

Whirlpoo

Climber

- Constant force springs extend two telescoping arms
- Custom winch gearbox for optimal torque and speed
- Full climb in 0.99sec

Shooter

- 360° rotating turret
- Adjustable hood from 24° to 62.38°
- 4" main flywheel and 2" secondary wheel

Spindexer

- Releases 5 balls in 0.75sec
- 5 pockets in flooring provide secure ball handling
- Omni wheel lifts balls up tower

Control Panel Mechanism

- Rotation control in 5.25sec
- Neo 550 encoder for quick and accurate position control

Intake

- Stows away for ball retrieval from human player station
- Geometry based on optimal ball path into the robot
- Mecanum wheels on edges to avoid ball jamming

Drivetrain

- 11.55 ft/s max speed
- Tank drive with pneumatic and omni wheels

General Specs

- Intakes up to 3 balls simultaneously
- Spindexer serializes 5 balls
- Hooded flywheel shooter shoots up to halfway across the field
- Climber hooks onto bar with two hooks
- Control Panel Mechanism uses horizontal wheel to contact Control Panel
- Able to traverse under the control panel

