

# **BAE Shop General Safety**

The BAE Shop is located in 1329 Bainer Hall and is set up primarily as a manufacturing machine and fabrication shop. This facility includes computerized machine tools, complete welding capabilities, and wood and plastics equipment. The following safety policies are required to be followed by all Shop staff and any user of Shop facilities. Violation of these safety policies may result in loss of Shop access or other disciplinary action at the discretion of the shop lead person.

## **Eye Protection**

All staff, users, and visitors must wear eye protection that meets the ANSI Z-87.1-1989 standard while in the Shop, except for office and break room areas. Safety glasses with side shields are posted at each entrance door for users and visitors.

For people who wear corrective glasses, eye protection must be of the type that can be worn over glasses. Prescription-ground safety lenses may be substituted if they provide equivalent protection and if side shields are attached to the glasses frame.

All staff, users, and visitors who are welding or viewing welding activities must wear eye protection from the radiation produced by welding. Appropriate eye protection will be provided at the welding areas.

Arc welding or arc cutting operations require the use of welding helmets with an appropriate filter lens.

Goggles with filter plates or tinted glass are required for gas welding or oxygen cutting operations.

Safety glasses are required for portable hand grinding operations and some stationary grinding machines. Depending on your specific activity, Shop staff may recommend or require full face shield protection.

## **Hand and Body Protection**

Ties, rings, watches, bracelets, tight or loose fitting plastic "cause" bracelets, unbuttoned long sleeves, dresses, or other loose clothing cannot be worn while operating rotating machinery such as drill presses, lathes, mills, and other equipment at the discretion of shop staff.

Long hair must be tied back or covered by a cap while operating machinery. Long hair is basically defined as long enough to be laying on your shoulder, but final discretion is by Shop staff.

Long pants must be worn while in the Shop when working with any machine tools or equipment, sheet metal or metal scraps, and welding equipment.

Machine guards provided for a machine must be in place whenever the machine is operated. Guards or shields removed for maintenance must be replaced before the machine is used.

## **Respiratory Protection**

Welding must be conducted with good ventilation. The movable welding fume hoods must be used whenever welding is occurring inside the Shop.

## **Foot Protection**

All staff who normally work in the Shop will be furnished annually

with steel-toed shoes, and are expected to wear these shoes while working in the shop areas.

Non-Shop staff, faculty, and students must wear closed-toe shoes when working with any machine tools or equipment, hand tools, sheet metal or metal scraps, and welding equipment.

## **Back Protection**

Staff and users must not attempt to lift more than 50 lbs unassisted, and should ask others to help in lifting any heavy tool, attachment, or equipment.

Use appropriate lifting techniques, hoist, fork trucks, and other lifting devices as needed to prevent back injuries.

## **Chemical Safety**

All oil and other chemical waste are to be disposed in the hazardous waste drums located near the north door of the Shop. Everyone other than full-time Shop staff must ask a Shop staff person before disposing this type of waste.

MSDS information is located in the Shop area in the front office. Always consult the MSDS when using a chemical for the first time, or when a review of the safety precautions is needed.

Any new chemical, cleaner, or solvent that is brought into the Shop must have a copy of the MSDS on file in the particular area in which the chemical is used and stored.

## **Visitor Safety**

A “visitor” is defined as a person who is not intending to use shop

equipment or hand tools, but must visit the shop for a short time.

The pathway between the yellow lines painted on the shop floor is to keep visitors who are not wearing long pants and closed toed shoes away from machining, fabrication, and welding areas. This pathway also marks the egress route in case of evacuation. The pathway must be kept unobstructed and clear of debris such as metal chips, machinery, hand tools, and other objects.

Shop staff must escort visitors outside the aisles marked by yellow lines if the visitors are not wearing long pants and closed toed shoes.

## **General Safety Practices**

Shop staff and users cannot operate machinery or conduct welding operations when alone in the shop areas.

All machine tools and welding equipment have potential safety hazards. Machine tools and welding equipment can only be used if safety training on that machine has been completed and documented.

A machine operator should not be startled while he/she is in contact with the machine.

Each machine can only have one operator at a time. Do not touch the controls on a machine that is being operated by someone else.

Machine tools and hand tools that are unsafe should not be used, and should be reported immediately to the Shop lead person.

All machines and the surrounding work area will be cleaned and wiped down after use, including sweeping the floor if necessary.

Injuries, no matter how small, must be reported to the Shop lead person immediately. Anyone who is injured, other than small superficial cuts and abrasions, must be seen by a medical professional as soon as possible. The medical professionals are located as follows:

- Students in classes held in Shop facilities
  - Non-emergencies: Student Health and Wellness Center.
  - Emergencies: Sutter Davis Hospital, located at 2000 Sutter Place in Davis (Covell Blvd at Hwy 113).
- Shop Staff and Student Employees during Normal Work Hours
  - Non-emergencies: Occupational Health Clinic, located at Cowell Hall.
  - Emergencies: Sutter Davis Hospital, located at 2000 Sutter Place in Davis (Covell Blvd at Hwy 113).
- After Hours Care
  - Sutter Davis Hospital, located at 2000 Sutter Place in Davis (Covell Blvd at Hwy 113).

Call 911 from any campus phone for emergency care and transport to Sutter Davis Hospital.

In the event of fire or building evacuation, everyone must leave the Shop immediately. People in the Shop should assemble on the lawn on the south side of Bainer Hall, directly in front of Crocker Nuclear Lab.