

# WyoBots Tournament Procedures

## Match Frequency:

- Robots will be given a minimum of 20 minutes between matches.
- If a robot will not be ready in time for its next match the driver may request a postponement.
- If allowed time and allowed postponement have expired and a robot is not ready that robot will be forced to forfeit the match.
- If allowed time and allowed postponement(s) have expired and neither robot is ready then the first robot to demonstrate controlled movement in the arena will be declared the winner.

## Postponements & Match Duration:

- If a robot will not be ready in time for its next match the driver may request a postponement.
- A postponement will give a robot up to 20 minutes of extra time to prepare for its match.
- Each robot will be allowed one postponement per competition.
- If the robot does not use all of its postponement time the remaining time is lost and cannot be used for a later match.
- If a driver has two or more robots using a postponement for one robot does not guarantee his/her other robot(s) will not be required to compete during the allotted postponement time.
- The match duration for robots is 3 minutes. The standard match duration for a rumble is 5 minutes.

## Arena Procedures:

- The combat area is defined as the region of the arena where active combat occurs. This would exclude gutters between whatever internal barricade exists in the arena and the arena walls.
- The process for activating a robot is as follows:
  - Robot is placed in a stable position on the combat area with the drive wheels oriented such that when they come in contact with the combat area the direction of travel will be away from other robots, persons, and entry doors. If the robot has a weapon that is aim-able it will be aimed at the wall furthest from the arena entry door. Weapon covers are removed. Main power is turned on. If separate, weapon power is turned on. This applies to both a separate power loop and non-electrical power systems. (ie. pneumatics) Weapon locks are removed.
  - No movement or functional testing is permitted while the combat area door is open.
  - Transmitters may not be turned on or activated in any way until the corresponding robot is in an enclosed testing box or in the closed combat arena.
  - Once both robots are activated and in their starting squares the arena access point will be closed and a maximum of 20 seconds will be allowed for a brief weapon/drive system test if the drivers so desire. No weapon testing of any sort will be allowed prior to the arena door being closed.
  - After this, the referee will ask both drivers if they are ready and the fight will begin.
- Post Fight Activities:
  - At the end of the fight both robots are to cease movement and if applicable, allow their weapon systems to de-energize. Once the weapon systems have been de-energized the judges may request that one or both robots demonstrate that either their drive or weapon system is still functional.
- The process for deactivating a robot is as follows:
  - Transmitter is turned off.

- Weapon system is disabled. This includes any applicable weapon locks, power cut-off and venting. The exact order of this procedure will be left to the discretion of the builder as differing designs may necessitate different safe shutdown procedures. Main power is turned off.
- Weapon covers are reinstalled. Robot is removed from the arena.

#### Emergency Deactivation Procedure:

- Event supervisors will determine if a circumstance in competition becomes unsafe.
- Instructions from event supervisors must be followed, it is at the supervisors discretion how to handle robots that begin smoking or catch fire.

#### Match Formats:

- Round Robin (Standard format for classes with ~5 or fewer robots entered)
  - Each robot faces each other robot a single time. The robot with the greatest number of wins is declared the winner. In the event of a tie, the winner of the match between the two robots is declared the winner. Should more than two bots tie for the win the winner will be determined with a judged rumble.
  - If desired, a double round robin format can be used where each robot will face each other robot twice. The same criteria is used for determining a winner. Should the results necessitate it, a tie-breaker match may be run to determine which robot places higher.
- Qualifying Rounds
  - In some cases, event supervisors will use multiple rounds of qualifiers to determine which robots proceed to the tournament bracket. Generally, each robot is guaranteed to participate in each round of qualifiers.
  - Qualifier match format (3 rounds is most common):
    - Round 1, all robots are matched at random
    - Round 2, 0-1 and 1-0 bots fight
    - Round 3, 2-0 vs 0-2, 1-1 vs 1-1
  - After all qualifying rounds, robots will be selected using these criteria in this order of priority:
    - Highest number of wins
    - Highest number of wins by knockout
    - Highest number of points earned in wins not by knockout
    - In the unlikely event of a tie, judges will decide which robot proceeds based on overall performance and general impression.
- Single Elimination
  - This format uses a standard single elimination bracket.
- Double Elimination (Standard format for classes with ~6 or more robots entered)
  - In a double elimination bracket all robots start in the winners bracket. The losing robot in a winners bracket match will move to the losers bracket. The losing robot in a losers bracket match is eliminated from the tournament.
  - In this format, the robot that “wins” the losers bracket will need to defeat the robot that “wins” the winners bracket twice to win the overall event.
- Modified Double Elimination
  - The format is the same as a double elimination bracket however the overall final is treated as single elimination, meaning that if the robot that “wins” the losers bracket will only have to defeat the robot that “wins” the winners bracket a single time to win the overall event.
- Rumble Bracket
  - This format is single-elimination, but most battles are structured as 3-bot rumbles where one winner is chosen to proceed to the next round.
- Free-For-All
  - Four or more robots are placed in the arena, 5min battle duration, one winner. Sicking and separation rules suspended for safety.

**Entanglement:**

- If two opposing robots stuck together in such a way that they cannot separate under their own power after 10 seconds the judge may request a “de-entanglement”
- At such time the match timer will be paused, both drivers will de-energize their weapons and the event referee or safety officer will free the robots. The robots will be placed a few inches from their original position in the arena in the general orientation they were at the time of the entanglement. If the event referee or safety officer feels that the robots cannot be separated safety he/she may require that one or both drivers deactivate their robot’s main power. Once this has been complete and the arena secured the match will resume.
- If a robot is deemed to be causing multiple entanglements per match that robot may be declared in violation of Robot Construction Specifications section 14.1.5 and be required to forfeit the match.

**Sticking/Un-sticking:**

- If a robot, for any reason, is unable to move because a portion of the robot is pinched, held or connected to the arena and cannot free itself using its normal articulation that robot shall be consider “Stuck”. Once per match a drive may request an “un-stick”. Note; if a member of a multi bot receives an un-stick no other member of the multi bot may request an un-stick.
- Sticking may include, but not necessarily limited to; Wedged under the arena inner wall Wedged or hooked on a floor seam
- At such time the match timer will be paused, both drivers will de-energize their weapons and the referee or safety officer will free the robot. The robot will be placed a few inches from its original position in the arena in the general orientation it were at the time of the sticking. If the referee or safety officer feels that the robots cannot be freed safety he/she may require that one or both drivers deactivate their robot’s main power. Once this has been complete and the arena secured the match will resume.

**High-Center:**

- If a robot, for any reason, is unable to move due to it being oriented in such a way that it’s means of translational movement is not in contact with the floor the robot shall be considered “high-centered”. A robot that is high-centered may not request an un-stick. If a high-centered robot cannot show controlled translation movement a knock out countdown will begin.
- High-centering may include, but not necessarily limited to;
  - A robot that is leaning against an arena wall, but not held in place by the arena
  - A robot that is high-centered on piece of debris (not arena debris) from either robot that does not constitute an entanglement device per Robot Construction Specifications

**Pinning/Lifting:**

- Any robot pinning or lifting their opponent may only continue to pin or lift them for 15 seconds at a time. After 15 seconds has elapsed the robot in control must release the opposing robot. If the robot in control is not able to release the opposing robot then the match will be halted and the robots will be separated.
- “Release” is defined as complete physical separation such that both robots are able to freely move away from their current location.
- Refusal to comply with the referee’s request to release the opponent when the robots are not stuck together will result in forfeit of the match.

**Tapping Out:**

- At any time during a match the robot operator may choose to tap out. Once an operator has tapped out combat will cease and the opposing robot will be declared the winner.
- Tapping out is done by informing the referee that you are tapping out.

**Knock-outs:**

- When a robot has ceased moving in a controlled manner but has not tapped out the referee will begin a 10 second countdown. If the robot is unable to demonstrate controlled translational movement before the countdown ends it will be declared the loser by KO. If during this time the robot is able to show controlled translational movement or if the opposing robot attacks it the countdown will cease.
- A bot with one side of its drivetrain disabled will not be counted out if it can demonstrate controlled translational movement. Controlled translational movement is defined as being able to traverse in a manner such that the net movements of the robot are in a linear direction.
- In the case of multi-bots, the countdown will begin when the primary bot is considered disabled.
- If the match lasts all three minutes and no knockout occurs, the battle ends and judges determine the winner based on points (see Judging guidelines document).
- In the event of a simultaneous knock-out a judge's decision will be made based on the robots performance up to the point of simultaneous knock-out. Documentation scores can be used to break a tie in this case.

**Value of wins:**

- For most purposes, victories are considered in the following order of value:
  - Win by Knock-Out (including tap-out)
  - Win by technical Knock-Out (High-Center rules)
  - Win by points
  - Win by default/forfeit

