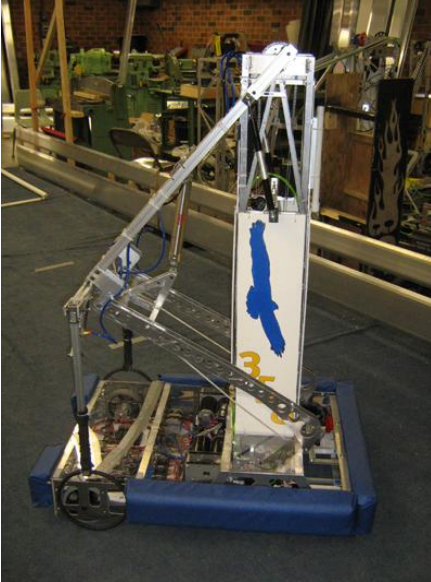


TEAM 358, Hauppauge Festo/Fonar Robotic Eagles



Arm:

- 🤖 Arm that allows the robot to carry the ball with an extreme tight grip via pneumatics.
- 🤖 Able to “kick” the ball over the rack.
- 🤖 Arm is installed with 2, 60 lbs gas shocks, van door motor, and a gearbox geared for high torque which allows great stability.
- 🤖 Robot is able to hurdle the ball ~100 inches (8 feet) from the rack or grab or place the ball.
- 🤖 Design of the arm allows us to pick the ball up on the run and never needs to use the

wall for pickup.

- 🤖 Powerful kicker able to launch the ball not only over the rack but kick the ball under the rack.

Drive Train:

- 🤖 Slicks installed on the front while Omni Wheels are installed in the back of the robot allowing the robot to turn efficiently with tank steering.
- 🤖 Two speed robot pneumatic shift, 4 CIM drive motors.

Autonomous:

- 🤖 Over 10 autonomous variations including where the robot is able to either lift the ball off the rack or knock the ball off with a high success rate. Uses IR to select trackball position.