

## **Regulation 2.**

### **Competition rule of “ROBO FOOTBALL”**

#### **1 CONDITIONS OF COMPETITION**

- 1.1 Score as many goals as possible to the opposing team.
- 1.2 The competition takes place between two teams. Each team has two remote controlled robots.
- 1.3 It is permitted to use one substituting robot in the game.

#### **2 FIELD**

- 2.1 The field color is green.
- 2.2 The color of the lines of the field is white.
- 2.3 Field size - 1800 x 2700 mm.
- 2.4 The diameter of the field center - 800 mm.

#### **3 GATE**

- 3.1 Gate width - from 300 mm up to 400 mm.
- 3.2 The gates must be firmly fixed to the surface
- 3.3 The height of the gate is 180 mm - up to 250 mm

#### **4 FOOTBALL**

- 4.1 The color of the ball is white, red, or pink.
- 4.2 The diameter of the ball is 43 mm
- 4.3 The weight of the ball is 46 gr.

#### **5 ROBOT**

- 5.1 Participants can use any kind of material to build a robot.
- 5.2 The maximum width of the robot - 20 cm.
- 5.3 Maximum length –20 cm.
- 5.4 Maximum height –20 cm.
- 5.5 To measure the robot, transparent glass cube is used as a measuring device. The internal size of the cube:
  - width - 20 cm.
  - length –20 cm.
  - height –20 cm.
- 5.6 The robot can change its size during game period.

- 5.7 The maximum weight of the robot is 1 (1.5) kg (including batteries).
- 5.8 One operator can handle one robot.
- 5.9 Robot is controlled by the remote communication device. For remote control, any type of device is permitted, including a special application or mobile phones.
- 5.10 Sticker is attached to each robot to indicate which team the robot belongs to.
- 5.11 So as not to interfere with any robots during the game, any wires of the robot should be accurately stuck to the body of the robot.
- 5.12 The robot may be equipped with a kicking mechanism. Kicking mechanism is a mechanism that allows the robot to kick the ball when the robot is not in motion.
- 5.13 The robot cannot hold the ball in the game process. The referee decides that a robot holds the ball when 50% of the ball is blocked by the robot body and in that case the team will get a warning.
- 5.14 Before the beginning of matches, there will be a technical examination - inspection of robots to be in accordance with the specified parameters. The robots will be placed in the specific "quarantine" area after the inspection.

## **6 CONDUCTING THE FOOTBALL MATCH**

- 6.1 All operators should be at the back of the playground behind the gates they are defending. Operators can pick up their robots during break time (to recharge and repair the robot).

## **7 DURATION THE FOOTBALL MATCH**

- 7.1 The game consists of 2 halves and each half is 2 minutes.
- 7.2 Interval between halves must not exceed 3 minutes.
- 7.3 The duration of each half in the final match is 4 minutes and the break time is 5 minutes.

## **8 EXTRA TIME**

- 8.1 Starting from PLAY-OFF matches, if in the main two halves, teams score same points, there will be held extra time. Extra time consists of two halves each of which is 1 minute-long. Extra halves follow the first goal rule i.e. the team that scored first is considered the winner. There is a-minute time interval between extra halves for teams to change their gates. If the winner is not defined in extra time each team is given the opportunity to send the ball to the empty gate from a specified distance, only once. The winner is the team that performs this task in the shortest period from the start.

## **9 REFEREE SIGNALS**

- 9.1 The referee gives the whistle marks during the game
- 9.2 The referee may suspend the game with a whistle signal
- 9.3 The double whistle means that the game is over.

## **10 STARTING THE MATCH**

- 10.1 The draw will be played before starting the match. The winner of the draw will be given the right to kick the ball first or choose one of the two gates at the first half of the match.
- 10.2 In the second half of the match, teams will change gates.
- 10.3 The opponent of the team, which gave the first shot in the first half, gives the first shot in the second half.
- 10.4 Robots cannot guard the gate during the game.
- 10.5 A technical defeat would be announced for the team that could not assign their robots to the field in required time. The score would be recorded as 3:0.

## **11 TAKING INITIAL POSITION AND GIVING THE FIRST SHOT**

- 11.1 At the start of the match, the robots are placed in half of the field where they are defending the gate.
- 11.2 At the start of the match the ball is set in the center of the field.
- 11.3 A robot of the team starting the match will be closer to the center of the field, near the ball. A robot of the opponent team should be located outside the center line until the ball is put in the game.
- 11.4 The game starts with the referee blowing the whistle.

## **12 GOAL**

- 12.1 If the ball crosses the gate line completely, and if the team does not break the rules at the time of the attack, the goal is considered scored.
- 12.2 After a goal has been scored, the ball will be put in the center of the field and the team *on whom* the goal was scored (losing team) will start the game.

## **13 SUBSTITUTION**

- 13.1 During the game, the robot can be substituted with the permission of the referee. Maximum number of the substitution is not limited. The substituting robot must meet all requirements for robots in this regulation.
- 13.2 The Player (Operator) asks the referee to replace the robot, the number of the robot will be announced.
- 13.3 The robot which is being substituted into the game, can be placed on any of the boundary lines of the half of the field that is being defended by its team.

## **14 REINSTALLATION**

- 14.1 Reinstallation of the robot can be done before the start of the match by the referee permission. The referee may also allow to reinstall the robot in the following cases:
  - If the robot loses a connection with the controlling device;
  - If the robot runs out of power;
  - If there are any spotted defects in the robot.

According to the decision of the referee, the robot will be withdrawn from the playground and the referee permits a replace. If the team does not have a replacing robot, the withdrawn robot is handed over to the operator to eliminate defects. But this will not stop the game.

## **15 THE END OF THE GAME**

15.1 The game can be considered to be over in the following cases:

- When the period of the halves ends;
- A technical defeat is announced to one of the teams by the referee.

## **16 DISCIPLINARY PUNISHMENTS**

16.1 The following disciplinary punishments can be applied during the proceedings:

- warning
- penalty kick
- exclusion from the game

16.2 A team will be warned in the following cases:

- When the field or ball is damaged.
- When one of the robot operators leaves their places
- When someone touches the robot located on the field during the game without the referee's permission
- When the number of robots in the game exceeds the permitted limit in the field

16.3 A team that receives 3 warnings will be punished with a penalty kick.

16.4 One of the robots of the team, that receives a total of 5 warnings, will be suspended until the end of the game.

16.5 If the team does not have enough robots after one of the robots of the team is suspended during the game, the team continues to play the game with one robot. If both of the robots are suspended, the suspended team will receive a technical defeat.

16.6 After suspending one of the robots of the team from the field, all warnings of the team will be removed.

## **17 SITUATIONS IN THE MATCH**

17.1 No corner shots can be made during the game

17.2 Penalty kick.

17.2.1 A penalty kick will be shot:

- After three warnings;
- Both robots of the defending team get to the gate line to defend the gate for long (more than 10 seconds).

17.2.2 The ball is placed 50 cm away from the gate area and the player performs the shot after the referee's whistle.

- 17.3 When a penalty kick takes place, the robot of the opponent's team cannot come close to the ball. If the rule is broken, a penalty shot will be repeated.
- 17.4 No out lines are in the field. So, there is no out during the game.
- 17.5 Free kick.
- 17.5.1 The free-kick is performed by the referee whistle in the following cases:
- When the opponent robot breaks the rules while performing the first shot of the match;
  - Violation of the requirements at the time of the free kicking
- 17.5.2 When a free kick is performed, the ball is placed to the spot where the rule was broken
- 17.6 Free ball.
- 17.6.1 After clinch continued more than 10 seconds, the referee suggests playing the ball from the center. At the same time, the robots are placed at the same distance from the center of the field, outside the center line of the field.

## **18 REFEREEING**

- 18.1 The organizers have the right to make any modifications to the rules of the competition without the benefit to any of the teams, minimum of 2 weeks before the competition.
- 18.2 Referees' decisions must strictly satisfy competition rules.
- 18.3 During the competition, all participants must comply with the rules.
- 18.4 In problematic cases, in order to make right decision the referees may add additional half for the match.
- 18.5 Referees can temporarily stop the game to clarify the rules.
- 18.6 If there is a disagreement with the referee's decision, then the team leader must inform the organizers about the situation no more than 10 minutes after the end of the match in the written form.
- 18.7 A team that creates artificial barriers to prevent the opposing robots from functioning properly during the competition, will be excluded immediately.

## **19 THE RULES TO DETERMINE THE WINNERS**

- 19.1 The team that scores more than the opposing team in each match is considered the winner.
- 19.2 Group stage
- 19.2.1 Teams are divided into groups by drawing lots, three, four or five each, depending on the number of participants. In the group stage, each team conducts a match against each opposing team in its group.
- 19.2.2 During the group stage, the winning team receives 3 points. In the draw each team receives 1 point. The losing team does not receive any point.

19.2.3 If two teams in the group gather the same points, to determine their place in the group following records are taken into account:

Firstly, the ratio of balls

Secondly, number of scored goals

Thirdly, the result of the match held between two teams.

If teams have the same records according to the abovementioned points, each team will have one penalty shot performance and this way, the winner is selected.

19.2.4 The teams that took the first and second places, respectively, will have a chance to play in the PLAY-OFF stage.

19.3 PLAY-OFF

19.3.1 At this stage, matches are held in lost-left basis, i.e., a losing team leaves the competition. The number of matches depends on the number of teams.

19.3.2 PLAY-OFF continues until 4 teams remain. Next matches are called as semi-finals.

19.4 The team that won the final match becomes the winner. Its last opponent gets second place. To determine the third place, an additional match is held between the two teams that lost in the semi-finals.