



HHM ROV - Spec Sheet

Holy Heart of Mary High School | St. John's, NL, Canada

NEPTUNE

The Newfoundland Exploration and Probing Technology for Underwater Navigation and Evaluation



Figure 1: NEPTUNE.
(Photo: Lucas Lownds, 2024)

Cost: \$3007.28



Figure 2: TRIDENT.
(Photo: Daniel Cheng, 2024)

TRIDENT

Vertical Profiling Float

Figure 3: HHM ROV Team Photo.
(Photo: Cole Murphy, 2024)



Back Row, Left to Right: Evan F., Lucas L., Benjamin E., Frank C., Kenneth L., Daniel C., Peyton C., Nikolas B., Peter T.
Front Row, Left to Right: Allison H., Priya P., Waffa Z., Sophia Z., Natalie M., Prajwala C.

Size:

57.0 cm x 28.5 cm x 42.5 cm

Weight:

12.1 kg

Team Hours:

136 hours

Safety Features:

Some safety features of NEPTUNE include leak sensors that protect electronics in case of potential leaks, proper strain relief & tether management to protect cables, a 25 amp fuse to prevent damage or fires due to excessive current, and shrouded thrusters to prevent team injuries, and ecosystem damage.

Special Features:

NEPTUNE has a pneumatic manipulator designed to fulfill mission objectives, two external cameras to maximize our field of view, a more accessible enclosure for easier access to electronics, and a temperature sensor to monitor our surroundings.

Distance Travelled:

3994 km
from St. John's, NL

History of Participation:

This is our 2nd year competing in MATE ROV competitions, and first at Worlds!

Members:

Allison Hutchings**
Team Lead - Grade 12

Cole Murphy
Teacher Mentor

Lucas Lownds*

Marketing Lead - Grade 11

Prajwala Chedella**

Software Lead - Grade 12

Benjamin Evans**

Design & Fabrication Lead - Grade 11

Evan Fang*

Marketing - Grade 11

Peyton Cashin*

Software - Grade 11

Nikolas Brits*

Design & Fabrication - Grade 10

Priya Purohit**

Marketing - Grade 11

Frank Chen*

Software - Grade 11

Peter Trinh **

Design & Fabrication - Grade 12

Natalie Mitchell*

Graphic Design Lead - Grade 11

Kenneth Le**

Software - Grade 11

Sophia Zhang*

Design & Fabrication - Grade 10

Daniel Cheng*

Graphic Design - Grade 11

Waffa Zahralyn*

Safety Lead - Grade 11

* : New Members

** : Returning Members