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.

**Karl Suss MA56 Mask Aligner**

- **Personal Safety Hazards**
  - Ultraviolet Radiation - The aligner has a mercury arc ultraviolet light source. Do not look into the direct light area without wearing special UV light protection.
  - Mechanical Hazards - Moving parts may create pinch hazards. Broken pieces of silicon wafers very sharp and slivers may puncture or cut the skin.

- **Hazards to the Tool**
  - Acetone - Do not clean the aligner with acetone.
  - Contamination - Wafers need to be clean and kept free of contamination as much as possible. It is a good idea to inspect the backs of the wafers as well as the mask for any resist that could gum up the system.
  - Wafer Size - Make sure that the aligner is set up for the proper wafer size.

- **Operating Tool**
  - Users should be able to:
    - Start the system, including service chase set up.
    - Measure photo intensity
    - Load a mask and wafer
    - Expose a wafer
  - Reservations - If not present at stated start time, tool is reserved for 15 minutes and is then considered open for general use.

- **Simple Errors**
  - n/a

- **Processes**
  - A qualified user should be familiar with contact aligning and photolithography.

- **Appropriate Tool Use**
  - Use caution when doing a hard contact exposure because the wafer may stick to the mask.