

Robocon Malaysia 2020 FAQ – 26 Feb 2020

Rolling of Ball to Try

Q: Can the try robot roll the ball into the try spot? The ball will touch strings or chains or flap on the Try Robot while rolling to touch the try spot. There is an instance where the robot and the ball and the touch spot in contact.

A: No rolling is not allowed. You need to place the ball in the try spot. Placing mechanism must be designed to put the ball in the middle of the try spot (not touching the boundaries of the try spot).

Ball touching the operators

Q: What happens if the try ball or kick ball touches the robot operators during the game? What if the operator catches the ball when it's about to go out or goes into opponent's field?

A: If the try ball or kick ball touches or caught by the opponent's operators in the opponent's field they will get 10 points. (Not applied to kick ball that hit the conversion post)
If team operator enters the opponent's field, the team will be disqualified.

If the kick ball touches or caught by your own operators the game will continue and you cannot use that kick ball again. After the kick process the ball needs to be taken out of the field by the operators.

If the try ball touches your own operators and is still in the game field a retry is required. However, if the try ball moves out of the field it cannot be used again.
If the operator catches a try ball (regardless of where the ball is going) a retry is required.

Passing or Receiving in Start Zones

Q: Can the PR pass in its start zone and can TR receive the ball in its start zone?

A: The PRSZ is considered the Passing Zone. The TRSZ is considered the Receiving Zone. You may pass or receive the ball while in start zones.

Supplement 1 for Kick

About the process from 'try' to 'kick'

1. If the team moves to the goal kick process after a try, the team member must declare to the referee the number of kick ball/s to pick up and get permission. This is called "kick declaration". The process from "kick declaration" to the end of goal kick is called "goal kick process".

* The "kick declaration" can be made at the following three timing:

- 1) Immediately after a new successful try
 - 2) At retry (However, you cannot announce 'Kick Declaration' while TR or PR is holding a Try Ball)
 - 3) Immediately after kicking all the picked-up ball/s
2. Team members pick up kick ball/s.
 3. Teams must choose one of the following;
 - I. Place all kick balls picked up by team members under article 2 in KZ.
 - II. All kick balls picked up by team members under article 2 must be loaded into either PR or TR (one robot only).
 4. In both cases of I and II of article 3, the team must report to the referee and get permission before starting the robot.
 5. The robot enters the KZ and performs a goal kick. At this time, one robot must kick all kick balls picked up one at a time.
 6. The team can move on to the next action only after kicking all the balls picked up under the article 2.

Supplement 2 for Kick

About the number of kick balls that can be secured by kick declaration:

The right to use kick ball/s acquired by successful try/s can be exercised up to 3 times at the same time. However, the upper limit is the number of kick balls remaining in the ball rack at the time of the kick declaration. Even if balls remain in the ball rack, the balls which were confirmed by 'kick declaration' by the opponent team earlier cannot be used.

FAQs

No.	Question	Answer
	<u>PR and TR</u>	
1.	Can we have kicking mechanism on both robot (TR and PR)?	Yes. You can have kicking mechanism on both robots TR and PR. However, you need to choose only one robot to kick at one time.
2.	Are we allowed to use both manual and automatic systems in the same robot?	Yes. Semi-automatic system is allowed.
3.	Does TR require arm mechanism to receive the Try Ball?	Any mechanism is allowed.
4.	Can the kicking mechanism use punching motion?	Yes. Any type of motion is allowed for kicking mechanism as long as it follows the kicking criteria.
5.	What does soft and flexible material mean?	Example of soft and flexible materials are rubber, cloth, cushion, wool, spring, and etc. Only one hard material surface such as steel, wood, hard plastic is allowed to be in contact with the ball during kicking process.
6.	Does a square structure frame made using several steel bars consider a concave surface?	Only one flat surface is allowed to be in contact with the ball when kicking.
7.	Can suction be used to hold the ball?	Yes.
8.	Can we use kick mechanism for passing mechanism?	Yes
9.	Is it allowed to change the mechanism of the robot for each game in order to match the red and blue fields?	Line-symmetric mechanism can be prepared for each match with the aim of dealing with the red and blue fields.
10.	Can the robot in the Passing Zone touch the side of the fence of the Kicking Zone? If not, what is allowed for the robot which is grounded with both the Passing Zone and Kicking Zone?	The robot is not allowed to touch the side of the fence opposite to itself. When the robot is grounded on both the Passing Zone and the Kicking Zone, the robot cannot touch either side of the fence.
11.	Can robots cross over the fence?	No.
12.	Can the stationary robot help a team member to find the rights spot to place a ball by using laser pointer and the like?	Yes, you can as long as it does not violate the safety regulations of the Rulebook.

13.	Is it allowed to press the robot against the ground using method other than suction (such as propeller)?	No, it's not allowed.
14.	Can PR and TR communicate?	Yes, they can.
15.	What happens if we accidentally damage the field and/or robots by the kick?	You will be disqualified if you damage the field and/or robots.
	<u>Pass, Try and Kick</u>	
1.	Can the robot also kick the tee during the kicking process?	Yes.
2.	Can the team start kicking from KZ3?	Yes. The team can choose to kick from any KZ.
3.	After the kicking process, what happen to the Kick Ball?	If the ball enters opponent's field, the referee will pick the ball and the ball cannot be used again. If the ball lands in the team's own game field, the team member must pick the ball and move it out of the game field but the ball cannot be used again.
4.	What happen to the tee after the kicking process?	The team can leave the tee or put it away as long as it is in the team's zone. Please collect the tee in your team area when you finish the Kicking Process. If you wish to pick up the tee at any other time, you need to ask for a retry. If the tee enters the opponent team's zone, 10 points will be added to the opponent team as with the Kick Ball, and the tee will be picked up by a referee. The tee cannot be used again.
5.	Must the robot be in the Kicking Zone during the kicking process?	Yes. All parts of the robot that are in contact with the ground needs to be within the Kicking Zone during the kicking process.
6.	What happened when the kick ball falls without the kick being attempted?	If the Kick Ball falls from the Tee without a kick attempt, the team member is allowed to place the Kick Ball on the Tee provided the robots are not in motion.
7.	What if the Try Ball or Kick Ball hit the poles or bounce in the own field before it lands in the opponent's field?	10 points will be given to the opponent.

8.	If the Kick Ball lands in the team's own game field after the kicking process, can the team ask for a retry and reuse the Kick Ball?	No. That is considered as unsuccessful kick and the Kick Ball cannot be used again.
9.	Is it counted as kick attempt, if the robot accidentally knocked the Kick Ball down before the kicking mechanism is triggered?	Kicking attempt is counted only if kicking mechanism is activated AND the ball leaves the tee.
10.	How does the team kick multiple Kick Balls?	Provided that the team has successfully made three or more Tries, the team is eligible to request for 3 Kick Balls (maximum). The team must set all the Kick Balls on the Kicking Zone or load all the Kick Balls into the kicking robot, and kicking robot must kick the all the Kick Balls (one by one) before proceeding to the next task. The team members are not allowed to keep any balls.
11.	How does the point from the successful kicking counted?	Successful kick from KZ1 gives 5 points, KZ2 gives 10 points and KZ3 gives 20 points.
12.	What if the Kick Ball collided with the opponent Kick Ball during kicking process?	Point will be awarded as per the kicking points criteria. Team will be awarded the point if its kick is a successful goal. If the Kick Ball enters the opponent team's zone after colliding with the opponent team's Kick Ball, no points will be added to the opponent team, and the ball will be picked up by a referee.
13.	Is loading the kicking ball into the robot contradicts with the kicking rules?	There are 2 ways to set the Kick Ball. It is either the team member sets the kick ball in the kicking zone manually or a team member load the kick ball into the robot so that it can set the kick ball in the kicking zone. However, the robot cannot just kick the ball without setting it up first. After setting the ball, the same robot must kick the ball according to the kicking rules.
14.	How many Try Ball can TR hold?	TR is allowed to hold only 1 Try Ball at one time.
15.	Can PR throw the Try Ball to TR when it is not in Receiving Zone?	PR must pass the ball from passing zone and TR must be in the receiving zone in order to get a successful pass.

16.	Can PR pass the ball from PRSZ?	No. Pass is only allowed from the passing zone (green zone).
17.	What happen if the Try Ball moves out of the field?	If the Try Ball moves out of the game field while playing it cannot be used again.
18.	What happen if Try Ball falls from the robot?	A retry is compulsory when the robot drop the Try Ball in the Kicking Zone and Passing Zone or did not make a Try. If the ball falls in the Receiving Zone, TR can pick it up. If the Try Ball enters the opponent's field the opponent team will receive 10 points automatically. If the Try Ball moves out of the game field, it cannot be used again.
19.	What happen if Try Ball lands on border during try attempt?	It is considered as foul and retry is compulsory.
20.	Can TR throw the Try Ball into the Try Spots?	No. For a successful try, when the Try Ball touches the surface of the Try Spot for the first time, TR and Try Ball has to be in contact with each other.
21.	Are we allowed to store the Kick Ball?	No. Only take the Kick Ball when it is required.
22.	What happen if the team's rugby balls on the rack is accidentally moved by the opponents?	Depending on the situation, the referees will decide on the best way to rearrange the Try Balls.
23.	Can the robot access the space above the outside of the game field?	Yes. The robots can enter the space above the fence outside the field
24.	Is it allowed for the PR to throw the Try Ball to the ground of the receiving zone for the TR to receive?	Yes. You can even roll the ball. However, the try robot can only pick up the try ball in the receiving zone.
25.	During retries, can the player move the try ball to another hole in the ball rack?	During retry you can adjust the position, orientation and location of the try balls as you want.
26.	Before a successful try for the first ball, can the PR touch the second ball?	PR can only pick up the next Try Ball when the TR has successfully placed the Try Ball in the Try Spot or the current ball moves out of the game field excluding the Try Spots.

27.	If the team declared to kick multiple kick balls after successful tries, can the robot perform a try after kicking only one ball?	If the team chooses to take multiple kick balls (2 or 3), all the kick balls must be set up on the kicking zone or loaded into the kicking robot. If after setting up, the team decided not to kick all the balls but continue to make another action using try ball, the unused kick balls must be returned back to the rack.
28.	Can the robot kick multiple kick balls at the same time?	No.
29.	If the team chose to load 3 kick balls into the kicking robot, should the robot set all 3 balls on the kicking zone first before kicking them or is it okay to kick the ball while the robot still holding another 2 balls?	The robot may set the kick balls one by one and kick it.
30.	Is it still be counted as score if the ball was kicked above the 3-meter pole but still in between the scoring poles?	Yes
31.	Can the try robot touch the 10mm steel square tube at the try spot?	Yes as long as it does not damage it.
32.	Can the pass robot kick the ball while the try robot is scoring a try at the receiving zone at the moment as long as the pass robot is not at kicking zone?	No. The robot is not allowed to touch the try ball during the kick process.
33.	Do we need to kick the kick ball after taking the ball from the rack or we can store it?	The team must kick all the balls. If the team decided not to kick all the balls but continue to make another action using try ball, the unused kick balls must be returned back to the rack.
34.	After a Try Robot score a TRY, can the Try Robot remain at the passing zone while the pass robot kicks the ball at the kicking zone?	Yes
35.	Can we use a jig during the set-up time and kicking process?	Jig can only be used during setting up time or retry at the start zone only. The use of jig to set the kick balls or try balls is not allowed.
36.	If the robot is retried during the Goal Kick Process, from which state will the	If you retry during the Goal Kick Process, the two robots must restart from their respective Start Zones. At this time, the ball already placed in the field and the ball already loaded in the

	robot restart? What happens to the Kick Ball that I have already secured?	robot can be adjusted. If a team member holds a Kick Ball during the retry, it may be placed on the field or loaded into the robot during the retry. If you wish to load the ball placed on the field into the robot or place the ball loaded in the robot to the field, you can do so during the retry.
37.	What if the robot cannot perform a kick or the team decided not to kick the kick ball(s) that they have taken?	Team members can declare the end of the Goal Kick Process and retry to move on to the next action. At this time, if there is a Kick Ball secured in the kick declaration but the kick has not been completed, the ball must be returned to the Kick Ball Rack.
38.	Are the Try Spots and Pass Robot Start Zone considered to be inside of the Passing Zone? Is the Try Robot Start Zone considered to be inside of the Receiving Zone?	The Try Spots are not inside of the Passing Zone. The PRSZ is inside of the Passing Zone. The TRSZ is inside of the Receiving Zone. You may pass or receive the ball while in start zones.
39.	Are the square steel tubes of 10mmx10mm in the Try Spot considered as a part of the Border Zone?	No, they are not a part of the Border Zone. TR is allowed to touch it.
40.	If a Try Ball comes out of a Try Spot, will the try be invalidated? For instance, will the opponent's try be invalidated if we take out their Try Ball from the Try Spot?	It doesn't affect the score or the right of the ball if the ball leaves the Try Spot after the try is confirmed. When your ball leaves the Try Spot pushed by opponent's tee or ball, the action will be considered as the same as the opponent's ball landed on the your field. Therefore, you get 10 points. When the ball leaves the Try Spot by the contact of the opponent's robot, the action will be considered as the same as the robot invading your team's space above. Therefore, opponent receives a foul.
41.	What does it mean to 'remain in the Try Spot'? What about if the ball is in contact with the inside of the Try Spot or a part of the ball protrudes into the air?	The ball in those positions are considered to 'remain in the Try Spot'.
42.	Is it considered to 'come in contact with the ball' if a string or soft components attached to the robot comes in contact with the ball during a try?	Yes.

43.	While picking up a Try Ball, can PR make contact with other Try Ball? What happens if the ball falls from the Rack while picking up?	PR may touch other Try Ball. If the ball falls from the Ball Rack by contact, please ask for a retry and team member should put the ball back to the Rack. Or you can just leave the fallen ball as it is.
44.	After a Goal Kick, can we pick up the tee which has been used in our team area and reuse it for another goal kick?	You may leave the tee which fell in your team area as it is. Please collect the fallen tee in your team area when you finish the Kicking Process. If you wish to pick up the tee at any other time, you need to ask for a retry. You may reuse the picked-up tee.
45.	Should we pick up the ball before kicking the next ball if the first kicked ball fell in our team area while trying to kick multiple balls in a single kicking process?	No you don't have to do that. Please collect the fallen ball in your team area when you finish the kicking process.
46.	What are the specific conditions for the goal from each Kicking Zone such as the position of the balls and robots?	The score by the goal kick will be based on the position where the tee is placed at the time of a kick and the position of the robot does not matter as long as the robot is in KZ. If the tee is grounded across multiple zones, the lower score will be taken.
47.	Can the try robot roll the ball into the try spot? The ball will touch strings or chains or flap on the Try Robot while rolling to touch the try spot. There is an instance where the robot and the ball and the touch spot in contact.	No rolling is not allowed. You need to place the ball in the try spot. Placing mechanism must be designed to put the ball in the middle of the try spot (not touching the boundaries of the try spot).
48.	Can the PR pass in its start zone and can TR receive the ball in its start zone?	The PRSZ is considered the Passing Zone. The TRSZ is considered the Receiving Zone. You may pass or receive the ball while in start zones.
	<u>Try Ball, Kick Ball and Tee</u>	
1.	Must the Tee must be in contact with the ground when setting up the Kick Ball?	Yes. For kicking process, the tee cannot be placed on the robot. It must be on the ground and the ball must be placed on the Tee.
2.	Before game start, how is the orientation of the try ball and kick ball on the rack?	During the setup time you may adjust the orientation of the Try Balls. The Kick Balls will be arranged by the referee and will be taken manually by the player during the game.

3.	What if the opponent accidentally moves our try ball on the rack?	Depending on the situation, the referees will decide on the best way to rearrange the Try Balls.
4.	Operator A throws the kick ball to operator B to set up but the ball but the ball goes out of the game field, can the ball be used again?	If the ball goes out of the field or goes into the opponent's field, it cannot be used again. If the balls enters the opponent team's zone, 10 points will be added to the opponent.
5.	Can a team member touch and adjust the Try Balls placed in the Ball Rack before the game starts?	No. Team members can ask for a retry to touch and adjust balls after the game starts.
6.	How will the Try Balls be arranged on the Ball Rack?	For every hole of the Ball Rack, one Try Ball will be placed in the way that the major axis of the ellipse becomes almost vertical.
7.	When the Kick Ball is placed in the KZ, is it OK if the part of it protrudes into the space above the fence, Passing Zone and Receiving Zone?	It is OK
8.	<p>What happens if the try ball or kick ball touches the robot operators during the game?</p> <p>What is the operator catch the ball when it's about to go out or goes into opponent's field?</p>	<p>If the try ball or kick ball touches or caught by the opponent's operators in the opponent's field they will get 10 points.</p> <p>If the operator enters the opponent's field your team will be disqualified.</p> <p>If the kick ball touches or caught by your own operators the game will continue and you cannot use that kick ball again. After the kick process the ball needs to be taken out of the field by the operators.</p> <p>If the try ball touches your own operators and is still in the game field a retry is required. However, if the try ball moves out of the field it cannot be used again.</p> <p>If the operator catches a try ball (regardless of where the ball is going) a retry is required.</p>

