

Specs Sheet of Narwhal

Company Name: Narwhal







School Name: Keang Peng School (Secondary Section)

Home State: AVENIDA HIPÓDROMO, NO.389
KEANG PENG SCHOOL(SECONDARY SECTION)
Macau 00853

Distance Required Traveling to Orlando: 8743 miles

History of Company: We has participated in a regional event but this is the second trip to international completion

Members:

					
Lou Weng Keong Prime Mechanical Engineer & CEO Form 6 student	Cheong Chi Kit Electronic Engineer & CTO Form 5 student	Io, Hong Wai Vice mechanical Engineer Form 2 student	Mok, Kuai Un Graphic designer & Instruments director Form 2 student	Lou, Cheng Nong Graphic designer & Chief pilot Form 2 student	Kan, Hok Tim Mechanical trainee & CFO Form 2 student

ROV Name: Narwhal

Total Cost of Construction: HK\$ 58,145

Primary Materials Used in Construction: Aluminum and acrylic sheets

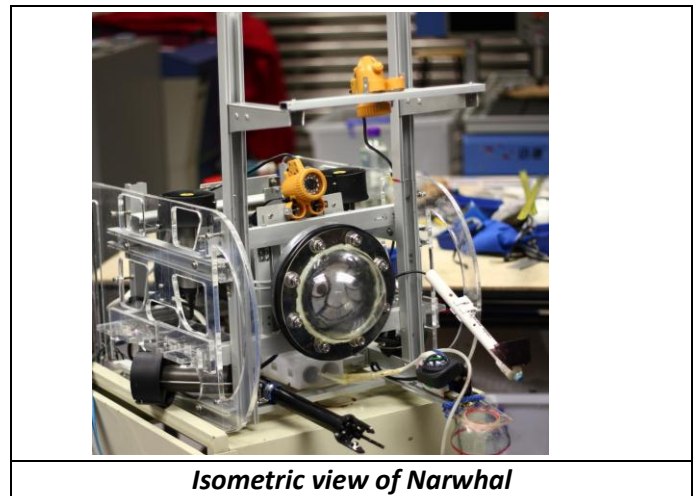
Approximate Dimensions: 0.6m X 0.6m X 0.5m (Width X Depth X Height)

Total weight: 20 Kg

Maximum Electric Power Consumed: 189W

Maximum Propelling Velocity: 26cm/s

Maximum Turning Velocity: 1.58rad/s



Safety features:

1. Low voltage operated control panel and high voltage isolated design;
2. Double waterproofing technique (water-resistance paint and O-rings) & Fuses for precaution of short circuit;
3. Ducts for each thruster to avoid getting entangled in seaweeds or other underwater obstacles.

Special features:

1. Versatile movements gained, including moving forward and backward, making turns as well as lateral movements;
2. Ease-to-use and moving velocity control available because we adapt using joystick as the main user control interface;
3. Portable manipulator which can be replace with different kinds of grippers and devices;
4. Ball-type compass whose pointer won't get stuck because it isn't horizontal;
5. Equipped a measuring tape with a "easily attach hook" at the front and the metal-detecting switch and sample sucker;
6. There is a platform at the bottom of Narwhal to mount different kinds of devices.