

Roaring Robotics

Safety Presentation

Why Safety Training is Important

For many years, it has been this team's philosophy that safety is **everyone's responsibility**. We have built a safety program on this core principle by making sure that all members are equipped with the knowledge to make safe decisions. By stressing this, the responsibility for keeping a safe environment is not on just one person (for example, the safety captain) since this would prove impossible. As a result, a safer place is created with everyone looking out for their own and each other's safety.

Workshop Safety

Personal Protective Equipment

Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses.

- Safety glasses
- No loose clothing
- Long hair tied back
- No jewelry
- Close-toed shoes
- Gloves when necessary
- Earplugs when necessary
- Face shield when necessary
- Safety guards for equipment

Characteristics of a Safe Workshop

We need to make sure that wherever we are working is safe. To the right are several characteristics of a safe workshop that we should comply with.

- Adult supervision
- Easily accessible safety equipment
- Use of P.P.E.
- Well organized
- Not crowded
- Well lit
- Quiet enough for communication
- **No horseplay**
- No food or drink except water

Workshop Safety Equipment

The equipment on the right is what should be present in a safe workshop because it either prevents an injury or aids in the response to one.

- Fire extinguisher
- First aid kit
- Eyewash station
- P.P.E.
- Battery acid clean up kit
- Bloodborne pathogen kit
- S.D.S. (Safety Data Sheet- gives information on how to safely use materials and procedures for accidents)

In Case of an Injury

- If you are hurt, immediately see the safety captain or one of the mentors, they will help you
- Afterwards, record your injury in the injury log and fill out all of the necessary information
- Report all injuries, no matter how small

Tool Safety

Tool Safety

On our team, students go through a certification process in order to use a tool. On the right are the rules of certification.

- Every student must be trained by Mike in basic shop safety before using any tool
- Students may only use tools that they are certified to use
- If a student does not intend to use a tool, he or she does not need to be certified to use it.
- After being certified, make note of it in the safety certification checklist
- If you are under 16 you need a adult train in the tools to be with you at all time.

General Tool Safety Rules

- Wear proper workshop attire
- Gloves- do not wear gloves when operating a rotating tool, the glove may get caught in it
- “Eyes off = Hands off”- when operating any type of tools, watch what you’re doing
- Tool usage- tools of any kind are not to be used by students without adult supervision. A power tool may only be used by a student who has received training on how to safely operate it.
- Do not leave a machine running- turn off power tools once you finish using them. Make sure that they have completely stopped running before walking away.

General Tool Safety Rules (continued)

- Check tools for defects- bent, cracked and damaged tools can break and result in injury
- Use tools for their designed purpose- for example, do not use a wrench as a hammer
- Safety Guards- make sure power tools, such as the chop saw, have the proper guards in place and that they're working properly. If you are not sure, as a coach/mentor
- Do not drill or cut materials on desks
- Keep computers away from power tools- metal/plastic filings can ruin a computer
- Take your time- rushing can result in mistakes and injuries

Fire Safety

General Fire Safety

- Always know where the fire extinguisher is.
- Have at least one person present who knows how to use a fire extinguisher.
- Know where all the exits are.
- Have an escape plan for if there is a fire.

Fire Prevention

- Keep liquids away from electronics
- Never leave any hot objects unattended
- When welding, remove unnecessary objects. Including notebooks, papers, jackets that are lying around, etc.
- If you're not sure about something, ASK A MENTOR!!!
- Tie back long hair
- Don't wear loose clothing

Evacuation

- Always look for emergency exits while in the room/building
- Try to look for “EXIT” signs
- Some types of exits are:
 - Emergency exits
 - Doors
 - First floor windows

Response to a Fire

R.A.C.E. is an acronym used for how to respond to a fire

- R- rescue, remove anyone in immediate danger and move them to a safe area
- A- alarm, call 911 to report the fire
- C- contain, close doors and windows that can be safely reached to prevent the fire from spreading
- E- extinguish, use a fire extinguisher and only do so if you know how

Extinguishing a Fire

Never attempt to fight the fire by yourself!

Stand at least 10 feet away from the fire

P.A.S.S. is an acronym for how to use a fire extinguisher

- P- pull the pin off the fire extinguisher
- A- aim at the bottom or base of the fire
- S- squeeze the handles of the fire extinguisher together
- S- sweep back and forth

Thank you

Remember that safety is everyone's
responsibility

Be Safe!