OH 500: Machine Shop Safety Training

Machine Shop Safety Training
The University of Texas at Austin

General Safety Training
- This training does not replace shop-specific safety training.
- You may need to take further training in order to be a qualified machine shop user.

Responsibilities
Users:
- Follow all safety rules.
- Complete all required training.
- Report any malfunctioning equipment or missing guards or safety devices immediately to the shop supervisor.
- Look out for the safety of yourself and others.

Responsibilities
Supervisor:
- Verify all personnel are trained prior to using equipment.
- Ensure personal protective equipment is used.
- Take out of service malfunctioning equipment.
- Ensure all emergency response & communication equipment is working.
Responsibilities (continued)

Supervisor:
- Shut down work equipment for practices that are immediately dangerous.
- Ensure that injury report gets filled out:
  - University Health Services (students)
  - HealthPoint (staff)

---

Etiquette & Housekeeping

Be considerate of others:
- Be aware of where your sparks, grindings, debris may fly.
- Clean up after your work is done. Debris may cause a slip hazard.
- No horseplay.
- No cell phone use, personal music devices.
- Keep exits, emergency equipment, and aisles clear.

---

Personal Safety

- Never operate machinery while alone.
- Never wear loose jewelry, clothing (medical alert bracelets & necklaces are exempt).
- Never work when you are tired.
- Never use equipment when impaired.
- Never distract the machine operator.
- Never place hands in the area of any cutting head, drill, or other rotating or cutting device/tool.

---

Personal Safety (continued)

- Never leave a machine while it is running.
- Check stock for imbedded objects prior to using.
- Secure all loose clothing (including religious and non-religious headgear), long hair, beards, jewelry, and lanyards.
- Tuck all medical alert necklaces and bracelets away.
- Report injuries to shop supervisor.
- Follow your shop’s dress code.
Shop Access

- Your shop may have specific access requirements. Please follow these.
- Access should be limited to only trained personnel.
- Do not prop open the door.

Personal Protective Equipment

- You may be required to wear personal protective equipment when working on specific equipment.
- Some items you may need to wear are:
  - Safety glasses
  - Safety goggles
  - Welder’s hood
  - Hearing protection (ear plugs or ear muffs)

Machine Guards Video

[Click to watch video (01:57 min)]

Machine Guards

- All belts, flywheels, chains, pulleys, spindles, & other moving parts should be guarded to prevent access or contact.
- Report missing guards to your supervisor.
- Never ever completely rely on a machine guard. No guard can protect you 100% of the time.
Types of Machine Guards

**Interlock** - part is connected to the machine controls that if the movable part is in the open the machine will not run.

**Fixed** - a fixed guard surrounds components and is not easily removed.

- **Adjustable** - guard that can move to accommodate stock or raw materials.
- **Self-adjusting** - similar to adjustable guard, it covers the hazardous area until stock is pushed into the point of operation and moves the guard.

Common Equipment

- The next slides are equipment found in many machine shops here at UT.
- They contain pictures and safety videos.
- Feel free to view as many of the safety videos as you or your shop supervisor prefer.

Lathe
Slide 21

Sander

Click for video
(07:44 min)

Slide 22

Circular Saw

Click for video
(25:11 min)

Slide 23

Table Saw

Click for video
(19:06 min)

Slide 24

Warning Signs & Labels

• In addition to parts of machine that should be guarded there are other hazards.
  – Pinch point
  – Hot equipment
Hand Tools

- There may be a variety of hand power tools in your shop such as:
  - Drills
  - Saws
  - Grinder

- These should be treated with the same care as fixed tools.

  Make sure their cords are in good working condition.

Medical Emergency

- In the event of a medical emergency first call 911.
- Immediately report the incident.
- Fill out appropriate paperwork with your supervisor.

Consequences

- Failure to follow rules may result in:
  - Loss of machine shop privileges.
  - Inability to complete project.
  - Reprimand or disciplinary action.

Almost Done!

You have completed the Machine Shop Safety Training module. Please click on the quiz button to take the quiz and receive credit for this course.