

WET BENCH FOR ALUMINUM ETCH CERTIFICATION CHECKLIST

How can a user hurt themselves? How can a user hurt the tool?

A qualified user should be able to:

1. Identify personal safety hazards associated with the tool and what precautions are taken to prevent an accident from occurring.
2. Identify hazards to the tool and what precautions are taken to prevent an accident from occurring.
3. Operate the tool safely and proficiently.
4. Recover from simple errors.
5. Demonstrate knowledge of the processes performed with the tool.
6. Know the appropriate uses of the tool.

Wet Bench for Aluminum Etch

▪ **Personal Safety Hazards**

- Hazardous Chemicals –Read and understand the MSDS for the chemical being used. When using this bench safety gloves, chemical apron and a face shield are required, in addition to your safety glasses. The temperature-controlled baths are capable of heating chemicals to high temperatures which creates an additional burn hazard. The chemicals used in this bench may include PRS-1000 and PRS-2000 photoresist strippers, phosphoric acid, acetic acid and nitric acid.

▪ **Hazards to the Tool**

- Cross Contamination –Wafers with gold or copper should not be introduced into this bench. No lift-off processing allowed.
- Tank Breakage –The Aluminum etch tank is breakable. Carefully place wafers in it and never bang a cassette on the side.
- Fire –Never attempt to heat a process tank that is not filled.
- Dedicated Process –All tanks in this bench are dedicated to a specific process. Never interchange chemicals.

▪ **Operating Tool**

- Users should be able to:
 - Turn on the bench and heat up the tanks.
 - Process wafers.
 - Shut down the bench.
- Reservations – If not present at stated start time, tool is reserved for 15 minutes and is then considered open for general use.

▪ **Simple Errors**

- Incorrect liquid level
- Level detector not bubbling
- Lost or broken wafer

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- **Processes**
 - A qualified user should be familiar with Aluminum etching and photoresist solvent strip.

- **Appropriate Tool Use**
 - Only photoresist stripping and aluminum etching are to be done in this tool. The solvent strip tanks are *not* intended for photoresist that has been ion implanted, plasma etched or sited.
 - Only Teflon wafer cassettes and handles may be used.
 - Process temperatures are set and should not be changed without SMFL approval.
 - Only wafer cassettes are allowed, no single wafer carriers.
 - No lift off processing.