



Miracle Workerz



**TO: FIRST ROBOTICS COMPETITION COMPETITORS**  
**FROM: TEAM #365, MOE & The MIRACLE WORKERZ**

**ROBOT DESCRIPTION (CoMOEtion – our 2012 Miracle Of Engineering)**

*CoMOEtion is a bright green and black robot designed to collect basketballs from the floor or bridge and score them in hoops using our turreted shooter. We have a low CG and wide-body to easily balance on the co-opertition or alliance bridge at the end of the match.*



**FEATURES**

1. 8-wheel, highly maneuverable drive using 4 CIM motors on Supershifters for high speed driving and high torque pushing/climbing
2. Wide-bot chassis & low center of gravity with horizontal and vertical gyros for precision maneuvers
3. Robust design with 3 ball holding capability and ability to easily traverse the barrier
4. Two-position, 270-degree turreted shooter - each pair of shooter wheels independently speed controlled to optimize shooting from key or fender. Can apply top spin or backspin depending on the location on the field. Shooter angle can be set for long distance or up-close scoring.
5. Camera aligned shooter for automated alignment during hybrid and tele-operated modes.
6. Multi-purpose extendable ball collector/bridge manipulator capable of clearing balls from corners/under the bridge, lowering & raising bridge, and collecting balls rolling off of the bridge.
7. Multiple autonomous modes for shooting, retrieving balls from both bridges, etc.

**HOW WE CAN ENHANCE YOUR STRATEGY**

- Have multiple hybrid modes with delays to shoot, lower bridge, collect balls, or combo actions.
- Have quick ball collecting through shooting process to maximize hoop points.
- Have stable wide-body to enable two- or three-bot balancing on the bridge.
- Have a well-trained scouting team to bring you up-to-the-minute match info
- Have great experience in qualification & elimination round strategy

**CONTACT INFORMATION**

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