

ROBOCON PROBLEM STATEMENT

Hardik Ahuja

There will be 2 robots-

1)Automatic robot.

2)Manual robot.

Or Two Automatic robot

-Manual robot(MR)-Could be used wireless or cable connection.

-Automatic robot(AR)-Without help from operator

- Manual robot area(MRA)- An area, from where the manual robot starts the game.

Shuttle cock

1)normal shuttle cock-10 single or multicolor

2)Golden shuttle cock-5 golden color

OUTLINES

3-minute game

TZ1 and TZ2-normal shuttle cock throwing

TZ3-golden shuttle cock throwing

TZ3-golden cup

-1minute-for moving the robot+shuttle cock or rack

- Manual robot can load one or more shuttle cock
- Manual robot must pass automatic robot one normal shuttle cock at a time.
- Robot are allowed to handle and receive one or more golden shuttle cock each time.
- Handling and Receiving the shuttle cock is considered successful only when having enough 4 factors as follows-
 - + Automatic Robot successfully keeps or hold Shuttlecock or Tail or Fringe.
 - + Shuttlecock is not allowed to touch the game field.
 - + None of the Manual Robot part makes any contact with shuttlecock.
 - + None of the Manual Robot part makes any contact with Automatic Robot
 - +During the processof handling and receiving shuttle cock,the manual robot is allowed to make contact with automatic robot.But the manual robot is not allowed to send any signal to or control the automatic robot.

THROWING OF SHUTTLECOCK

We can go either first TZ1 or TZ2

Only when throwing is successful at least one normal cock in TZ1 and TZ2,the automatic shuttle cock is allowed to take the golden shuttle cock.

When the automatic robot fail to throw the golden shuttle cock, it's allowed to come back and throw normal shuttle in TZ1 and TZ2

-The automatic robot is allowed to carry and throw the multiple golden shuttlecock

-The automatic robot allowed to carry only one normal shuttlecock.

-The automatic hold the tail and not allowed to hold the shuttle cock.Distance b/w the keeping point and shuttle cock is minimum 250 milimiters.

-If normal shuttle cock throw-Manual robot-pickup-YES

-Automatic robot-pickup-NO

-if golden shuttle cock-reusing-NO

-if normal shuttle cock-reusing-YES