HEPHAESTUS ROBOTICS



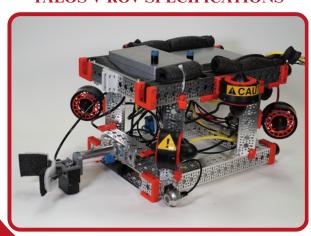
Left to Right: Blaise Benoit-Corey (COO) '25, Aditya Menon (Electrical) 27', Nathan Hofmann (VP of Engineering) '25, Sam Imahara (Electrical) '26, Sophia Casaletto (CEO) '26, Amber Williams (Float) '26, Julia Tick (Float) '28, Arthur Guihaire (Software) '25, Rowan Delander (Software and Pilot) '26, Kai Herbst (mentor), Ojas Shastri (Float) '26, Daphne Bingham (Tools) '26, Bennet Menzer (CTO) '25, Cole Williams (Software) '25, Matthew Hofmann (Float) '25, Zander Shulman '25 (Tools)

Company Name: Hephaestus Robotics Organization Name: X Academy Location: Santa Cruz, CA, USA

Distance traveled to Competition: 3,326 km

History: Fifth year competing in MATE. The team first competed in 2020-21 and placed 7th in the Telepresence Category at the World Championship. Competed in 2021-22 and placed 3rd regionally. Competed in 2022-23 and placed 5th at the world championship in Longmont, CO. Competed in 2023-24 and placed 3rd at the world championship in Kingsport, Tennessee.

TALOS V ROV SPECIFICATIONS



ROV Name: Talos V Total Cost: \$7,474 Weight: 12.1 kg

Dimensions (LxWxH): 50 cm x 53 cm x 32 cm

Tether Length: 15 m **Student Hours:** 900 hrs

Safety Features: Tether strain relief, neat wiring, 3D printed shrouds on thrusters, 25A fuses, watertight compartments, valves for pressure testing, wire labels, pressure and leak sensors, 3D printed bumpers on sharp edges.

Special Features: 360 camera, computer vision software to measure objects, Robot Operating System (ROS), custom PCBs, on-board Ethernet switch, two on-board Raspberry Pi computers, video & control signals over IP network.