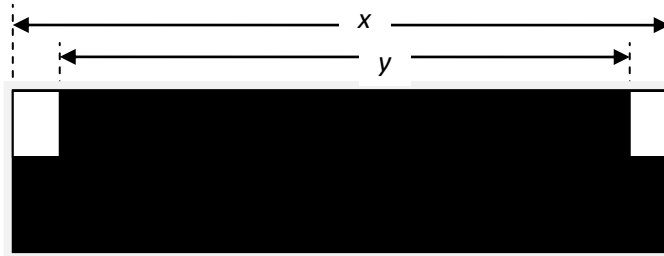


# Robofest 2011 Game (BTOS) FAQ and Clarifications

3/11/11

**Q. How should the length of the pipe 3 structure be measured,  $x$  or  $y$ ?  $x$  is correct.**



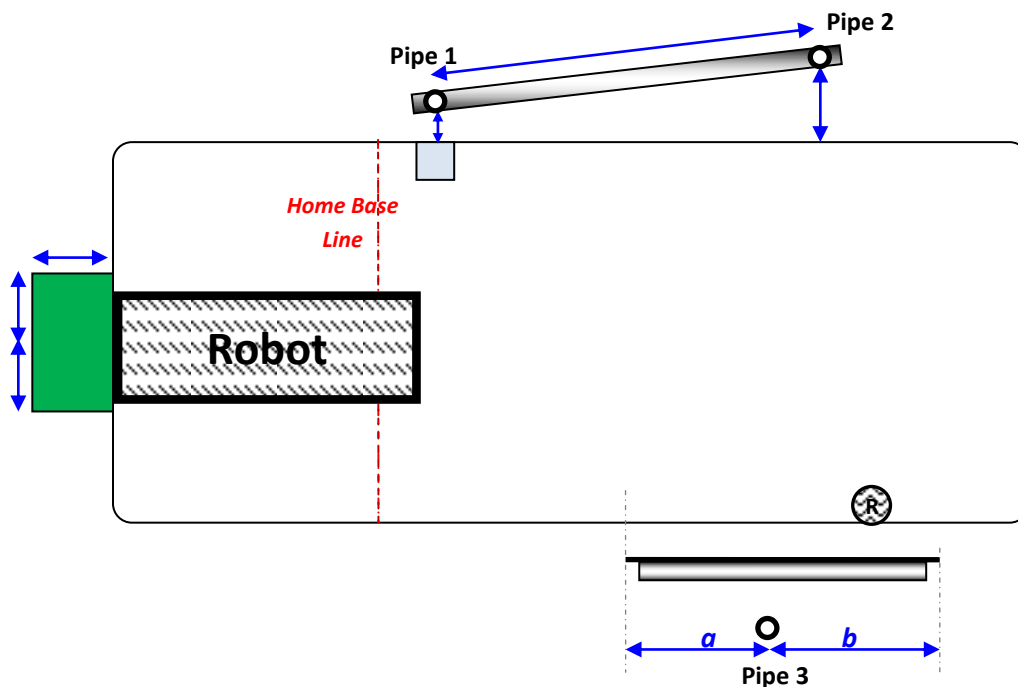
**Q. How precise are the dimensions mentioned in the rule?**

Though every effort is made to be consistent and precise, in all of the dimensions of the playing field and parts, Robofest assumes some error of up to plus / minus 1cm. Note that Robofest encourages feedback loop control using landmarks, not dead reckoning.

**Q. The rules say we can touch the robot when part of it is on or over the Home Base (foil). Does that include switching parts like arms and/or repositioning? Yes, if the robot does not cross the Home Base Line.**

**Q. Can we pick up the robot when part of it is on or over the Home Base (foil)? Yes, you can pick it up and place anywhere on the playing field table to work on the robot.**

**Q. I know my robot should not cross the Home Base Line when it starts. How about the following case, when it returns home? Can I get any penalty if I pick up the robot? No.**



**Q. Can we use our own cup?** Yes, if judge approves and it meets the 16 oz. requirement.

**Q. Can we modify the cup?** No, you cannot *permanently* modify the cup.

**Q. The rules say the robot dimensions can get bigger after the start (page 5). What does that mean? Can we add manually some part extending outside of the Home Base Line when it is on or over the Home Base?**

No, it means the robot can get bigger “automatically”. A human player cannot add a long arm to reach the pipe even if the robot is over the Home Base (foil).

**Q. May parts like arm or sensor hang over the edges of the table?** Yes, but remember the maximum size is 35cm x 76cm (or 76cm x 35cm).

**Q. Can we use multiple programs?**

Yes. You may touch the robot to change the program when it is on or over the Home Base.

**Q. My robot dropped a cup on the table while it is carrying it toward a leaking pipe. Can we reload the cup without penalty while the robot is in action?**

No. It is like touching the robot. If you do that you will get a red card penalty and you must restart it from the Home Base.

**Q. Are the "10 seconds" & "3 seconds" for reporting the measurement of the pipe part of the two minute timer?**

There can be two cases:

- If this mission was the **last** mission during a round: NO. Judges shall record time when the robot stops at the foil tape.
- However, it is possible for a team to do this before another mission. In this case, yes, 3 seconds and the time for Judge to read the value will be included in 2 minute timer. Therefore, it is a good strategy to do the board measuring mission at the end.

Judges will count 3 seconds and 10 seconds.

**Q. It is hard to show the LCD with measured number to Judges within 10 seconds after the measuring. May we get more time if we request?**

No, it is a team’s responsibility to design robots in such a way that the measurement displayed on LCD can be shown within 10 seconds.

**Q. Will printed-Robot ID tag be provided?**

No, each team must provide a visible tag with team ID. Blank name labels will be available.

**Q. Is this a successful case?** Yes, since the cup does not touch the floor.



**Q. The diagrams show that the distance from the table of the wells is 15.5 cm. Is this 15.5 cm to the outer edge of the pipes (as it seems in the figures), or to the center of the well pipes?** OUTER EDGE AS IN THE FIGURES

**Q. Does the robot have to be "home" to finish? E.g. if the last thing the team does is cap well 3 (they have already reported the board length) do they need to return to home to finish?** NO, IT DOES NOT MATTER. We said sequence of missions does not matter. However, your team may lose time, if the reporting is done in the middle since Judges need to read the value.

*Please also read Judging Guidelines in PPT that can be found on 2011 page.*