

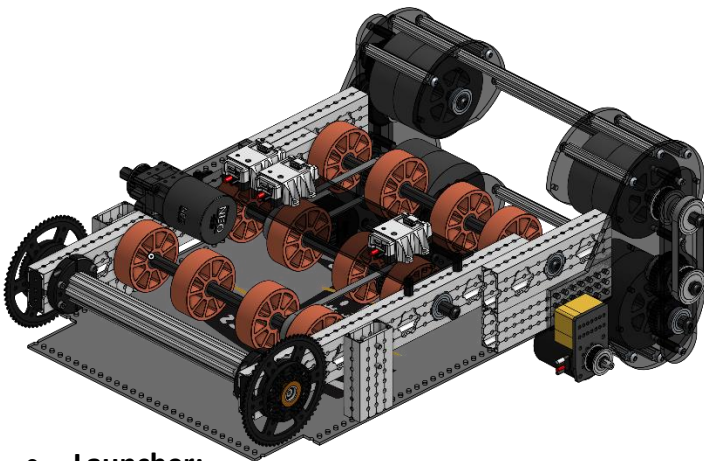


BLACKWATER ROBOTICS

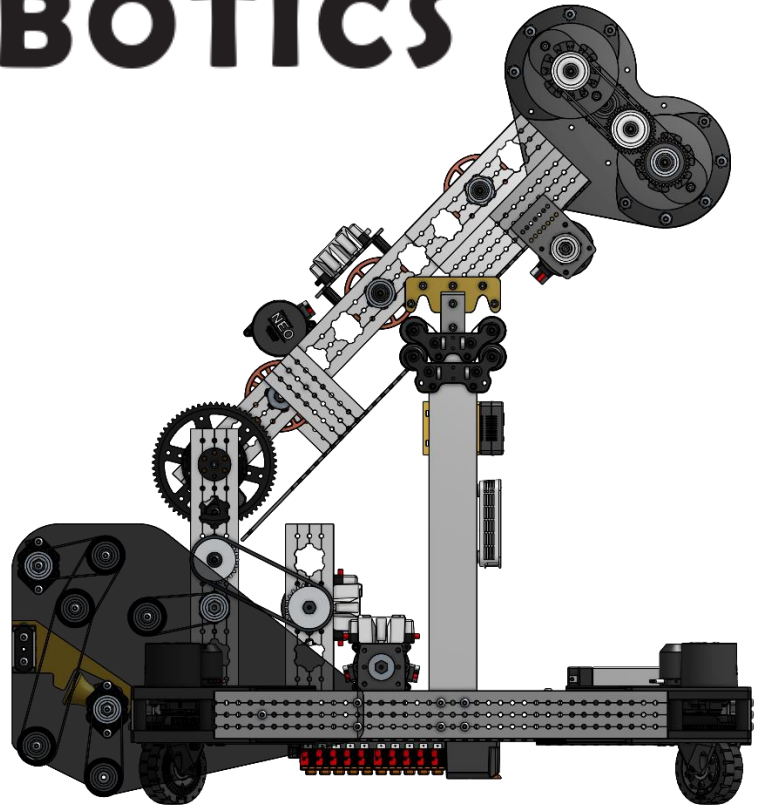
"Titanic" Quick Facts

Size: 31" long x 26.5" wide x 23" high
Weight: 100 lbs.
Drivetrain: MAXSwerve (3.75:1, 19.81 ft/sec)
Total Motors: 18

Arm – Launcher - Indexer



- **Launcher:**
 - 8x 4" 45A ThriftyBot Solid Urethane wheels
 - Powered by 2x NEO, 1:1
 - Split axles allow for independent left/right speed control
- **Arm:**
 - Built from Rev Robotics MAX Pattern Tube and pivots on MAXSpline Shaft
 - Powered by 2x 100:1 NEO MAXPlanetary Gearboxes
 - 2.46:1 chain reduction, 246:1 total
 - Integrated Indexer with Note detection sensor
 - Through-Bore Encoder position control
 - Available Positions: Subwoofer, Podium, Wing, Intake, Source, Amp



Intake

- Under-bumper intake inspired by team 95
- Five silicone covered polycarbonate rollers
- Powered by three 4:1 NEO 550 motors
- 3D printed centering rollers

Climber

- Dual telescoping climb arms
- Powered by 25:1 MAXPlanetary Gearboxes
- Dual-sided chain hooks
- Max height deployment for easier Harmony

CRESCENDOSM

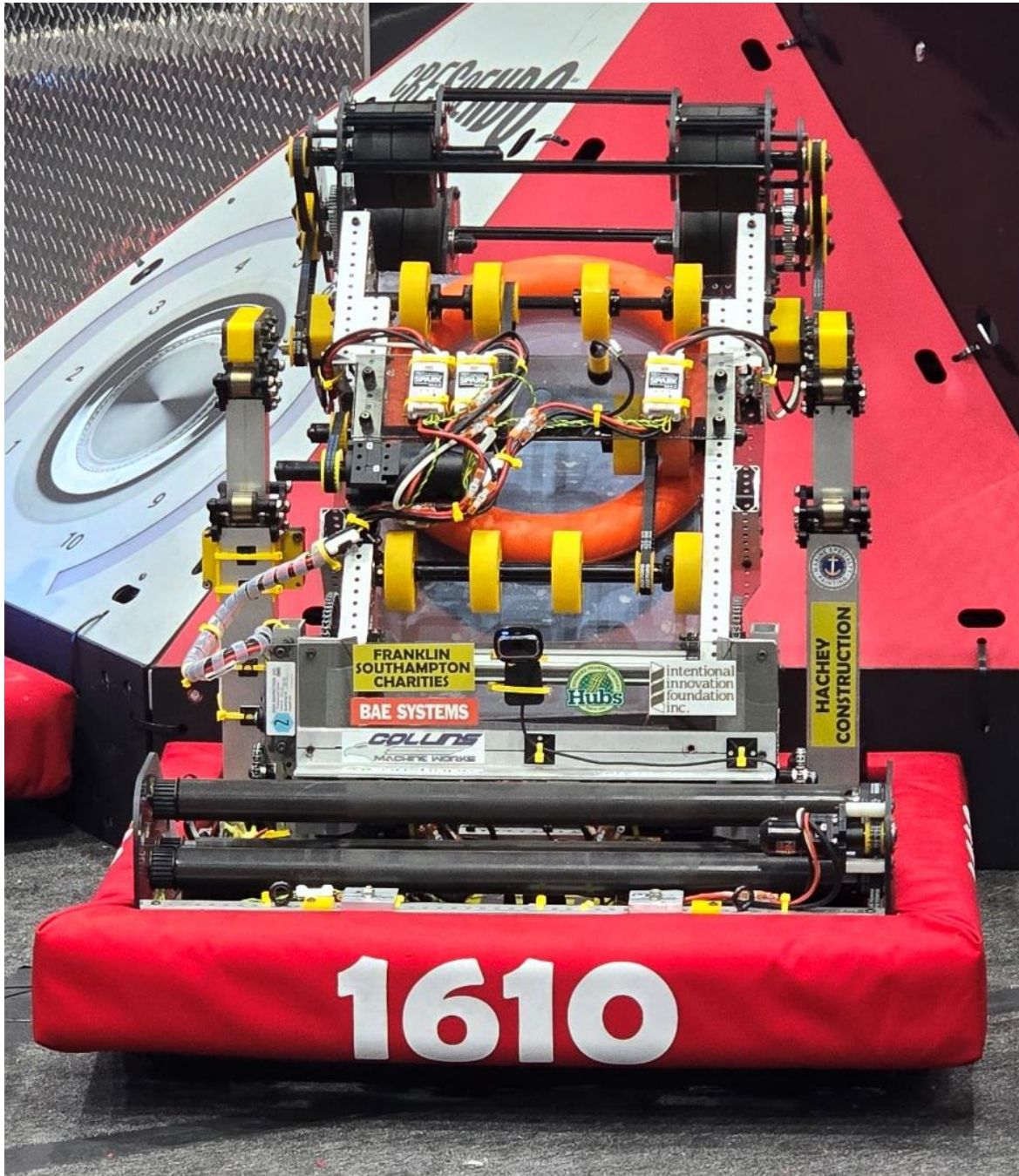
PRESENTED BY **HAAS**
Gene Haas Foundation

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

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