

























Date

August 6, 2010 - August 18,2010

Venues

Engineering Training Center, Shanghai Jiao Tong University (August 6~17: Workshop) Site of Shanghai Expo (August 18:IDC final contest)

Contestant

Design (Singapore)

Sao Paulo University (Brazil)
Ionis Institute of Technologie (France)
Tokyo Institute of Technology (Japan)
Tokyo Denki University (Japan)
The University of Seoul (Korea)
Singapore University of Technology and

Thailand select members

Massachusetts Institute of Technology

Shanghai Jiao Tong University (China) Tsinghua University (China)

Organizer

IDC International Organizing Committee Shanghai Jiao Tong University

Co-Organizer

Tokyo Institute of Technology Tokyo Denki University Tsinghua University

International Design Contest 2010

Date: August 18, 2010

Theme: Clean River, Better Life

Venues: Shanghai Expo (final contest)

Website: http://www.idc-robocon.org/idc2010/index.html









2010 Contest Theme: "Clean River, Better Life"

Game Summary

In the course of industrial development of a city, a river might become eutrophicated and algae will grow. In order to prevent or reverse such pollution and thereby improve life, machines in the game gather algae (Ping-pong balls) to clean up the river and also engage in river harvests (Golf balls).

The winner of a match is determined by the weight of balls which machines convey to their own bowl. Since a golf ball is much heavier than a ping-pong ball, a golf ball can be used effectively to influence the outcome of the game.

Game Rules

- Two teams play the game in a match. Time limit is 90 seconds.
- All machines may leave the 500mm cubic starting area on its side at the starting time.
- The winner of a match is determined by the weight of the balls in the bowls. Whichever side is heavier, the team assigned to that side of the table wins the game.



Ping-Pong Balls (Algae)

Ping-pong balls are stored in an upper part of the river and they are released just after the game starts.

Rotating Score Panel

The panel has 4 plexiglass tubes which contain golf balls. The panel is rotated according to the difference of the weights of balls in the two bowls. When the panel rotates, golf balls will fall down into the river zone.

Parts

There are more than 30 kinds of parts for each team.

You can buy additional parts or material with up RMB 80 Yuan.

Energy

Allowed forms of energy storage include:

- Gravity potential.
- The electric energy provided by the controller unit.
- The compressed air stored in the air tube.
- Elastic energy (such as stored within springs).



Competition Team









Universities' logo:





















Sponsors' logo:





















Japan Fluid Power Association













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