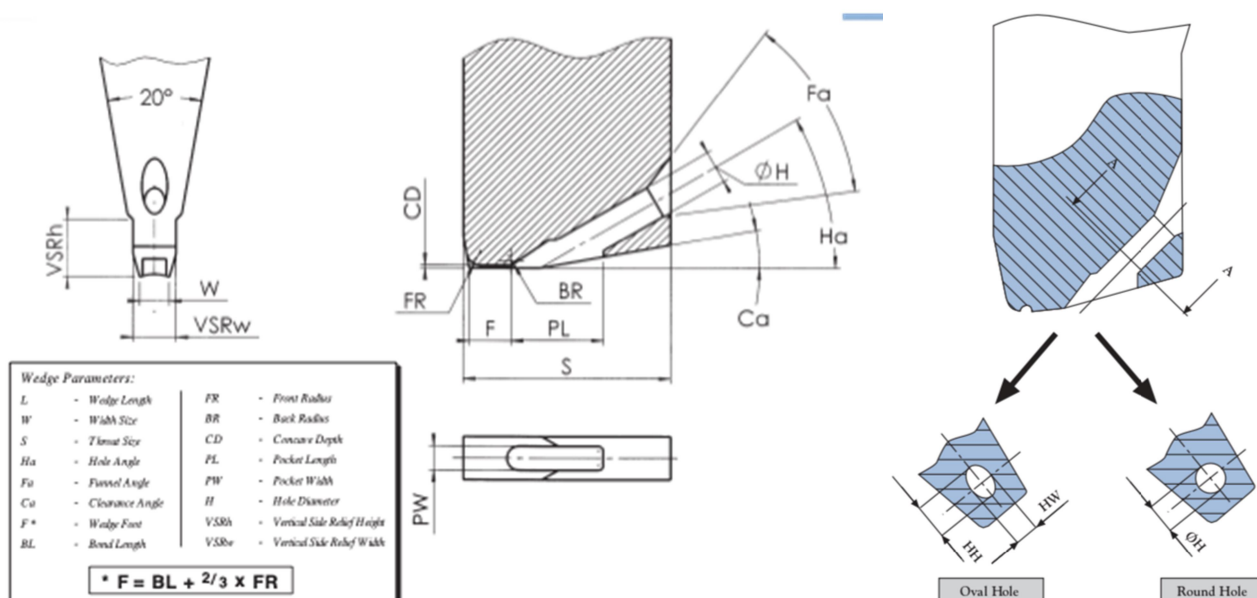


- SCOPE: A guide to help specify the correct feed hole size for a given wire diameter for an MPP fine wire bonding wedge.

The wire diameter is defined by the application, taking into account the geometries of the bond pad, materials and circuit requirements. Thicker wires are preferred as they tend to create a stable loop and are easier to bond. However, there is a balance in the feed hole diameter against the wire diameter in order to maintain free uninhibited moment and feed of the wire when selecting the correct fine wire bonding wedge.

Larger hole sizes will influence the location and accuracy of the first bond. The smaller the hole, the tighter the control on the bond's location. Care should be taken if the hole is made too small as the added friction will affect the looping height and tail consistency. Oval holes may be an option, providing tighter control to the first bond's location, keeping the tail of the wire under the tool, but providing some relief to eliminate friction between the wire and hole.



Wire diameter		Round Hole		Oval Hole	
mil	microns	Recommended (inches)	Minimum (inches)	Hole Width (inches)	Hole Height (inches)
2.00	50	0.0035	0.0032	0.0030	0.0040
1.50	37	0.0030	0.0025	0.0025	0.0035
1.25	31	0.0025	0.0020	0.0022	0.0028
1.00	25	0.0020	0.0016	0.0017	0.0023
0.70	17	0.0015	0.0013	0.0013	0.0017