

ABU Robocon 2023 Phnom Penh, Cambodia

FAQ1-2

2022.10.11

Please read the rule book carefully before sending any questions. Please cooperate with us for smooth operation in a limited time.

Rulebook Ref No.	Table of content
1	Terms and Conditions
2	Game
2.1	Game procedure
2.2	Points
2.3	Deciding the Winner
2.4	Retry
3	Violations
4	Disqualification
5	Robots
6	Safety
7	Teams
8	Others

[FAQ1-2 Posted on Oct 12, 2022 Providing answers for questions received end of August - 18 Sep 2022](#)

FAQ1-2 (the remaining questions from FAQ1-1)

Please always put the date of when you add FAQ

2.Game

2.1 Game Procedure

FAQ #	Question	Answer
2.1-25	Rule 2.1.14 says that the ring tossed in a pole cannot be removed. If it is removed after it gets hit by another ring, so what happens?	Whatever the reasons are, once rings are tossed in a pole, the rings are valid and the score remains.
2.1-26	According to Rule 2.1.8, does the participant fill the ring manually legal during the retry?	During retry, both robots of your team must retry. Team member can touch and adjust the ring which is held by the robot.

2.2 Points

FAQ #	Question	Answer
2.2-3	If the Elephant Robot (ER) has tossed a ring towards a pole and at the same time, the Rabbit Robot (RR) has stuck or slightly touches the same pole then, will that team get the points for that ring?	No, the ring is not valid because RR is in contact with the same Pole. Please refer to Rule 2.1.10.

2.4 Retry

FAQ #	Question	Answer
2.4-1	Rule 2.4.3 says that if the other robot is nearby and the referee determines that it is dangerous, the robot cannot be moved? Thus, how to break this impasse?	After confirming the safety of the field, the referee gives permission to the team to retry. Then team member must carry the robot to the retry zone

2.4-2	When a retry is taken for either of the robots, shall both the robots be brought to their respective retry zones?	When there is a retry, both robots have to start from their start zone or/and retry zone.
2.4-3	I want to know how much minimum force is enough to bend the ring?	Please refer to the information on the website. In case of damage, rings will be replaced by the Contest Committee.
2.4-4	As per section 2.4 Retry, "2.4.4 During the retry, team members can adjust the ring(s) held by the robot. Can the team members adjust the rings inside ER and RR during retry?	Yes.
2.4-5	Describe the 2.4.3, as there's retry if RR(ground plane) touches Angkor wat area?	If all the ground planes of the RR are in the Angkor Wat Area, return the robot to the Retry Zone for adjustment. If not, RR has to retry from the Start Zone.

3. Violation

FAQ #	Question	Answer
3-1	Can the robot enter the space above the Moat Area?	Yes.
3-2	Rule2.1.15 says that it is a foul of the robot that actively touched the other robot. If two robots impact each other, how to determine which one actively touch the other?	Robots entering the Angkor Center Area must not touch each other. * When moving robot B comes into contact with stationary robot A → robot B violates, B restarts. *When two moving robots A and B come into contact with each other → Both robots violate and restart.

		<p>*If the referee deems that B has run into opponent robot A with malice → Team B is disqualified.</p> <p>These rules prevent the act of attacking the opponent team.</p>
3-3	Rule 3.2 prohibits "RR stands around the opponent's Bridge and prevents them from entering the Angkor Center Area". But, how is it possible to stand around the opponent's Bridge?	<p>We would like to revise 3.2 to read as "<u>RR attempts to block the opponent's space entering or climbing the Angkor Center Area with intention or malice</u>".</p>
3-4	Is it considered a violation when we pick up the opponent's rings?	<p>No, if you are picking up the opponent rings in your area.</p>
3-5	In which areas can the operators of the robots enter without any violations?	<p>Team members can enter only Red or Blue area of each team's area.</p>
3-6	As per section 3 Violations, "3.4 Robots touching the area or objects which is prohibited to touch." Is the <u>projection</u> of ER and RR allowed over the prohibited areas?	<p>It is prohibited to touch the Moat Area. It is OK to enter the space above the Moat Area. It is prohibited to touch opponent's area including its space above. It is prohibited to touch outside of the field including its space above. ER can enter the space above the Bridge but cannot touch the Bridge. ER cannot enter the Angkor Wat Area including its space above.</p>

5 Robots

FAQ #	Question	Answer
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5-1	In the rules, the movement of robot doesn't have to use legs right? So we can use wheels.	Yes, the robots can use wheels.
5-2	Can we do sub-unit robot?	No, you cannot.
5-3	In the section "5. Robots" of the Rule Book, there is no statement which corresponds to the statement "Each robot cannot be split into sub-units or connected by flexible cords during the game" in the Rule Book of last year. In relation to this; Will the robot ever be forbidden from being "split into sub-units or connected by flexible cords"? If not, what is the intention of omitting this statement, which is annually included in the Rule Book?	No, each robot cannot be split into sub-units.
5-4	In the rulebook it is mentioned that elephant and rabbit robot can combine and it is also mentioned each of the robot has specific limits(constraints) while they are moving , so my question is that whether those constraints matters when both bots combine into one?	The rulebook doesn't mention that robots can 'combine'. Refer to rulebook, 2.1.12.
5-5	If we stack the elephant and rabbit robot, (say rabbit on top of elephant), how does it count for the height limit? Is it from the ground or the base of the robot?	Robot size is regulated for each robot. Please refer to rulebook 5.4.

7. Team

FAQ #	Question	Answer
7-1	As written in the rule book, there will be 3 team members and 3 pit crew members. If we have 20 team members which are working in making the robots , So will they all receive participation/winning/etc. certificates or just those 6?	The organizer will only provide 1 certificate for each award. No individual certificates will be issued.

8. Other

FAQ #	Question	Answer
8-1	What is the weight, hollow diameter, and deformability of the ring? Can we order rings from the Organizer?	Refer to the information on the website.
8-2	The organizers provide rings or each team makes their own to bring to the competition	The organizer will prepare the rings for the ABU Robocon 2023 competition.
8-3	Is the Organizing Committee planning to use a ready-made product for the rings, or is it planning to make the rings by themselves?	We will share the ring model to each country to let all the teams in each country to produce their own rings according to the spec in the rule. Moreover, we will provide a guideline on how to produce ring as well.
8-4	Regarding the size of Type 2 poles, "Rule Book" (21 August 2022) 1.15 states: "There are three types of poles: type 1, type 2 and type 3. See drawing". However, in "Game Field ABU Robocon 2023", we can only see the design for Type 1 poles(No. 0.5) and Type 3 pole(No. 0.6). We assume that the design for Type 2 poles are exactly the same as the design for type 1 poles. Is our assumption correct? If not, could you illustrate and tell us the design for type 2 Poles?	Yes, type 2 pole have the same dimension with type 1 pole

8-5	Regarding the material of "Bridge", "Game Field ABU Robocon 2023" states: "playwood" (No. 0.5). We assume "playwood" is a misprint for "plywood." Is our assumption correct?	We are sorry, it is plywood. Thank you for your correction.
8-6	As per the Rulebook RULE 8.2, will the error margin be considered for the weights and the dimensions of both the robots?	No, as for the robot it is the maximum value. Refer to rulebook 8.2.
8-7	I would like to know about when the registration is open for us.If the registration is open kindly send me a link for the event.	Please contact to your own host in each countries.
8-8	Is there any limit on the velocity of the rings thrown? If yes, then at what instant should it be measured?	No. But, please think of the safety during the tossing to spectator.