



Company name:	Kwok Tak Seng Inc.	
School:	Kwok Tak Seng Catholic Secondary School	
Team Name and No.:	KTS-WaterLoong	
Country:	Hong Kong SAR, China	
Distance traveled:	13267KM	
Company History:	Kwok Tak Seng Inc. (Hong Kong) had 19 years of experience in participating in MATE ROV competition since 2006. We are always in the top five of the Hong Kong regional ROV competition. We have been qualified to the international competition in 2009, 2010, 2017 and 2019. CHEUNG KAREL, CHEUNG MAN HO, LEE JAIVEN joined the ROV competition in 2022. All other members join the competition for the first time this year.	


	Name	Post	Grade	New/Return
	CHEUNG KAREL	Pilot, Chief Executive Officer, Chief ROV Designer	10	RETURN
	CHEUNG MAN HO	ROV Designer, Safety manager, 3D-Graphic Designer	10	RETURN
	LEUNG TO	Co-pilot, Software engineer	10	NEW
	LEUNG SHEK MAN	Chief Secretary, Software engineer assistant	10	NEW
	LAW PAK CHUN	Financial Officer	10	NEW
	LEE JAIVEN	Mechanical Engineer	10	RETURN
	DAI ZHOUXIAN	Programmer	10	NEW

KTS-WaterLoong

ROV Name:
KTS-WaterLoong

Total cost:
US\$2450

Total Hours to design and build:
180 hours



Weights:
11kg

Dimensions:
0.6m x 0.5m x 0.3m

Primary materials:
Acyclic tube, Plastic, 3D filaments

<p style="text-align: center;"><u>SPECIAL FEATURES:</u></p> <ul style="list-style-type: none"> ● High mobility with high speed brushless motors ● Direct control of the ROV without delay by thruster command and Arduino with ESC. ● Water-proofed multiple high resolution cameras provide different views of the environment. ● A rotatable payload to hold and grab firmly for transporting and releasing any object. (replacement of cable, deploy components, remove objects) ● Specially designed tools for different missions. 	<p style="text-align: center;"><u>SAFETY FEATURES:</u></p> <ul style="list-style-type: none"> ● 25 amp fuse in line within 30 cm from power supply ● Voltage and current display ● Tether covered in abrasion proof wrap ● Strain reliefs are used on cables ● Thruster with fabricated shields ● Components are firmly attached ● Safety warnings on moving parts ● Connectors are water proofed by Epoxy
--	---