

Automatic volleyball pass and retrieval machine

Catcher

Retrieval

Passing Machine

Objectives

Easy to set up/take down

Catches balls and funnels them into retrieval system

Must fit through a door when transporting

Move ball from A-B without falling out

A-B should be adjustable.

Ball travel should never get stuck and should be fairly fast.

Launch/hit ball with ample backspin

Accurate repeatable pass

Adjustable



Requirements

Set up/ Take down in <1 minute by one person.

Catch area HxWxD >= 4.5x10x6.
Dispense balls >=40" from ground.

Fold/Disassemble to fit through 8'x3' door.

Travel without falling out on its own.

Adjustable between 10-40 feet.

Ball travel in <40 seconds

About 2rev/sec

Land within 5 feet of target >10 times for all distances/h eights.

Adjustability range >= 10-30 ft distance
10-20 ft height for any distance.

Coefficient of restitution Vf-Vi

