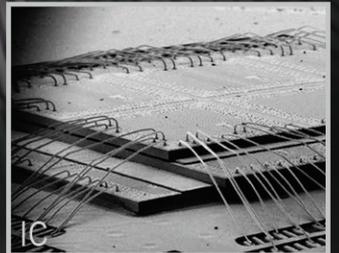


Ag

Silver Alloy Wire Bonding Capillary

Applications:



AG ALLOY WIRE BONDING

In recent years, wire bonding packaging interconnect technology has shifted gears from gold to copper. The interest to use Ag-Alloy wire as an alternative wire bonding material has been explored for further process improvement in terms of bonding sensitive metallization devices that cannot be bonded using a hard but cheaper copper wire. However, second (stitch) bond associated to the change in wire properties has been one of the most common wire bonding related problems that cause poor productivity and low Mean-Time-Between-Assist (MTBA).

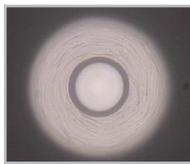
To achieve an optimal stitch formation and reliable bonding using Ag alloy wire, SPT's Stitch Integrator (SI) capillary is the recommended working solution proven to enhance the coupling interface between the capillary tip surface and the Ag alloy wire as it provides the most efficient ultrasonic energy transfer.

SI Features

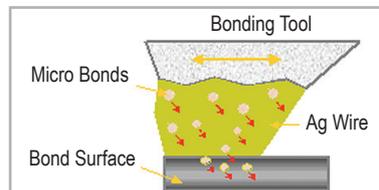
Enhanced coupling effect between the capillary and wire with better ultrasonic energy transfer versus conventional finishing.



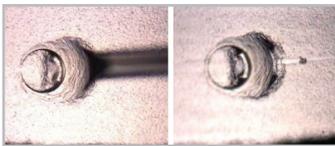
Conventional Finishing



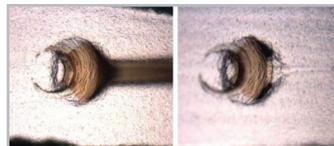
SI Finishing



Superior wire pull failure mode with comparable result as Au wire bonding.



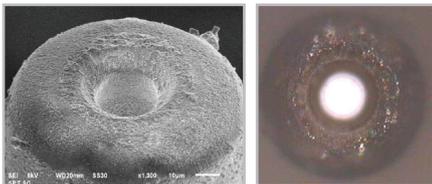
Ag Alloy Wire



Au Wire

Extended capillary tool life

Typical cause of short tool life using Ag alloy wire is due to heavy load-up of foreign materials at the tip surface of the SI capillary. To overcome this problem, it is highly recommended to integrate the Infinity feature which increases the capillary touchdowns.



Ag Alloy wire bonding – 1.5kk bonds
Capillary build up issue

How To Order



**STITCH
INTEGRATOR**

INFINITY