



Istanbul Technical University Robot Olympics 2019 Color Selecting Category Rules

Task Definition

In this category, the robots must carry the cubes from gathering ground to correctly colored area.

Success Criteria

In this category, the success is to place at least one prism to the correct place.

Robot Specifications

1. Robots do not have size and weight limit.

Competition

2. Every robot is reflected in the order,

3. Each contestant has two chance to contest. The higher score will be based on.

4. Robots have 5 minutes to contest.

5. Robots are all right for 5 minutes .

6. The prisms received from the robots receiving zone should leave any of their release pigments.

7. Robots can start from the spot where the black zone of the competition wants.

8. Robots can take prism to the air by removing or dragging.

9. Robots can move as many prisms as they want every time.

10. If the competitors want it, they can start the initial apparatus to align the robot.

11. If the apparatus is used at the beginning of the robot, this apparatus may pass to the colored region.

12. Contestants must consider color tolerance when calculating.

13. Before the prism and the ground sample will be found in the technical room,

14. In this category, "above the category rules" apply.

Track Specifications

15. The track has a pickup zone with 7 prizes in 5 different colors and a drop zone with 9 area in 7 different colors.

16. The competition area is the area with black background and other colors (green, red, etc.).

17. The prisms are measuring 3 cm x 3 cm x 6 cm. The 3cmx3cm part of the prism is in contact with the ground.

18. The walls on the track are white MDF. The height of the walls is 10 cm and the thickness is 1.8 cm.

19. The pickup and drop zones are 30x30 cm.

20. To help with the chambers, there will be a 1.8 cm wide white line on the runway.

21. It is necessary to take the prisms from the pickup area and leave them in the drop zone.

22. All prisms will be in the middle of the rooms.

23. Prism weights range from 30 to 40 gr.

Scoring

24. When the robot is removed from the track, scoring will start.

25. The highest point will be assessed.

26. In order for the prism to qualify for the score, the right rennet must be in full contact.

27. The number of prisms not in the pickup zone will be multiplied by +100 and scored.

28. The cubes in the correct colors in the drop zone will be multiplied by +200 and scored.

29. To leave each cube out of the competition area -50 points.

30. In case of score equalization, the robot, which completes the contest in a shorter time, takes the top rank.