

Section 3. Requirements for Robots

Article 5. [Specifications]

1. A robot must be in such a size that it can be put in a square tube of 10 cm wide and 10 cm deep. A robot can be of any height. A robot must not be in such a design that its body will be physically separated into pieces when a match starts. The robot with such a design shall lose the match. The design to stretch a robot's body or its parts shall be allowed, but must remain a single centralized robot. Screws or nuts or other robot parts, with a mass of less than 5 grams total, falling off from a robot's body shall not cause the loss of match.
2. The mass of a robot must be under 500 grams including the attachments and parts, but excluding the weight of a proportional system (the transmitter or control box held by the operator, hereafter called "Prop") for remote-controlled models.
3. The radio frequencies for radio-controlled robots must be either 27 mHz (1-6 bands) or 40 mHz (61, 63, 65, 67, and 69 bands). 40 mHz (71-83 bands) cannot be used.
4. Only one Prop can be used for one robot. Radio control Prop must be one of Futaba's, JR's, Sanwa's, or Kondo Kagaku's.
5. For stand-alone robots, any control mechanisms can be employed.
6. Stand-alone models must be so designed that a robot starts operating a minimum of five seconds after a start switch is pressed (or any method that invokes the operation of a robot).
7. Microcomputers in a robot can be of any manufacturers and any memory sizes can be chosen.

Article 6. [Don'ts in manufacturing a robot]

1. Jamming devices, such as an IR LED intended to saturate the opponents IR sensor, are not allowed. Do not disturb your opponent's radio-control by putting into a robot's body such devices as a jamming device.
2. Do not use parts that could break or damage the Ring. Do not use parts that are intended to damage the opponents robot or its operator. Normal pushes and bangs are not considered intent to damage.

of the Match is announced.

3. When a robot has fallen on the Ring or in similar conditions, Yuhkoh will not be counted and the match continues.

4. When judges' decision is called for to decide the winner, the following points will be taken into considerations:

1. Technical merits in movement and operation of a robot
 2. Penalty points during the match
 3. Attitude of the players during the match
5. The match shall be stopped and a rematch shall start when:
 1. Both robots are in clinch and stop movements for 5 seconds, or move in the same orbit for 5 seconds, with no progress being made. If it is not clear if progress is being made or not, the judge can extend the time limit for a clinch or orbiting robots up to 30 seconds.
 2. Both robots move, without making progress, or stop (at the exact same time) and stay stopped for 5 seconds without touching each other. However, if one robot stops its movement first, after 5 seconds, he shall be considered not having the will to fight, and the opponent shall receive a Yuhkoh, even if the opponent also stops. If both robots are moving and it isn't clear if progress is being made or not, the judge can extend the time limit up to 30 seconds.
 3. If both robots touch the outside of the ring at about the same time, and it can not be determined which touched first, a rematch is called.

Section 8. Violations

Article 15. [Violations] If the players perform the deeds as described in Articles 6, 16, and 17, the players shall be declared as violating the rules.

Article 16. The player utters insulting words to the opponent or to the judges or puts voice devices in a robot to utter insulting words or writes insulting words on the body of a robot, or any insulting action.

Article 17. A player:

the cause of such injury or accident loses the match. When it is not clear which team is such a cause, the player who cannot continue the game, or who requests to stop the game, shall be declared as the loser.

Article 23. [Time Required to Handle Injury/Accident] Whether the game should continue in case of injury or accident shall be decided by the judges and the Committee members. The decision process shall take no longer than five minutes.

Article 24. [Yuhkoh Given to the Player who Cannot Continue] The winner decided based on Article 22 shall gain two Yuhkoh points. The loser who already gained one Yuhkoh point is recorded as such. When the situation under Article 22 takes place during an extended match, the winner shall gain one Yuhkoh point.

Section 11. Declaring Objections

Article 25. [Declaring Objections] No objections shall be declared against the judges' decisions.

Article 26. The lead person of a team can present objections to the Committee, before the match is over, if there are any doubts in exercising these rules. If there is no Committee member present, the objection can be presented to the judge, before the match is over.

Section 12. Requirements for Identifications for Robots

Article 27. [Identifications for Robots] Some type of name or number, to identify the robot (as registered in the contest) must be easily readable on the robot's body, while the robot is in competition.

Section 13. Miscellaneous

Article 28. [Flexibility of Rules] As long as the concept and fundamentals of the rules are observed, the rules shall be so flexible that they will be able to encompass the changes in the number of players and of the contents of matches.

Article 29. [Change in Rules] Any changes to or obsolescence of these rules shall be decided by the General Committee Meeting based on the Sumo Match Committee Rules.

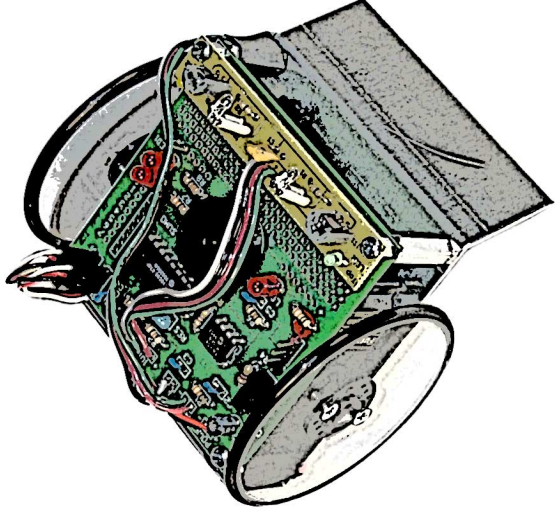
Specifications For Robot

1. A robot must be in such a size that it can be contained in a square tube of 10 cm (width) x 10 cm (depth) x any (height). The robot can be any shape within this tube.
2. Robot's Weight must be under 500 gm including all the parts and attachments.
3. The robots must be either stand-alone or remote-controlled. Stand-alone robot must start moving, without the operator's manual operation, 5 seconds after the operator pushes the start button when Gyoji announces the start of the match. Remote-controlled robots must be remotely operated by the operator using a remote control device.
4. Any mechanism can be used to control stand-alone robots.
5. Remote control of robot can be with: radio-control (use frequencies of either 27 mHz (1-6 bands) or 40 mHz (61, 63, 65, 67, 69 bands)), infrared light, sound, wire, or other means of control.
6. For radio-controlled robots, use the crystal sender / receiver parts that will be given by the office, if available. Make sure the crystal receiver part can be easily removed from or attached to your robot's body. Use one of the Futaba's, JR's, Sanwa's, or Kondo Kagaku's Props.
7. Give a Shikona (name, or number) to your robot, for registration purposes. Display this name or number on your robot to allow spectators and officials to identify your robot.

Specifications of the Ring for Robot Sumo

Diameter	77 cm
Material	hard rubber
Color	
Inside the ring	Black
Shikiri line	Brown, or equivalent for IR reflection
Tawara	White
Illuminance on the ring surface	Under 1,000 luxes

Northwest Robot Sumo Tournament Guide



Last Update: 12/17/99
Robot Mini-Sumo

<http://www.sinerobotics.com/sumo/mini-sumo.html>

These rules are based on the official rules of the All Japan Robot Sumo Tournament, submitted by Fujisoft ABC Inc. Bill Harrison of Sine Robotics is the rules keeper of the Northwest Robot Sumo Tournament.

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