

SPEC SHEET
Vortex Titans
Alexandria, Egypt
1st year participating
Alexandria University,
Faculty of Engineering.



VORTEX TITANS



MATE



Distance away from Seattle is about 10,817Km

ROV specs:

Name: Sturgeon

Total mass in air: 16.83kg

Overall dimension: fits in a 53 cm diameter circle

Primary materials: Polyethylene, PLA, PA type 6 and acrylic

Total cost of ROV: 2257\$

Total ROV Design Person-Hours: at least 1300 hours per person

Safety feature:

- No sharp edges and exposed bolt threads are secured with cap nuts
- Safety labels are used properly
- Fuses are used to prevent overcurrent
- Water detection sensor is used to detect leakage
- Thruster guards having a mesh size that meets IP-20 standards

Special feature:

- Four thrusters that provide all necessary degrees of freedom
- Compact size and lightweight
- Pneumatically actuated multifunctional manipulator
- Acrylic dome to minimize drag and provide a wider view for the cameras
- Sensors including a pressure sensor and a water leakage sensor

Team members:

Belal Aboelkheir: CEO | year 2

Marwan Taha: CTO (mechanical) | year 3

Ziad Abdalkarim: CTO (electrical) | year 2

Mahmoud Saeed: CFO | year 2

Abdallah Elmaradny: Electrical Team | year 2

Abdulaziz Yousry: Mechanical Team | year 3

Ahmed Medhat: Mechanical Team | year 2

Fareda Hossam: Electrical Team | Grade 11

Karim El-sayed: Mechanical Team | year 2

Lina Nassar: Mechanical Team | year 2

Mai Hesham: Electrical Team | year 3

Mohamed Behiry: Mechanical Team | year 2

Mohamed Waly: Mechanical Team | year 3

Omar Elshanawany: Electrical Team | year 2

Omar Hosny: Electrical Team | year 2



Mentors:

**Abdelrahman Elmaradni, Muhammed Tarek, Amr Essam
Mahmoud Assem, Abdelrahman Hussein, Abdelrahman
Abukleila, Ibrahim Yousry**



VORTEX