



BLACKWATER ROBOTICS

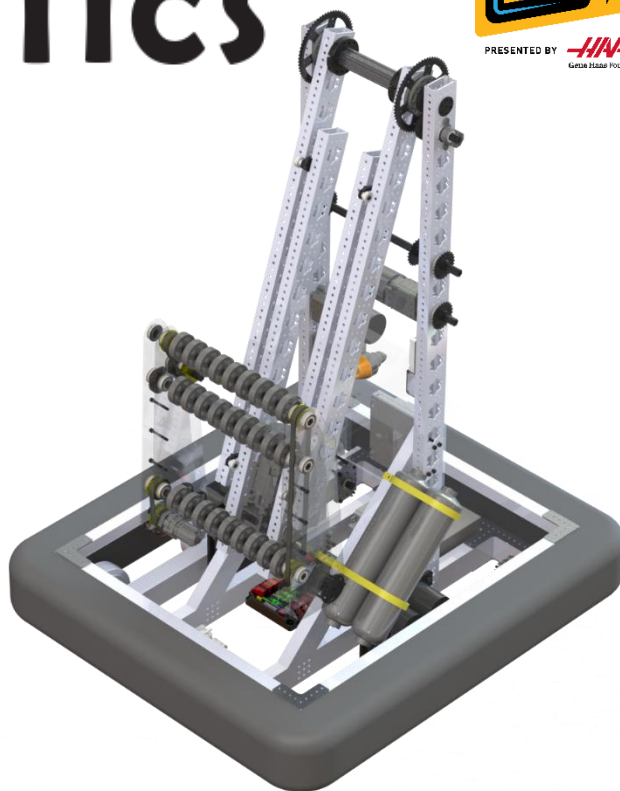


"Convoy" Quick Facts

Size: 28" long x 24" wide x 46" high
Weight: 108 lbs. (includes 17 lbs. ballast)
Drivetrain: 6-wheel West Coast Drive

Drivetrain

- 6-wheel West Coast Drive
- 5" Colson Wheels + Omnis
- Custom flipped 2x NEO gearboxes
 - 7.5:1 Total reduction
 - Estimated 15.5 ft/s top speed



Arm

- Rev Robotics MaxPattern Tube
- Thrifty Bot "elevator" slides
- 363:1 total reduction
 - Driven by 2x 125:1 NEOs on MaxPlanetary Gearboxes
 - Additional 2.9:1 chain reduction
- Rev Through Bore Encoder provides position control
- Arm extension powered by two cylinders
 - 6" for floor pickup, L2, and HP
 - 15" for L3 scoring

Intake

- Modified Everybot Intake
- Thrifty Bot 2" squish wheels
- NEO 550, 36:1 reduction
- Rotates on Rev Robotics 90 Degree Gearbox
 - Powered by 125:1 NEO
 - Rev Through Bore Encoder provides position control

Blackwater Robotics – FIRST Team 1610 | Franklin, VA | blackwaterrobotics.org

FRC1610 FRC1610 [blackwaterrobotics1610](https://www.instagram.com/blackwaterrobotics1610)