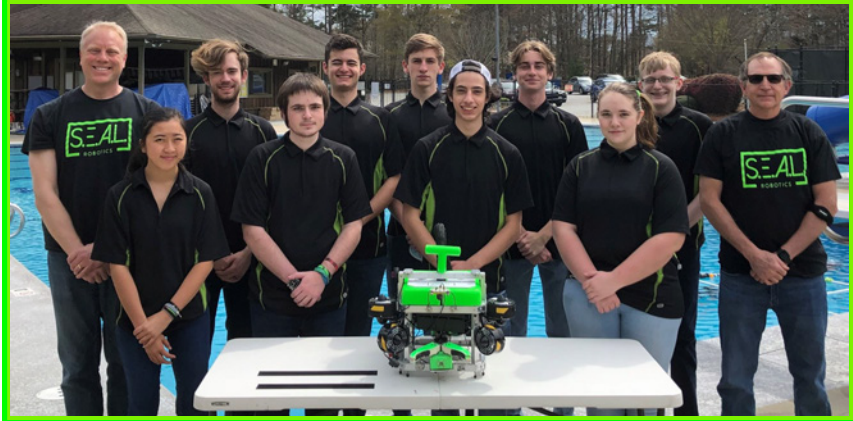
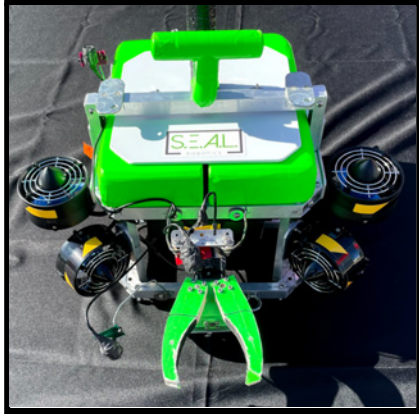


### Company Spec Sheet ROV - *Hammerhead*

**233 miles to MATE World Championship Competition in Johnson City, TN**



Team Member	Role	Year in MATE	Grade
Michael Scutari	co-C.E.O, Programmer, Tech Writer	Third	11
Jonathan Bacon	co-C.E.O., Project Manager, ROV Pilot	Third	11
Owen Voorhees	Lead Electrical Engineer, Programmer	Third	11
Ben Liebkemann	Lead Team Programmer	Fourth	11
Nathan Ruppel	Challenge Design Expert, Mechanical Engineer	Fourth	12
Quinn Welch	CAD Designer, Fabricator, Mechanical Engineer	Third	11
Li Yan Snyder	Marketing Director, Mechanical Engineer	Third	11
Phillip Szypulski	Video Expert, Electrical Engineer	Third	9
Caroline Ruppel	Tech Writer and Prop Specialist	Second	11
Clay Austin	Mechanical Engineer and Tech Writer	Second	11
Ned Voorhees, Walt Liebkemann, Kurt Ruppel, Robert Welch	Team Mentors	Ned, Walt, Kurt - Third Robert - Second	

***Total Cost for Building Hammerhead* ..... \$7848.00**  
***Total hours for Design, Build, and Testing of Hammerhead* ..... 3,291 hours**  
***Hammerhead's Dimensions* ..... H= (40.0cm) W= (48.3cm) L= (47.0cm) Weight = 12.4 kg**

**Safety and other Standout Features:**

- **Safety:** Shrouded thrusters, kill switch, and failsafe on software.
- **Dual Grippers (Front and Rear).** “Reliability First” design - all electronics individually waterproofed.
- **Stability control software** navigates to a target depth, or maintains a consistent depth.
- **Custom Graphical User Interface** showing all ROV systems.