

**SVG 1 TRACK CERTIFICATION CHECKLIST**

*How can a user hurt them self? How can a user hurt the tool?*

A qualified user should be able to:

- Identify personal safety hazards associated with the tool and what precautions are taken to prevent an accident from occurring.
- Identify hazards to the tool and what precautions are taken to prevent an accident from occurring.
- Operate the tool safely and proficiently.
- Recover from simple errors.
- Demonstrate knowledge of the processes performed with the tool.

**SVG Track**

- **Hazards to the Operator**
  - **Chemical hazards** - The SVG track uses various organic solvents in the coat process and basic solutions in the develop process. Operators should read the SDS for these materials and be familiar with hazards and safety controls to prevent contact before using the system.
  - **Electrical hazards** – Electrical hazards exist inside the tool. Do not operate without all covers in place. In the event of an emergency push an EMO button on either end of the machine.
  - **Spin hazards** - During spinning operations, wafers rotate at high speeds and can shatter. Always wear safety glasses.
  - **Pinch hazards** – Pinch hazards may occur during operation. Keep clear of moving parts.
  - **Burn hazards** – Avoid contacting the hotplates.
- **Hazards to the Tool**
  - **Waste bottle overflow** – Make sure that the waste bottle is not full before use.
  - **Arm damage** - The robotic arms on the SVG Track may be damaged if they are re-positioned manually. If the tool hangs up, do not attempt to re-position the arms. Contact a staff member in case of an arm error.
  - **Hot plate contamination** – Avoid back side coating of wafers. If wafers are run through the track with resist on the backs, the hotplates will become contaminated.
  - **Wrong chemistry** - AZ MiR 701 Photoresist and CD-26 Developer are the standard chemicals on this tool. Other resists could lead to clogs and need SMFL approval before use.
  - **Wrong cassettes** – Only use the labeled black polypropylene cassettes. Other cassettes may cause wafers to crash and damage the arms.
  - **Recipe change** – Please do not change established recipes. Established recipes will be posted on the tool.
- **Operating Tool**
  - A qualified user should be able to:
    - Load and unload cassettes and wafers correctly
    - Load a program
    - Start the run
    - Reset the system
  - Reservations – If not present at stated start time, tool is reserved for 15 minutes and is then considered open for general use.

## ***R·I·T SEMICONDUCTOR AND MICROSYSTEMS FABRICATION LABORATORY***

- **Simple Errors**

- Avoid removing wafers that are wet with developer. Contact a staff member.
- Track hang up during operation.
- A continuous alarm may indicate a low level or a full waste bottle. Contact an SMFL staff member for assistance.

- **Processes**

- Users should be familiar with material identities, bake time and temperatures, and spin time and speeds.

- **Appropriate Uses of the Tool**

- AZ MiR 701 Photoresist and CD-26 Developer are the standard chemicals on this tool. Other resists could clog the track and will need SMFL approval before use.
- No back side coating of wafers. If wafers are run through the track with resist on the backs, the hotplates will become contaminated.
- Hand dispense of resist is allowed only for approved resists.