

Company name: Kwok Tak Seng Inc. (Hong Kong)

School: Kwok Tak Seng Catholic Secondary School

Country: Hong Kong (Shatin)

Distance travelled: 13350KM



Company History: Kwok Tak Seng Inc. (Hong Kong) had 14 years of experience in participating in MATE ROV competition since 2006. We are always the top five of the Hong Kong regional ROV competition. We had been qualified to the international competition in 2009, 2010, 2017 and this year. Our CEO, Mr. Wong King Ho joined the international ROV competition in 2017. Seven members of our team were returning to the contest for the second time while others are new.

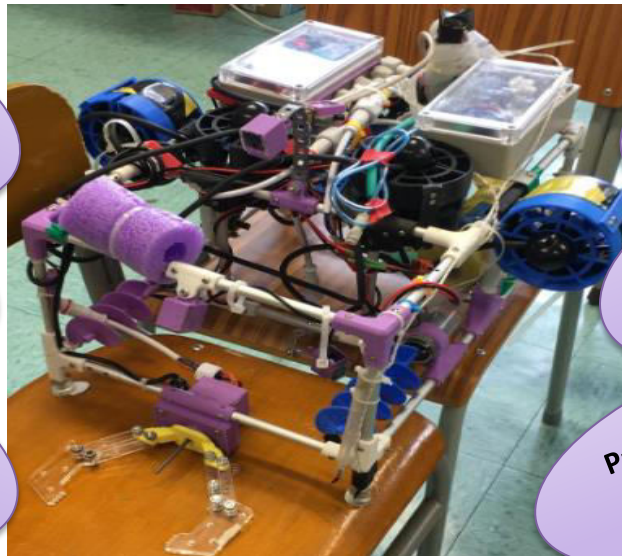


Name	Post	Grade
Wong King Ho	Chief Executive Officer	12
Tam Ching Yuen	Chief Executive Officer	11
Kwok Tsz Him	Rov Designer	10
Lo Wai Nam	Micro-ROV designer	9
Pong Hei Chung	Safety Manager	12
Ng Hoi Ming	Mechanical Engineer	12
DU CHUN HIN	Financial officer	12
Lai Tsz Ting	Software Engineer	12
Chan Hong Sui	Software Engineer	12
Fung Ching Yiu	Mechanical Engineer	9
Sit Yan Tung	3D Graphics Designer	9

ROV Name:
KTS-DOLPHIN

Total cost:
HK\$16,500

**Total Hours to
design and build:**
1350 hours



Weights:
6.5kg

Dimensions:
0.55m x 0.5m x
0.28m

Primary materials:
Aluminum tube,
3D PLA filaments

SPECIAL FEATURES:

- High mobility with high speed brushless motors
- Direct control of the ROV without delay by thruster command with ESC.
- Water-proofed multiple high resolution cameras provide different views of the environment.
- Micro-ROV with camera for inspection inside the drain
- A rotatable payload to hold and grab firmly for transporting and releasing any object. (Trout fry transporter, trash rack screen, drain pipe, water sample)
- Metal detector with special tools for dropping indicators of metal cannon shell / non-metal debris
- Automatic shape detection system
- Releasing Grout device and measuring tools

SAFETY FEATURES:

- 25 amp fuse in line within 30 cm from power supply
- Key switch for whole ROV system
- Voltage and current display
- Tether covered in abrasion proof wrap
- Strain reliefs are used on cables
- Thruster with fabricated shields
- No sharp edges, components are firmly attached
- Safety partitions on all thrusters
- Safety warnings on moving parts
- Connectors are water proofed by Epoxy