



# Safety Training

FRC RoboLancers 321

#1 Rule:  
Don't Be Stupid



# Safety in the Team

- Safety is not just the responsibility of the Shop Manager/Safety Captain
- Safety is a team effort meaning:
  - Everyone should know the basics of the team safety manual
  - Everyone should follow basic safety protocol (which is included in these slides)

# General Safety

- Common Sense
- Clean Up
  - PUT THINGS AWAY
  - Vacuums



# Pit Safety

- Clean Up
  - PUT THINGS AWAY
- People Count



# Soldering

- The soldering iron is a tool just like any other
  - You must be trained



# Safety Goggles

- Safety goggles must be worn in and around work areas both at Central and during competition.
- Goggles must be worn to enter the pits, practice fields, the official game field, and wherever else there is a sign saying to wear goggles.
- Don't forget them.



# Basics of the 321 Safety Manual

- We have two exits to 30, one on either side.
- Keep the space in front of each exit clear, as well as an aisle going through the room for easy accessibility.
- We have two big red buttons near these exits with all of our major power tools plugged into the circuit they control.
  - These buttons are not toys.
- We have multiple First Aid Kits filled with bandaids, alcohol wipes and gauze. If you need a bandaid, use it.

# Safety Manual Ctd.

## Battery Spill kit

- Handle leaking battery with gloves, you don't want to burn yourself.
- Cover leak with baking soda and keep adding more until no more fizzing occurs.
- Move the battery into a deep container or a trash bag at least 6 mm thick.
- Clean up the area of incident with a thick paste made of baking soda and water



# Basic Tool Safety

- Clamp down the object before you cut or drill
- Drill or cut downwards on a stable surface, not hovering in the air
- By stable surface, I mean a table or the stand for the tool itself, not your buddy's back.



# Robot Safety

- Know where the On/Off switch is on the robot
- Two glove-wearing people should carry the robot
- Count down from three and lift with your legs
- Never lift the robot above shoulder level



## Around 30

- As stated before, there are two emergency shut-off buttons located near the exits to the lab.
- In the middle of the lab, near the drill press, there are two circuit boards.
- In the smaller white one, the only switch you need is the air compressor, which is labeled in the diagram on the door. Only use this if the air pressure from the tubes is low.
- On the other board, the only switch you need is the one for ventilation, which is also labeled.

# Proper Attire

- No baggy clothing
- Closed toe shoes
- Long hair needs to be pulled back
- Safety goggles
- Gloves (not always necessary)





All of the stuff + more is in the official Safety Manual, which is kept around the shop.

**Have fun and stay safe!**

**FRC**

**FIRST<sup>®</sup> Robotics Competition**