Wire Bonder

Manager: Jerry Drumheller
Backup: Vince Genova
Backup:

Safety
- No unusual hazards during normal operation
- No buddy system restrictions imposed on normal operation

Process Restrictions
Material Restrictions
- Call machine manager
Parameter Restrictions
- None

Scheduling / Sign-up Restrictions
- Maximum 4 hour block reservations anytime
- Maximum 12 hours reserved in advance at any time per person
- No consecutive research group reservations
- Users/Groups may use any amount of unreserved time
- Additional individual restrictions may be imposed to maximize effective use

Requirements (Do Every Time)
- If you must change wire spools, then Capture the wire on end of spool with double sticky tape before removing wire end from horn.

Prohibitions (Never Do)
- NEVER Allow the wire end to fly loose when changing wire spools.
- NEVER Change or modify the wire clamp.

Common Problems

<table>
<thead>
<tr>
<th>Problem</th>
<th>Root Cause</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Bonds not sticking.</td>
<td>1) Power too low. 2) Pads are not a good material. 3) Pads may be contaminated. 4) Pads are peeling. Cotton friction too low. May be that cotton tension is too great. Tool clogged.</td>
<td>1) Increase power, shorten time. 2) A different or thicker metal may be required. 3) Try cleaning them. (Oxygen plasma) 4) Poor adhesion in metallization. Carefully push more cotton into hole. Pull cotton out a slight bit. Needs to be cleared with tungsten wire.</td>
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<td>Wire won't feed</td>
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<td>Wire tearing off first bond.</td>
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<td>Can't thread tool</td>
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Other Comments or Cautions
- Gloves are required.
- OK to call machine manager (at home) about malfunctions before 10:00 p.m. and after 9:00 am(weekends).