

# Pit Setup, Inspection and Judging

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*FIRST* Training Resource

# Overview

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- Objectives: What to bring, how to be prepared to go through inspection and to present to the competition judges
- Topics:
  - It's The Pits...(What to bring to competition)
  - Look Ma, I passed! (How to pass your first inspection)
  - They're Watching You (What the judges are looking for, and how to impress them)



# The Pits

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- What to bring to a competition
  - Basic tools (screwdrivers, drill, hacksaw, etc)
  - Extra hardware (screws, bolts, yadda yadda)
  - Spare Parts
  - Power strips, safety glasses, gloves, MSD sheets
  - Promotional material (pins, handouts, etc)
  - Shelving/Storage bins
  - Trash bags, broom, dustpan
  - Programming equipment (cables, laptop)
  - Batteries (if not shipped with robot)



# The Pits

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- Keep your pits clean and organized
- Keep a minimum number of members in the pits at all time. It gets crowded
- Safety goggles AT ALL TIMES



# Inspection

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- What is it?
  - All teams must be inspected by tournament officials before competing to ensure that all robots conform to the rules
  - You must bring a Bill of Materials that includes the prices of any non-KOP components
  - Inspection has two parts: The weigh-in/size check and the pit inspection



# Inspection

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- Step 1: Weigh-in/Sizing
  - Go to the weigh-in station (usually at one corner of the pits) and wait in line to be weighed.
  - After passing weigh-in, move on to the sizing box line
  - Once you've passed both weight and size checks, sign up for a pit inspection at the inspection table, and then return to your pit



# Inspection

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- Step 2: The Pit Inspection
  - An inspector will come to your pit with a checklist (which is available to all teams during build season) and make sure all points are met. You will give your Bill of Materials to the inspector
  - If you passed, you get a sticker on your robot. Congrats, you can now compete!
  - If you didn't pass, follow the inspectors instructions, and then go let the inspection table know that you're ready for a re-inspection



# Inspection

- Samples from the 2007 Inspection Checklist

GENERAL				
ITEM	PASS	DESCRIPTION	RULE(S)	COMMENTS
7		<b>Safety and Wedges:</b> No sharp protrusions or edges that could harm players, field or tubes, no entanglement risks, no exposed pinch points, no wedge-shaped robot bases that may potentially affect other robots	R03-R06, R32	
8		<b>Energy Sources:</b> No illegal energy sources, battery must be secured	R02	
9		<b>Logos:</b> School and sponsor logo and/or name must be clearly visible	R13	
10		<b>Team Number:</b> Must be clearly displayed on all 4 sides	R14	
11		<b>Panel Signal Device:</b> Must be clearly visible from the front of the robot	R16	
12		<b>Interference Mechanisms:</b> Robot cannot include devices or decorations that may interfere with the vision systems of other robots	R33	
13		<b>Decorations:</b> Cannot affect match, cannot broadcast using wireless comm w/o clearance from <i>FIRST</i> Engineering, cannot employ 900MHz cameras	R108-R110	





# Judging

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- What is it?
  - Judges will be walking around the pits observing teams and asking them questions
  - Judges will be watching matches, observing the robots in action
  - The Judges use the data they've collected from talking to teams and observing them to determine the award winners and the end of the competition



# Judging

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- Pit Judging: Tips
  - Judges want to talk to the students, so make sure the students are prepared to talk to the judges
  - If a student doesn't know the answer to the question, they should refer the Judge to someone who does, preferably another student
  - Judges like to see students involved, engaged and working cooperatively!



# Judging

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- Field Judging: Tips
  - Field Judges are looking for robots who are performing as described
  - Field Judges are looking for teams who are acting gracious and courteous to their alliance partners and opponents



# Putting It All Together

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- Set up your pit in an organized and orderly manner
- Get inspected, and make any changes necessary so that you pass
- Talk to (and impress) the judges
- Compete!

