Wirebonder

STANDARD OPERATING PROCEDURE

CORAL Name: --

Model Number: --

Location: ICL

Procedure:

1. Engage tool in Coral
2. Turn on power switch, located on the lower right hand side of the machine.
3. Choose which workstation is needed:
4. Clamping- used for smaller packages and pieces
5. Non-clamping- used for larger samples and full wafers
6. Set workstation height:
7. Use silver side of the height gauge
8. Adjust height of the workstation, so that it is flush with the silver side of the height gauge when the workstation is placed on the steel spacing plate.
9. Mount sample on workstation.
10. Place the spacer plate and workstation on the wirebonder.
11. Adjust focus and zoom on microscope so that the bonding area is in focus. (The tip should be visible in the upper view of the microscope.)
12. Using the lever on the right hand side of the tool, slowly lower the bonding tip down to the pad you want to make the 1st bond on.
13. Push lever down until it stops and then slowly allow it to return to its original position.
14. Move sample to 2nd bond position, and repeat bonding procedure.

Adjusting Loop Height

1. Make 1st bond.
2. Adjust Loop Height dial to proper setting.
3. Make 2nd bond.

Replacing Tip

New tips are stored in table drawer.

1. Using small Allen wrench, loosen the screw holding the tip.
2. Remove and throw old tip away.
3. Remove new tip from vial.
4. Install new tip so that its top is flush with the transducer arm.
5. Tighten screw with Allen wrench, being careful not to over-tighten.

Threading Tip

Note: This can be somewhat difficult and is best to have a hands-on training by staff.

1. Use 5ASA tweezers with good tips, Hold the wire about 1” above the end and carefully angle the wire down into the top of the tip.
2. When the wire starts to come out of the bottom of the tip, grab the end of the wire and pull about 2” of wire through the tip.
3. Feed the wire through the wire guide above the tip.
4. Press and release the red “EFO” button on the front panel of the bonder. This will create a ball at the end of the tip.
5. Make a couple of test bonds.
6. Any problems encountered can be resolved by staff.