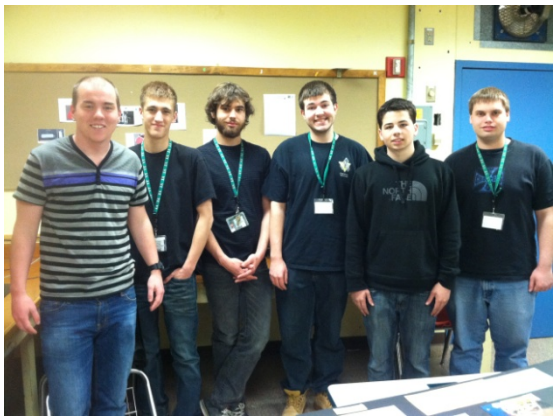
Greater New Bedford Voc-Tech: Engineering Technology

Company Specification Sheet

Company name: Mariner Engineering
School Name: Greater New Bedford Regional Vocational Technical High School
Program: Engineering Technology; Engineering Design and Development
State: Massachusetts, 2,962.16 kilometers away from the International Competition

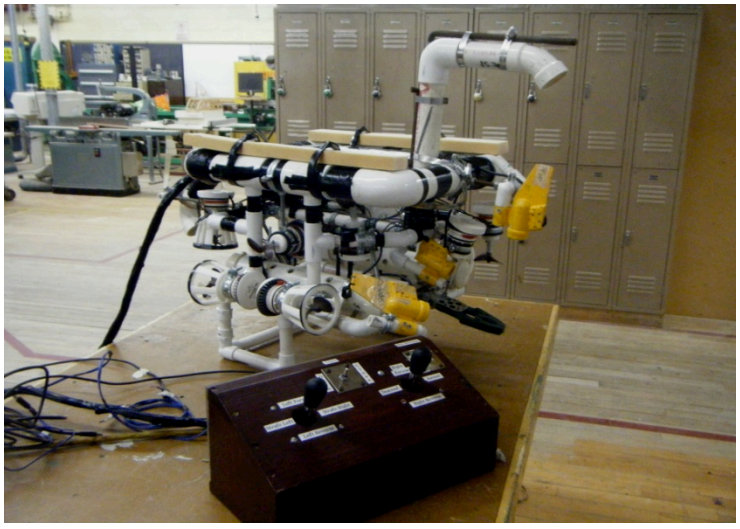
Team Members

Treg Dembitzki (CEO, Electro-Mechanical Engineer)
Gustin Froias (Government and Regulatory Affairs)
Jordan Vasconcellos (Testing and Operations Manager)
Alex Correia (Marketing and Design, Design Engineer)
Bryan Pasquarello (Research and Development Manager)
Nathan Morgado (CFO, Mechanical Engineer)



Participation History

Last year, as a team of six juniors, we competed in the MATE ROV competition for the first time. We were able to design and construct the vehicle but were unable to fully test before bringing it to the competition. This year, with weekly use of the pool at the local YMCA, we were able to frequently test and evaluate our ROV and its individual components. This gave our team the ability to work through the engineering design process multiple times to redesign, reconstruct and refine the vehicle and its specialized tools. Our company will be entering this competition with some experience, a great deal of determination and whole lot of excitement.



ROV Specifications

ROV Name: The Green Bean Machine
Cost: $973.09
Total Weight in air: 18.5kg (40.78 lbs)
Primary Material: polyvinyl chloride piping (PVC)
Dimensions (Frame): 50.8cm tall, 55.88cm long, and 43.18cm wide
Safety Features: Thruster mounts with propeller shrouds, 25 amp fuse, and a 3 amp fast break fuse for the temperature sensor

Special Features: Constructed with PVC pipe, sealed to prevent any change in buoyancy. High output thrusters with 70mm propellers, bilge pump driven manipulator with gear reduction, reliable SIA stabilization and deployment mechanism