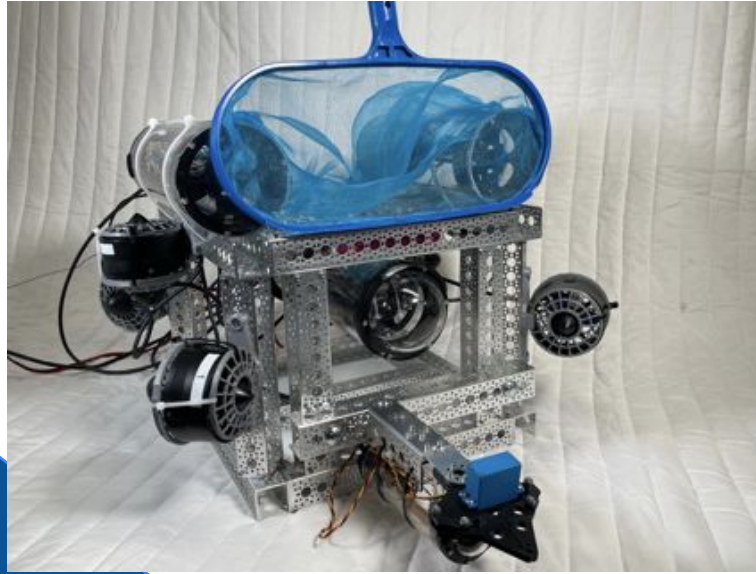


Hephaestus Robotics



Name: Talos
Weight: 13.6kg (133 N)
Dimensions (LxWxH): 73cm x 58cm x 60cm
Tether Length: 15m
ROV BOM Cost: \$3,448
Total Expenditures: \$6,452
Student Hours: ~400 hours

Safety Features: strain relief, neat wiring, 3D printed shrouds on both sides, 25A fuses, watertight compartments, valves for pressure testing, labels.

Special Features: Two on-board Raspberry Pi computers and cameras, on-board Ethernet switch, servo controlled manipulators, video & control signals over IP network, net for surface debris collection.



The Hephaestus Robotics team is sponsored by the X Academy, a non-profit based in Santa Cruz CA, that offers STEM enrichment programs to middle and high school students. Our team is made up of 9th through 11th graders. Seven of the ten team members have competed in MATE at the Scout level once or twice. Three team members are new to MATE. This is the first time competing at the RANGER level for all team members. The team is ~4100 km from the international competition.

Row 1: Om Shastri; Tim Sylvester, Mentor; Andrew Sylvester, Co-CEO
Row 2: Jordan Weiss-Penzias; Co-CEO, Konish Bhattacharya; Aden Sommerville
Row 3: Tim Madsen, Mentor; Nathan Madsen; Brian Carreno; Rinoa Oliver
Row 4: Saashin Subramaniam; Gabriel Orange; Parthesh Shastri, Mentor
Unless otherwise noted, all team members are Sr. Robotics Engineers and all team members worked on multiple, overlapping parts of the ROV.