



Important Elements for Determining the Proper Tools in Fine Pitch Wire Bonding Applications

- Bond Pad Pitch:** The distance between the centers of the bond pads.
- Bond Pad Size:** May be square, rectangular, or round. The most important dimension is the size along the pitch, as shown above.
- Loop Height:** The most important aspect of wire loop height is the effective critical loop height directly adjacent to the capillary. If the capillary is designed to clear only the maximum loop height which occurs away from the capillary, then the “T” dimension will be less than required resulting in a less than ideal second bond.
- Critical Clearance:** The design clearance between the capillary angle bottleneck, capillary manufacturing tolerances, loop control, and desired quality standards can all influence the designed clearance.