

DENTON SPUTTER UNIT CERTIFICATION CHECKLIST

How can a user hurt themselves? 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.

Denton Sputter Unit

- **Personal Safety Hazards**
 - High Voltage – This unit has hazardous voltages inside. Do not operate with the covers off.
 - Compressed Gases – This system uses compressed argon gas. Please read and understand the MSDS before using.
- **Hazards to the Tool**
 - Excessive Deposition Times - Sputter runs should not last for more than 3 minutes.
- **Operating Tool**
 - A qualified user should be able to:
 - Load and pump down the chamber
 - Set up and perform a sputter run
 - Shut the system down
 - Reservations – If not present at stated start time, tool is reserved for 15 minutes and is then considered open for general use.
- **Simple Errors**
 - If the unit does not pump down, make sure that the vacuum seals are clean and that the lid and glass jar are well seated.
 - If no gold is deposited, make sure that the pressure and current are correct and that you are using the **Sputter** mode. Also check that the target in the lid has not worn through.
- **Processes**
 - Certified users should be familiar with typical materials, powers, pressures, gas flows, and deposition rates of common materials.
- **Appropriate Uses of the Tool**
 - Sputter runs should not last for more than 3 minutes and are intended for SEM sample preparation only.