

# **RULEBOOK**

# **ROBO SUMO**



**ROBOVANZA9.0**  
**2025-26**

## 1). EVENT OVERVIEW

Participants are required to design and build a remote controlled robot capable of competing inside the sumo arena. The robot must push and attempt to force the opponent out of the arena while preventing itself from being pushed out. The objective of the competition is to disable or eject the opponent as many times as possible from the ring within the allotted time while maintaining control, stability, and strategic movement.

## 2). MATCH STRUCTURE

### • 2.1 MATCHES

- The tournament consists of two levels (Qualifiers and Playoffs). Every team must play at least one qualifier match before playing in the semi-finals.
- The number of qualifying rounds will be decided by the organizers, based on the number of participants.

### • 2.2 FORMAT

- The qualifier's format is established by the tournament's organizers, depending on the number of participants.
- If the number of participants is odd, byes may be given by the organizers based on win margins. Such decisions are final and cannot be further challenged.
- The top 4 teams after the qualifiers will move on to the semifinals.



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### **2.3 LEVEL DESCRIPTION**

#### **2.3.1 QUALIFIERS**

- Each qualifier match is for 3 minutes. A point will be awarded to the team that manages to push the opposing bot out of the playing field.
- The team with the maximum number of points will win the game
- **Tie Breaker:** If none of the bots manage to push each other out, then there will be a tie-breaker round of 1 minute which will decide the winner.
- **Half Time:** The teams will switch the sides of the arena at half time (i.e. at 1 minute 30 seconds). A duration of 1 minute is allotted for switching sides. Repairs/servicing of the bots during this time is permitted.
- **Self Out:** If a bot moves out of the playing arena while trying to score, a point will be awarded to the opponent.
- **Time Out:** Participating teams will have the option to avail of a technical timeout for **60** seconds, in case their bot is damaged. However, only two technical timeouts are permitted. The combined time for two technical timeouts is **60** seconds.
- **Knockout (KO):** If any team takes longer than the permitted time, a point will be deducted as a warning, and they are allowed to work for **30** more seconds. Beyond this, the team will be disqualified. Extra time can also be taken voluntarily, at the risk of being knocked out.



- If at any point in time, a bot is stuck in the arena without any movement and cannot free itself for 5 seconds, the organizers will intervene to free the bot. The intervening time will not be included in the total match duration.

### **2.3.2 Playoffs**

- The duration of each match is 2 minutes.
- The time allotted for technical timeout is 60 seconds.
- The teams will switch sides at the 1-minute mark.
- The other general rules of Qualifiers apply to the Playoffs as well.

## **3) . ARENA AND TEAMS:**

- A team can consist of **4** members and the entire team can be present near the arena but only **2** members (which includes the person controlling the bot) are allowed into the arena field.
- Arrival on time is mandatory. Failure to do so may lead to a disqualification.

## **4) . ROBOT SPECIFICATIONS:**

- Maximum weight: **5 kilograms**
- Maximum length: **30 centimeters**
- Maximum width: **30 centimeters**
- Maximum height: **35 centimeters**
- Tolerances of **5%** on all dimensions, **3%** for the weight **5%** for voltage will be accepted. Any value beyond that will lead to a disqualification
- Use of batteries exceeding **3S LiPo** is strictly prohibited (**12.6V max**).



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- Wired bots are allowed. However, if the wire disrupts the match in any way, a warning will be given to the team. Further disruptions for the same reason will result in a point deduction or disqualification. (**Minimum length of wire: 4 meters**)
- Ready-made kits and mechanisms (such as Lego) are banned.

## **5) SAFETY:**

- The participants must be at a safe distance from the arena field when the match is ongoing.
- Organizers are not responsible for any kind of damage done to the bots or any injuries incurred to the participants.

## **6) PROHIBITED COMPONENTS OF THE ROBOT:**

- Any components designed to disrupt the opponent's operation (such as flashlights or jamming devices) are prohibited during the competition.
- The robot must not include parts that fix it onto the arena (for example: glues, suction cups, etc). Magnets that improve the grip of the wheels are not allowed.
- Any components that may damage or scratch the surface of the arena are not allowed with an exception being when the robots collide.
- Any liquids, powders, and gas are forbidden to use as a weapon against the opponent.
- Inflammable materials in the robot are also strictly forbidden.
- The robot must not include any throwing devices (for example: throwing a net at an opponent).
- Sticky substances or powders, which improve traction are banned. Using such resources will lead to a disqualification.



## **7) STARTING THE MATCH:**

- Each round starts with a signal from the Referee (Co-ordinator or Head). The contestants should place their robots at the allotted spots in the arena before the round begins on the Referee's signal.
- The robots should only start and stop immediately when they receive a signal from the Referee.
- The match concludes officially upon receiving a signal from the Referee (Coordinator or Head). Participants must then remove their robots from the arena and vacate the premises.

## **8) CHANGES AND CANCELLATIONS IN THE RULES:**

- Under unexpected circumstances, any changes to or cancellations of rules can only be made with the approval of the main organizer and the core committee.
- All decisions made by the organizers are final.

## **9) DISQUALIFICATION:**

- Participants will be disqualified, if the participant's robot doesn't qualify for the robot requirements as mentioned before.
- If participants engage in quarrels or physical altercations with opponents, referees, or other individuals, their team will be disqualified.
- If a participant uses unethical practices during and after the match, their team will be disqualified.
- If a player is already in a team, he/she is not allowed to join any other team. If found so, the team will be disqualified.
- Breaking or moving the arena during the match is strictly prohibited, and will result in a disqualification.



**10) WARNING:**

- If a participant receives two warnings, a point will be deducted from their match score. Warnings will be given under the following conditions and situations:
  1. If the robot moves before the referee gives the signal, it will be considered a violation.
  2. Intentionally causing damage to the opponent's bot.
  3. If the participant doesn't follow any of the above rules mentioned.

**PRIZE POOL: 20,000/-**

**CONTACT DETAILS:**

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