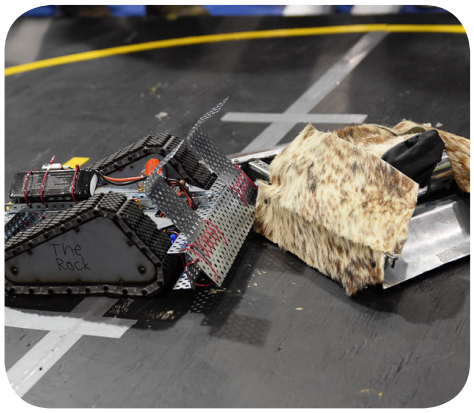
SOUTHWORKS ENGINEERING AND ROBOTICS OLYMPICS

2019 Competition Brief

SUMO Survivor



Objective

- Objective: Design and build a radio-controlled robot that can move a competing robot out of a 7ft. diameter ring within 3 minutes.
- Competition: The robot that remains in the ring longest is the winner. In the event that neither robot leaves the ring within 3 minutes, they will have a 1-minute tiebreak match. If both robots stay in the ring for the entire 1 minute, the judge will determine the winner by judging which robot acted most offensively.

Parameters

- Once the match begins, teams may not touch the robots unless the judge instructs them to do so.
- Robots may only be controlled/operated via remote control or autonomously.
- Robots must weigh 15 lbs. or less, battery included.
- At the beginning of the match, robots must fit within a 4-gallon crate that is 13"x13"x11".
- Once deployed, any extensions must remain deployed.
- Robots cannot have any offensive weapons or projectiles.
- Robots cannot punch, flip, strike, destroy, or disable opposing robots.
- Robots can shovel or scoop, but the shovel cannot be forcibly deployed into the opposing robot.
- If robots become entangled with each other for more than 5 seconds, the judge will instruct the teams to pick up their robots and place them at the start lines. Upon the judge's whistle, the competitors will resume the match. The clock will continue running during the reset.
- No glass can be used, No objects may be sharpened.
- Offensive weapons, such as fire, hammers, spinners, explosives, saws, or rams may not be used

Notes

- All robots must be weighed and checked for correct sizing before competition begins. If they do not meet size or weight requirements they will be immediately disqualified.

Materials

- No offensive weapons including fire, hammers, spinners, saws or rams
- Robot must meet weight requirements and utilize a radio control