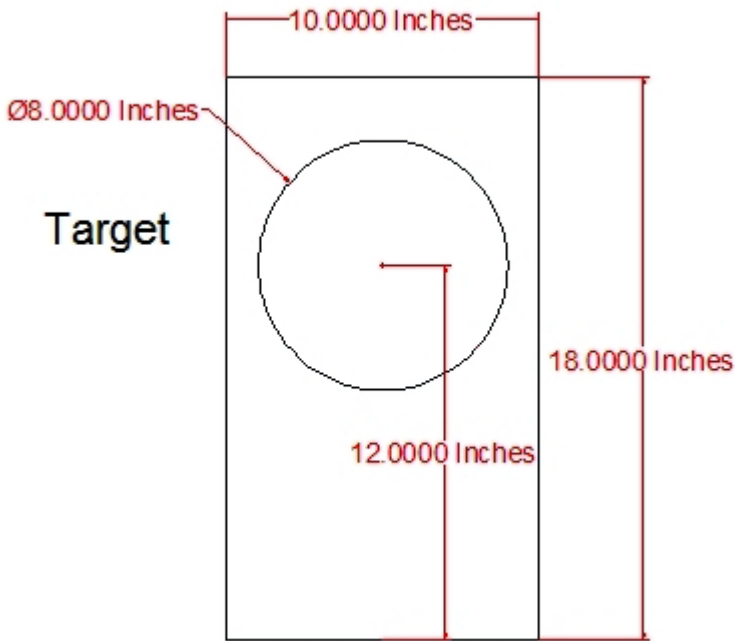


Minnesota Technology Challenge
2010-2011
Advanced Engineering Division



Problem:

Be able to shoot ping-pong balls at a distance of 10ft at 4 separate targets, with a maximum of 10 balls per target. Each target is 10ft away from the center line, which is the shooting line. There are 2 targets on either side of the shooting line. Each target is 10ft away from the other target on the same side and is 10ft away from the shooting line. Your shooting turret must be able to navigate from one position to another along the shooting line. The targets can either be a bag or a box to collect the ping-pong balls in which you are trying to shoot into. The goal is to get as many ping-pong balls into the collectors as possible.

Specifications:

The machine can use any method to drive along the line and it can be autonomous or remote controller, though extra points should be given to an autonomous machine.

The targets will be a hole in the side of a box that is 1ft from the ground to the center of the hole. The hole is 8 inches in diameter. In order to receive a superior rating in this challenge you must shoot a minimum of 3 balls into each target.

