



GEARS - Project PHENIX

2012 MATE Competition

Spec. Sheet



GEARS Inc.

116 Industrial Park Dr., Accident MD 21520

Our rookie company consists of 10 students from 4 different schools. We also enjoy mentoring the GEARs Seaperch Camp. We hope to run our ROV (Phenix) in nearby lakes after the competition is over.



Although 2012 is our first year doing the MATE ROV competition, we all belong to other land-based robotics teams.

ROV Specs

Cost: \$1,581

Size: 68.6cm (L) x 74.8cm (W) x 31.8cm (H)

Weight: 7.8 Kg

Materials: PVC, ABS Plastic, 3D Printed parts

Safety Features:

- 25A Marine **Circuit Breaker**
- Magnetically attached props
- Leak detector display and alarm
- Prop guards and warning labels

Special Features:

- 3D simulator for pilot/mission training
- Detachable tether
- Ethernet based communications
- LabVIEW Dual-Screen console
- Custom 3D Printed parts
- Custom electronics board & enclosure
- Pressure activated oil Sampler

Coach: - Phil Malone

Team Members and Positions:

- **CEO:** Levi Lantz (11th)
- **Systems Lead:** Aaron Lantz (12th)
- **Payloads:** Zach Frick (11th)
- **Tools:** Kevin Haenftling (12th)
- **ROV:** Alex Miske (10th)
- **Housings:** Brandon Tichnell (11th)
- **Power:** Scott Brenneman (9th)
- **Tether:** Kevin Maust (10th)
- **Software Lead:** Kendrick Bender (12th)
- **Controls:** Sonny Dornburg (9th)

