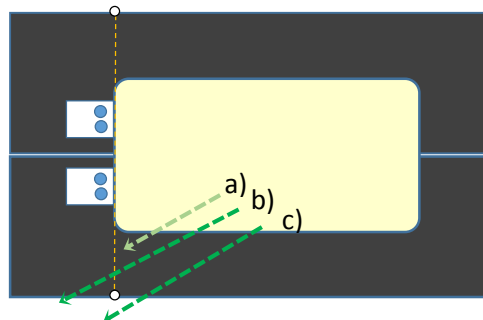


Last Updated 3-23-2015

Clarification or updates of the Rules

- Pins knocked down or moved due violations shall be reset by Judges
- If needed especially when the robot is tall, the robot can be moved off the Home Base to load a ball
- Unit used in the formula for d is cm, not mm
- Team members are not allowed stand behind pins side area. (Judge or volunteers shall catch the balls) (added on 3-23-15)
- Suggested definition of the “Pin Side Area”, when two 8ft tables are used as base tables. (added on 3-23-15)



- a) No Pin Side Area, since the ball did not pass the line
- b) Pin Side Area, OK
- c) No Pin Side Area

- Your robot may expand to bowl the ball. However, it still must fit in within a box with 35cm x 35 cm base (height of the measuring box is unlimited) when fully expanded **length or width wise in 2D space**. (added on 3-30-15)

Additional FAQs

Q19. Robot bowls the ball toward the “No Bowl Zone” from the legal “Bowl Zone”. Is this a violation? **No. Since it is not a violation, the Game continues. The ball is not retrieved.**

Q20. A team completes the Game before 2 minutes are expired. Is there an advantage? **No.**

Q21. A ball was dropped on “No Bowl Zone” when the robot was on No Bowl Zone. What should Judge do? **Declare violation, remove the ball, and ask the team to restart.**

Q22. A ball was dropped on “Bowl Zone” when the robot was on Bowl Zone, which is not a violation. Then the robot went back Home and came back to the Bowl Zone with a new ball. Can this robot push the ball toward the pins? **Yes, as long as it is just one ball. Rules state that only 1 ball can be played at a time.**

Q23. Same situation as in Q22. Can this robot use an arm to load on the robot? **Yes. (However, two balls cannot be bowled at the same time)**

Q24. A robot in “Bowl Zone” bowls the ball successfully. After the bowl, the robot cross the line into the No Robot Zone. If the pins are knocked down or moved by the ball, are they valid to count? **Yes, since the violation occurred after the bowling. But due the violation, the robot must be restarted and one ball becomes dead.**

Q25. At the end of the game, how is the number of unused balls determined? Do we include the ball loaded on the robot at the Home Base? **Judges will count the number of balls unused only when all the 4 pins are knocked down. If that is true, the team does not need to load the ball on the robot. In general, Judges will count the balls truly unused (not touched/loaded onto the robot).**

Q26. Are sensor or motor wires (connector cables) counted as the size of the robot? **No**

Q27. What if sensor or motor wires (connector cables) touch the “No Robot Zone”? **It is a violation.**

Q28. The pin was “shaken” by a ball or other pin. Is it considered as the “location” move? **No. Judges will only check if the pin location was moved after the game.**

Q29. Can teams pre-load the ball before the game starts? **No.**

Q30. Can teams move bottles during the (30 min) practice time? **Yes. It is encouraged to re-set using rulers or tape measures based on the unveiled numbers**

Q31. Will Judge check the maximum size (35cm x 35cm) requirement when the robot was modified or added new parts at the Home Base? **Yes. It will be rechecked whenever Judge notices the maximum size changes. Since the 2 min time is not stopped, it is not recommended to modify the size of the robot.** (added on 3-2-15)

Q32. What if the last ball is bowled after the 2 min limit (robot has not been touched after the 2 min limit)? **If bowled after 2 min, it is void. If bowled just before 2min and pins were knocked down right after 2min, we plan to count using basketball like rules.** (added on 3-23-15)

Notes to Site Host and/or Chief Judge (added on 3-23-15)

- Spacing between tables needs to be wide enough (at least 8ft).
- Orientation of all the tables should be the same (not back to back).
- The rectangular shape paper must be laid flat. Stretch before applying tape.
- Need to prepare at least 3 containers for live balls, dead balls, pin side balls that moved off the base tables.
- Emcee needs to do 5 sec count down when buzzer is not used.