Gantry Report

University of California
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UCSB Gantry Team:
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Recent Production

- **We built 101 modules since the last gantry meeting (June 7, 2004):**
  - 89 were ST qualification modules (77 TOB, 6 R5N, 6 R5S)
  - 12 were TEC R6 (6 with ST sensors and 6 with HPK sensors)

- **All modules were within module mechanical specifications (grade A), but there were a couple other problems encountered:**
  - 1 TEC R5S module had 64 APV/PA bonds damaged from a rotated vacuum cup. One of the 2 vacuum cups that picks up the hybrid is located on the PA. We have since glued the vacuum cups in position so they can not accidentally get rotated.

  - 1 TOB module had a bad HV connection to the second sensor. We were able to connect it using silver epoxy on an exposed copper pad which is not under the CF frame. This is the 1st time we have seen this problem. We have increased the amount of silver epoxy that we use to make sure this is always a reliable connection.

  - 10 SS6 TOB modules were built with hybrids from batches other than the 2 approved TOB batches. This was due to a miscommunication about stored hybrids in the clean room. All un-approved batches have been removed from the clean room. It is highly recommended that all un-approved parts (sensors, hybrids, etc.) be marked “faulty” in the DB to help avoid this kind of problem in the future.
### Assembly Plate Status

<table>
<thead>
<tr>
<th>Assy Plate Type</th>
<th># Fabricated (parts made)</th>
<th># Commissioned (ready to be used)</th>
<th>plates used in module production so far</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOB R-phi</td>
<td>7</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>TOB Stereo</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>TEC R5 R-phi</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TEC R5 Stereo</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TEC R6</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>19</td>
<td>15</td>
</tr>
</tbody>
</table>

- **TEC R7 assembly plates (2) are being worked on.**
  - *Expect to build 1st R7 modules by the end of August.*
• **Installed Valeria’s grading changes in the gantry DB files and in our OGP file conversion program.**

• **Spare sensor and hybrid tools being produced for UCSB, FNAL and Brussels.**

• **Upgrading OGP computer OS and OGP software at end of this month.**

• **In the process of setting up back-up gantry computer with spare U600 controller and expansion cards already installed in it.**

• **Gantry technicians are updating and finalizing our module assembly procedures for TOB and TEC modules.**