## Appendix C: Target Catalog

| Metric \# | Metric | Target |
| :---: | :---: | :---: |
| 1 | Regulate Flow | 0.5 second start/stop button reaction time |
| 2 | Mix Fluids | Dispense red and blue to get purple |
| 3 | Stabilize the Flow | Have a Reynolds number less than 2300 |
| 4 | Secure the Bottles | 4-750 mL bottles |
| 5 | Hold Mixers | Having 2 containers with 1 Liter of storage capacity |
| 6 | Withstand Handling | Machine will travel in a vehicle 1 mile and then be tested again upon arrival |
| 7 | Display Machine Information/ Status | Displays if slot is empty of filled with a particular liquid |
| 8 | Check Initial Conditions | Machine will have drinks with selected liquids programmed into the menu. |
| 9 | Convert Order to Mechanical Process | 1 second |
| 10 | Store Menu Options | at least 20 drinks |
| 11 | Compact Size | $12^{\prime \prime} \times 18^{\prime \prime} \times 16^{\prime \prime}$ |
| 12 | Universal Bottle Fitting | Able to hold the 12 most popular brands of liquor in the U.S. |
| 13 | Operation Time | Drink will be made within 20 seconds or less |

Team 519

