QA Technology Company, Inc.

A p p l i c a t i o n s  N o t e

# Point Style Selection for OSP Coated Pads



OSP (Organic Solderability Protectant) coating is increasingly being used due to the advantages they offer the PCB manufacturing process. By preventing oxidation of bare copper pads, OSP offers the elimination of the bare board solder-coating process (HASL - Hot Air Solder Leveling), and allows multiple passes through reflow ovens without degradation of solderability.

The OSP coating is dissolved by the flux when solder paste is applied to the pads and should not create an insulating barrier to the test probes. However, in cases where a PCB has components on only one side and test points on the other, bare copper pads coated with OSP remain as test points. Reliable penetration of this coating by the test probe is required to test the PCB, which should not be a problem if thickness and temperature is controlled in the OSP coating process. The coating thickness recommended by OSP manufacturers is between 0.25 and 0.35 microns. Higher contact pressure such as 6 to 10 ounces consistently provides a more reliable contact when the thickness of the OSP is greater than the specified 0.35 microns. Therefore the use of higher spring forces may be the best testing option.

Generally, the same tips used on no-clean flux processes are recommended such as the 51, 53, 61-S, 63, 6R-S, 8R-S and 91-S. QA typically recommends using these tip styles in our steel option.

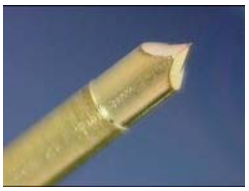
51 - Chisel

53 – Sharp Chisel

61-S - Blade

63 – Sharp Chisel

6R-S – Razor



8R-S – Razor
(Formerly 81-S)

91-S – Blade

Please refer to QA's website www.qatech.com or the latest catalog for additional information.