**Safety**
- Be careful removing the platen.
- Be careful not to touch the heating lamps with the platen or your hands.
- The platen may still be warm if substrate heating was used. Wait a few minutes for the metal to cool at atmosphere.
- Do not use the metal evaporator vacuum attachment to clean the sputtering system. Use the rubber tool by the tool.
- No buddy system restrictions imposed on normal operation.

**Process Restrictions**

**Material Restrictions**
- None

**Parameter Restrictions**
- We advise users to deposit between 100 -1000 angstroms of ITO.
- The oxygen concentration can only be adjusted between 2-12%.

**Scheduling / Sign-up Restrictions**
- None

**Requirements (Do Every Time)**
- Vacuum out target and shutter assemble before and after use.
- Always leave tool under vacuum

**Prohibitions (Never Do)**

**Common Problems**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Root Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low deposition rate</td>
<td>Micro arcing between the shutter and the ground shield around the target.</td>
<td>Vacuum out the shutter again and inspect around the target for flakes.</td>
</tr>
</tbody>
</table>

**Other Comments or Cautions**

Calls to staff phones will be automatically forwarded to their cell phones during accessible hours. At other times leave a message or send them an email.