Requirements List

* 2016 FTC Robot

horizontal line **Version:** update Apr 20, 2017

**Date:** Sep 15, 2016

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| --- | --- | --- | --- |
| **Physical Systems – Characteristics, Capabilities, Requirements, Needs & other Design Guidance** | **Required?** | **Status** | **Spec Achieved** |
| Push Beacons | Yes | Good | 1 Beacon 2 s |
| Side by side beacon pushers | Nice to have | To be assm’d | 1 in place |
| Shoots particles | Yes | Okay | 9 shots 120 s |
| Shoots multiple particles (reloads) | Yes | Okay | 3 balls, 8 s |
| Maneuverable – uses Mecanum Wheels | Nice to have | Good | Full side and front movement.  Full field movement to be tested. |
| Push other robots | Nice to have | Conflicts with rules & wheel type. Not done. | Not Used |
| Lifts Cap Ball | Yes | Lift off floor TBD. | To be tested. |
| Places Cap Ball on C.Vortex | Nice to Have | Not done. |  |

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| **Autonomous – Characteristics, Capabilities, Requirements, Needs & other Design Guidance** | **Required?** | **Status** | **Spec Achieved** |
| Push Beacons | Yes | InProg | 1 Beacon 30s |
| Shoot Particles | Yes | Okay | 1 particle scored |
| Shoots multiple particles (reloads) | Yes | Good | 2 shots 5 s |
| Removes Cap Ball | Nice to have | Good | Cap ball 5 s |
| Parks on center vortex | Nice to have | Good | Parked 1 or 2 wheels |

**Physical Characteristics Notes**

***Two Beacon Pushers:***

* 2nd pusher built. To be assembled, tested and programmed. Needed to aid Autonomous, so don’t have to move sideways or hit beacon twice to claim.

***Shoot Particles:***

* Accuracy could be improved

***Reload Particles:***

* Sweeper geared version works nicely
* Some jamming in gravity feed to reloader noted – to be checked.

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| **Development:** | Chandler, Engineering | **Date:** |  |
| **Customer – Tm Leadership:** | G. Edward | **Date:** |  |