

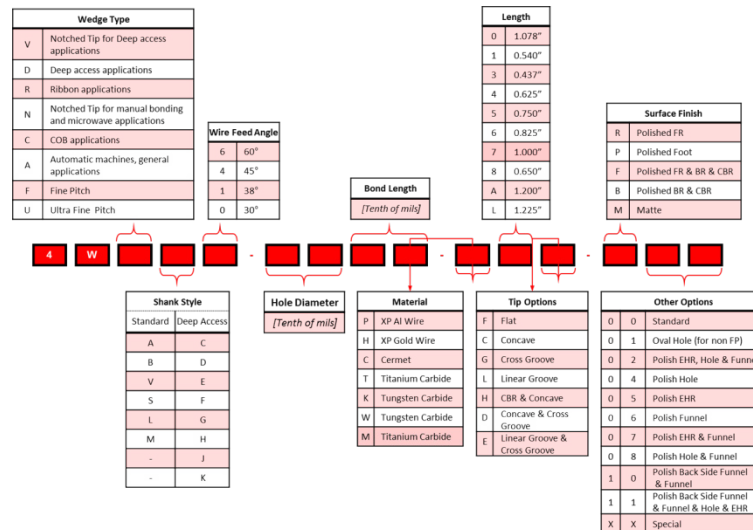
- SCOPE: This article explains the nomenclature used to identify Micro Point Pro’s bonding tools for wire and ribbon bonding, along with the key selection criteria to consider when choosing bond tools.

Bond tool selection is key to a successful and stable wire bonding process. Bonding tools are high precision manufactured, with attributes specific to the wire diameter in use and bonding process parameters.

Wedge tools are manufactured from 3 main materials:

- Tungsten Carbide for aluminium wire
- Titanium Carbide for gold wire
- Ceramic tipped tungsten carbide tools are also available for gold processes

The figure below describes the Micro Point Pro round wedge nomenclature:



Three main selection criteria for the above wedges are:

Hole Diameter (H):

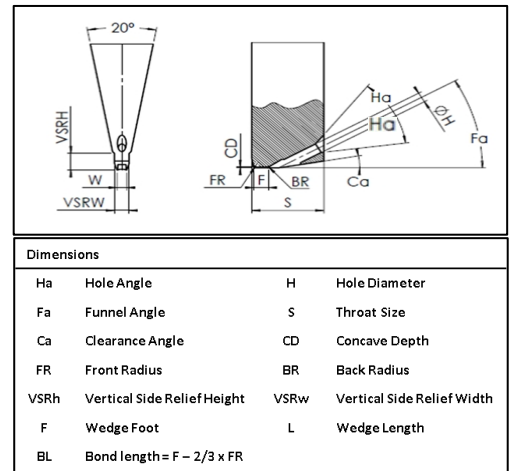
This contributes to bond placement accuracy and wire clearance during looping.

Hole Angle (Ha)

This contributes to looping consistency, heel stress in the bonds and tailing consistency.

Bond Length (BL)

Directly affects 1st / 2nd bond size, wire pull strength



For further information about Micro Point Pro bonding tools:

<https://www.inseto.co.uk/microelectronic-materials-mpp-bonding-tools.php>