Spec sheet
Company: Matrix
City: Alexandria, Egypt
Year of Participation: 1st Year Participating
Organization: Vortex Co.
Distance travelled to the competition: 11803 km
Range of grade: From Junior4 to Senior3

Company members
- Omar Elkobrosy | New | Software Leader|Co-pilot
- Youssef Taha | Return|Mechanical engineer|CEO| Pilot
- Rittaj Hemida | Return | Mechanical Engineer
- Lama Amr | Return | Mechanical Engineer
- Yassine mohamed | New | Mechanical Engineer
- Adam Ahmed | New | Mechanical Engineer
- Mariem Amr | New | Mechanical Engineer
- Hana Mohamed Aly | Return | Electrical Engineer
- Ahmed Rady | New | Software Engineer
- Yara Saad | New | Software Engineer
- Rodina Mohamed | New | Software Engineer
- Haneen Hassan | New | Electrical Engineer
- Aya El-Sayed | Return | Electrical Engineer
- Omar Tabouna | Return | Software Engineer
- Saif Tabouna | Return | Software Engineer
- Adham Mahmoud | Return | Electrical Leader
- Anas Hany | New | Mechanical Engineer
- Asmaa Bahaa | Mentor
- Lina Nassar | Mentor
- Muhammed Salem | Mentor

Special Features
- Six thrusters that provide all necessary degrees of freedom
- Compact Size and light weight
- Pneumatically actuated gripper
- Three cameras for the vision system
- Servo motor for tilting the camera

Safety Features
- No sharp edges.
- Fuses are used for the main ROV
- Pressure relief valve is used.
- Water detection sensor to detect leakage
- All thrusters are shrouded with meshes that meet IP20 standard
- Pressure of the pneumatic system is regulated below 2 bars

ROV Specs
- Name: Square
- Total Mass in Air: 14.5 kg
- Overall Dimensions: fits inside a 53.5 cm diameter circle.
- Primary Materials: PMMA, PA type 6, PLA and Polyethylene
- Total ROV Cost: $3097
- Total ROV Design Person-Hours: at least 240 hours per person