

RobotChallenge 2012 - Puck Collect Rules

Note: All rules are subject to change without notice.

Name of Event: Puck Collect

Number of Robots per Event: Two

Robot Weight Range: Any

Robot Dimensions: 50 cm x 50 cm, any height.

Arena Specifications: 280 cm x 280 cm

Short Description: Two robots compete. Small coloured pucks are distributed on the field. The aim is to collect all pucks of the assigned colour and carry them to the own home base.

Changelog

04.01.2011

- First publishing

21.10.2011

- Rules simplified: new way of counting collected pucks and removal of the rules for own goal and red card

07.12.2011

- Rules slightly modified in such a way, that colour recognition is necessary (Section 2.2)

09.12.2011

- Scoring clarified

1. General Requirements

1.1. Field Dimensions

The field in this competition is 280 cm x 280 cm big and bordered with 10 cm high boards (of any colour).

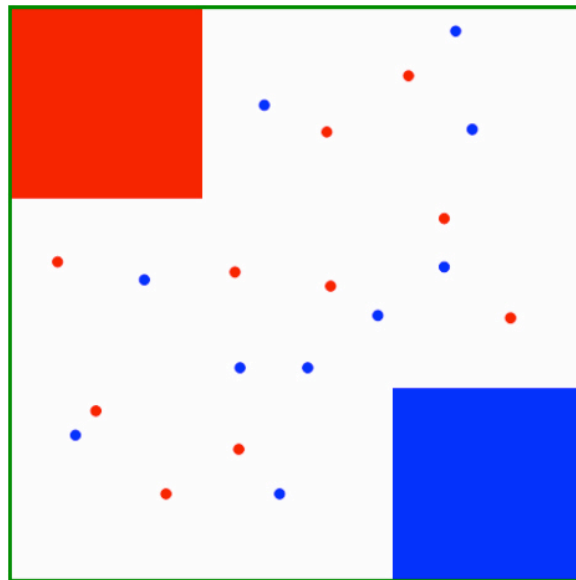


Fig 1: Puck collect field

1.2. Home Bases

Two 70 cm x 70 cm big home bases (red - RAL 3000 "Flame red", blue - RAL 5010 "Gentian blue") are positioned in opposing corners of the field. The remaining part of the field is white and the neutral zone.

1.3. Pucks

Ten pucks of each colour are spread randomly in the neutral zone. The pucks are wooden disks in the size of a tea light (4 cm diameter, 1.7 cm height) with slightly polished edges.

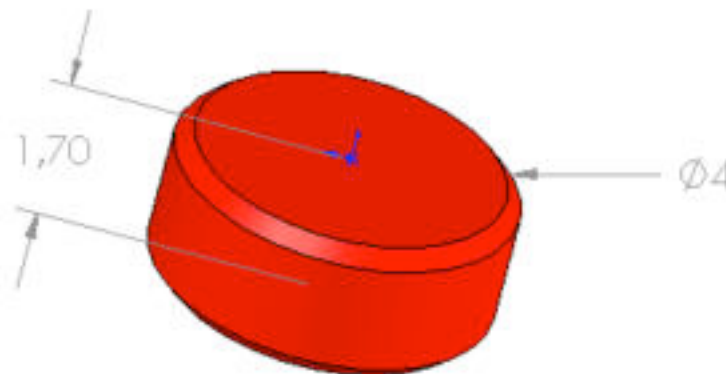


Fig 2: Puck

2. Game

2.1. Start of the Game

Each of the two robots is assigned a colour (red or blue) and is placed on the corresponding home base. The robots are not allowed to leave the home base until the judge announces the start of the match.

2.2. Aim of the Game

The aim of this competition is to collect all pucks of the assigned colour and place them into the assigned home base.

2.3. Scoring

A puck is counted as collected, if all the following conditions are met:

- its entire body is located unmoved within any of the home bases
- it is touching the floor
- it is not covered by any part of a robot

A collected puck is immediately removed by the judge. It counts for the robot, which is assigned to the colour of the particular home base as follows:

- If the colour of the puck is equal to the colour of the home base, the score will be increased by 1.
- If the colour of the puck is not equal to the colour of the home base, the score will be decreased by 1.

The total score of a robot at the end of a match must not be negative. Therefore, if there are more wrong coloured pucks than right coloured pucks the score will be corrected to 0

2.4. End of the Game

The match ends when all pucks have been collected. The robot with the higher score is declared the winner.

2.5. Time-Out

The match ends after a duration of 3 minutes or when the judge decides so. The robot with the higher score is declared the winner.

3. Scoring

3.1. Tournament

The winning robot is awarded 3 points. In case of a draw both robots receive 1 point each.

3.2. Knockout System

In knockout system there is no draw possible. If both robots have the same score the robot, which firstly gains the lead during the match (first robot to reach a score of 1) wins the game and advances to the next round. If no robot manages to collect a puck within the entire game, no robot advances to the next round.

4. Declaring Objections

4.1. Declaring Objections

- A. No objections shall be declared against the judges' decisions.
- B. The lead person of a team can present objections to the Committee, before the match is over, if there are any doubts in the exercising of these rules. If there are no Committee members present, the objection can be presented to the judge before the match is over.

5. Flexibility of Rules

As long as the concept and fundamentals of the rules are observed, these rules shall be flexible enough to encompass the changes in the number of players and of the contents of matches. Modifications or abolition of the rules can be made by the local event organizers as long as they are published prior to the event, and are consistently maintained throughout the event.

6. Liability

- A. Participating teams are always responsible for the safety of their robots and are liable for any accidents caused by their team members or their robots.
- B. The RobotChallenge organization and the organizing team members will never be held responsible nor liable for any incidents and / or accidents caused by participating teams or their equipment.