

## Triton Robotics Company Spec Sheet

World MATE Competition 2024 Ranger Class

June 18<sup>th</sup>-22<sup>nd</sup> 2024

Company name: **Triton Robotics**  
School: Seattle Academy of Arts and Sciences, Seattle, Washington  
Distance travelled: ~4200km  
MATE history: Second year team. 6 members: 2 new; 4 returning from 2023.  
Grade range: All team members are in 9th grade.

Team Members (from left to right in photo):



- Max Wilken, Systems Design
- Robbie Miyano, Fabrication
- Thomas Gust, Co-Founder / CEO, Software Lead
- Tenzin Larkin, Co-Founder / CEO, Engineering Lead
- Miles Lipson, Lead Pilot
- Theo Lipson, Float Lead

ROV Name: **Scylla**  
Float Name: **Charybdis**  
Total Cost: \$7081.27 total  
(includes development costs and \$2927.49 in reused supplies)  
ROV Size: 0.74m (L) x 0.50m (W)  
x 0.40m (H)  
ROV Weight: 17.2 kg (mass); 168.6 N (weight)  
Float Size: 0.17 m (max diameter)  
x 0.96 m (length)  
Float Weight: 11.4 kg (mass); 111.7 N (weight)

Student hours: ~1308 student hours to design and build - multiple designs tried since October 2023

Safety features: 25A main fuse; in-frame and shrouded motors; strain relief on wires; emergency vent for pneumatics; protected moving parts; no sharp edges; float pressure release; safety protocols.

Special features: Robust, adaptable frame design with 6 motor vectored thrust; 2 cameras; 3 custom grippers including rotating gripper; ability to carry 5 items at same time

