

**M 011 Auxiliary Machine Shop User Requirements**

**S-SA-M-128 REV B**

Revision	Date	Pages Affected	Description	Author
A	21 Mar 2023	-	Initial Release	J. Valverde Ortiz
B	11 July 2023	3,4	Removed ref to S-SA-M-044 & M_010. Added usage and guidelines.	C. Taylor

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## **1 General Description and Scope**

### **1.1 Description**

This document defines the requirements for an outside user of The ME Machine Shop to use the Auxiliary Machine Shop (Aux Shop) equipment.

### **1.2 Scope:**

This document is used when qualifying a potential user requesting access to the Aux Shop equipment.

This document *does NOT* apply to Hot Work qualification.

## **2 Business Case**

Members of the ME Machine Shop are skilled machinists with years of training and experience.

The Machinist on Duty (MOD) is a member of the ME Machine Shop group and can handle many of the jobs more efficiently and safely.

A user outside the ME Machine Shop group requires a reasonable justification to use the Aux Shop equipment.

The reasonable justification shall describe the type of work being done and why it should be done by a user outside of the ME Machine Shop group.

## **3 Safety Training Requirements**

The potential user shall complete *G\_001, M\_001, and M\_011* in order to operate the mill, lathe, arbor press, vertical band saw, bead blaster, bench grinder, drill press, paint booth, shear, sheet metal brake, and Dake stock saw.

The user shall complete *G\_001, and M\_001* for hand tools.

## **4 Evaluation of Experience**

The potential user shall be evaluated by qualified shop personnel.

The *MOD* and *Shop Supervisor* are the qualified shop personnel.

Qualification will entail an interview and practical exam detailed in Chapter 5.

## **5 Practical Test**

To demonstrate their knowledge in the operation of a lathe or mill, a user must show proficiency by describing how to manufacture a sample part from the print provided.

Show safe and proficient use: arbor press, vertical band saw, bead blaster, bench grinder, drill press, paint booth, shear, sheet metal brake, and Dake stock saw as applicable.

Show safe and proficient use of hand tools where applicable.

## **6 Rules of the Aux Shop**

### **Usage**

- LLE's Auxiliary Machine shop can typically handle no more than two additional users at a time due to its small size. Usage of equipment is on a first come, first serve basis. When equipment usage conflicts occur, LLE staff and students have priority (in that order) over non-LLE users. In the event of a conflict the MOD will arbitrate.
- The Auxiliary machine shop will only be available when there is a Machinist on Duty, typically 8:00 am – noon, and 1:00 – 4:00 pm Monday through Friday. After hours (evening, weekend, or holiday) use of the shop is strictly forbidden.

### **Guidelines**

1. Safety is first and foremost. Users who have questions should seek help from the MOD.
2. Unsafe working practices will NOT be tolerated in the machine shop. Users will likely be excused from the machine shop after one warning. Use of the Aux Shop is a privilege, not a right.
3. ONLY Approved Aux Shop users are permitted to operate machinery. A list will be posted in the LLE machine shop (LLE Shop). New users will be added after orientation with the Machine shop supervisor.
4. All personnel must wear ANSI Z87 rated safety glasses with side shields while in the LLE machine shops. "Loaner" safety glasses, they are provided at the entrances to the machine shop and must be returned when you leave.
5. Users must check in with the MOD before starting any work. (This does not mean just walking by the machine shop workers.)
6. If you have ANY questions regarding the operation of ANY machine, please contact the MOD.

7. If any staff questions your techniques or the operation of a machine, please stop, listen, and follow their directions. Most of the machine shop staff has 20+ years of experience.
8. Everyone must clean up after themselves. There are NO exceptions. If a machine or work area is found to be left dirty/messy by a previous user, please notify the MOD.
9. If any machine is not functioning properly, exhibits errant noises or erratic behavior, or you break it, shut the machine down immediately and then contact the MOD.
10. All machine shop personnel have personal tool boxes located on work benches. These tool boxes are NOT public property and are NOT to be gone through. Violation of personal toolboxes will result in the loss of shop privileges.
11. All machine shop personnel have their own work benches. These benches are not to be used by outside users unless express permission is given.
12. Machines outside of the Aux Shop are for the use of the LLE Shop employees with the following exceptions; the cut off saw, band saw, and shear.
13. LLE personnel may use prime stock material from the various stock racks over by the shear. Whenever possible, please use “scrap” or stock drops first that are stored in various locations throughout the shop. If you need assistance ask the MOD for assistance. Non-LLE personnel must first ask the MOD before taking any stock.
14. LLE personnel may borrow tools for short-term use, such as drills, cut off saw, etc. Please ask the MOD for assistance and sign out the tools at the south entrance to the LLE Shop. Non-LLE personnel are not permitted to borrow any tools.
15. The Aux Shop has a plentiful supply of tools to be used with the machines. Please ask the MOD for assistance if you can't find what you're looking for.
16. A plentiful supply of reground end mills is provided. These are just as good as new but don't necessarily hold a fractional dimension anymore.
17. If you need a part fabricated for you please contact Tim Clark (X59448).

If there are any questions regarding these guidelines contact one of the following.

- Machine Shop Supervisor – Tim Clark – [tcla@lle.rochester.edu](mailto:tcla@lle.rochester.edu)
- Shop Foreman – Bob McAllister – [rmcal@lle.rochester.edu](mailto:rmcal@lle.rochester.edu)
- ME Group Leader – Cody Taylor – [ctay@lle.rochester.edu](mailto:ctay@lle.rochester.edu)