

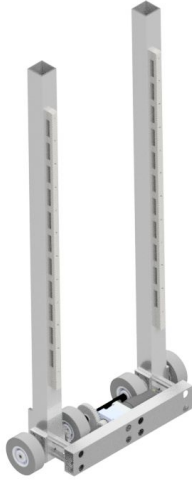
TECH HOUNDS

FRC
868



Climber (FOOT)

- Driven by rack and pinion
- Powered by custom shifting 2 neo gearbox (32.40 : 1)
- 775pro powers driving wheels



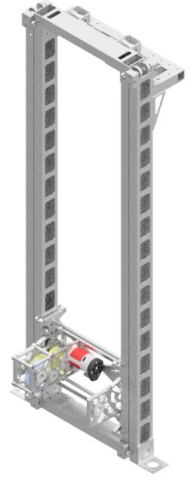
Climber (SLED RUNNERS)

- 1/4 in metal brace sandwiched between 1/4 polycarbonate
- Spring loaded with pneumatic release
- Once extended, sled runners are latched into place with a ratchet



Elevator

- 1x2 1/8th and 1/16th inch tubing
- Cascading 2 stage rigging reaching 85"
- Driven by shifting 2 neo custom gearbox (5.04:1)
- Custom carriage gearbox tilts intake

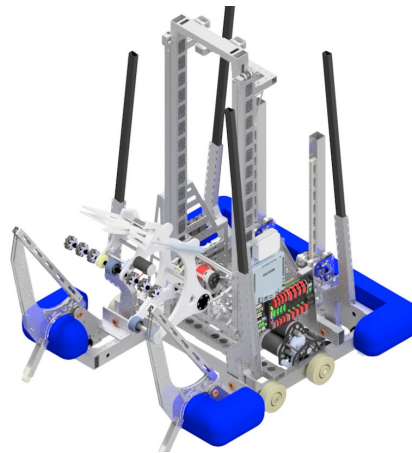


Software & Electronics

- Java Programming in VS Code
- Jevois Vision Targeting System and Camera for drivers
- PID Control for Tilting Carriage and Elevator

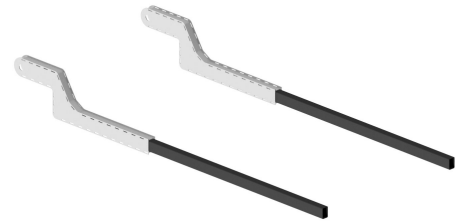
Cargo Intake (CLAW)

- 1/4 inch polycarbonate frame
- Mecanum roller for automatic centering
- powered by a custom gear train and bag motor



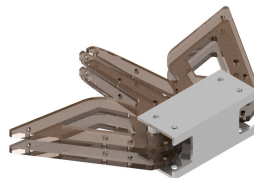
Forks

- Carbon fiber hockey sticks
- Pneumatic released
- Reinforced with aluminum plating



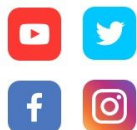
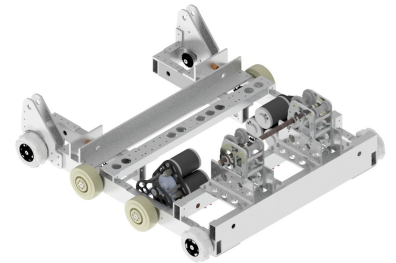
Hatch Intake (BEAK)

- 1/4 inch polycarbonate
- Driven by 2 pneumatics
- Can store a hatch in frame perimeter in tilted back position
- Profile optimized for a secure hold on hatch plates



Drive Train

- 30" x 25" chassis of 1/8 in 1x2
- West-coast drive
- 4 colson wheels in center 4 omnis in each corner
- 2x 3 neo gearboxes



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2019 Destination Deep Space
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