



# V3CTOR

V3CTOR is 1305's robot for the 2023 game, *Charged Up!* V3CTOR zooms across the field with direction and magnitude, scoring links and engaging with the Charge Station. V3CTOR collects game pieces with the **Enbridge Intake** and **Canadore Arm**, and zips across the field powered by the **GM Drivetrain**.

## Canadore Arm

- 2 Neo motors for arm control
- 1 Neo 550 for wrist control
- 9 presets



## Enbridge Intake

- Picks up Cones and Cubes
- 2 Falcon 500 motors
- 2 pneumatic pistons
- Colour sensor to detect game pieces
- Scores game pieces on most nodes
  - Cubes - low, medium, high
  - Cones - low, medium



## GM Drivetrain

- 8 wheel West Coast tank drive
- 6 Neo motors
  - 12.47:1 gear ratio
- Balances on Charge Station
- Size with bumpers
  - 28" wide
  - 36" long

## Programming

- 12 autonomous paths
- Triple modular redundancy voting system
- Auto balance
- Limelight camera for tracking game pieces and nodes
- LED feedback