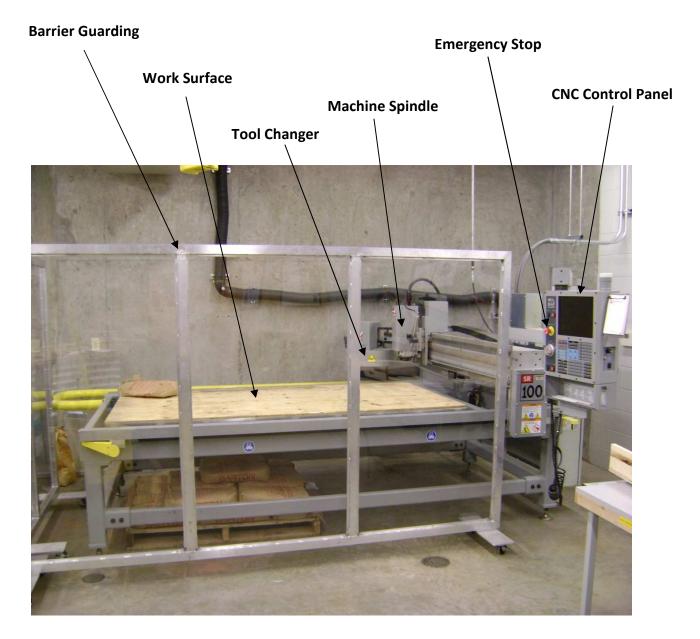
Armstrong Hall of Engineering Artisan and Fabrication Laboratories (AFL) Safety and Operational Procedure

HAAS CNC GANTRY SHEET ROUTER



PPE Required: Safety Glasses

Prohibited Clothing: gloves, loose clothing, neckties, jewelry

Machine Access Level: Supervised Only

Materials Allowed: Wood, plastic, composites

Note: For all other materials see the AFL supervisor! No MDF except for fixturing.

HAAS CNC GANTRY SHEET ROUTER

Operating Procedure

1. Machine Safety Inspection and Work Area Check-Out

- A. **PPE:** make sure you are wearing the proper PPE and not wearing any equipment listed on the first page that could create a hazard.
- B. **Machine Warning Signs:** Make sure you read and follow the machine warning signs that are attached to the machine. If you have any questions, ASK!!
- C. Work Area: Make sure the work area is clean and the work area around the machine is free and clear of debris and personnel.

2. Work Supervision

A. This machine requires supervision by an AFL employee. A supervisor or TA will assist you in the set-up and operation of the machine. You may not operate this machine without supervision.

3. Machine Adjustment

- A. Note: The electronic safety eye must be in position, in order to make adjustments on this machine.
- B. **Check and Select router bit(s):** Make sure the bit is in good condition. A TA will assist you in the selection and proper set up of your tools.
- C. **Identify the machine controls:** Identify the red emergency stop button. This will stop the machine in case of an emergency. Identify the Green Cycle Start button; this will start the program to cycle the machine.
- D. Secure the part to work surface: The part MUST be clamped correctly so it will not move during operation. You may NOT use your hand to hold the part to the work surface! The TA will assist you with this step.
- E. Adjust barrier guarding: Barrier guarding MUST be moved into place before you can begin cutting.
- F. **Adjust speeds and feeds:** Speed and feed adjustments are the main adjustments on the machine. The TA will assist you with this step.
- G. Adjust the air blast: Make sure to utilize air blast when needed. The TA will assist you with this step.

4. Machine Operation

- A. **Dust collection system check:** The dust collection system and ambient air cleaners MUST be on before cutting can be performed.
- B. Set up and operation: The TA will assist you with setting up and operating the machine.
- C. Safely run the part: Safely run the part. The TA will assist you with this step.
- D. **Turn the machine off:** When finished, push the red stop button to shut the machine off. Let the bit come to a stop before removing the part. Never touch a moving bit.

5. <u>Clean Up</u>

- A. **Disassemble work set-up:** Disassemble any clamps or bits. Return all parts to their proper location and the appearance of the CNC Router to how it looked when you started.
- B. **Clean up the area:** Clean up all messes (For example: Use a shop vacuum to clean up any additional dust), return all tools, etc. The TA will check that the area is clean before you can sign-out of the AFL.