1. **Revision Log**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Revision Log | | | | | |
| Revision Level | Revision Date | Section | Description | | Revised By |
| REL | 05112016 | ---- | Initial Release | | TC |
| A | 3/20/19 |  | Mass update, complete re-write to standard | | NT |
| B | 1/3/23 | 5.1.1 | Added 2 new preferred brands | | N. Taylor |
| C | 12/1/2023 | Header | Replaced GHSP logo with newer version | | BB |
|  |  |  |  | |  |
|  |  |  |  | |  |
|  |  |  |  | |  |
|  |  |  |  | |  |
|  |  |  |  | |  |
| Approval: | | CN: RS | | MX: AB | |
| US: JA | | Other (as req’d): | |

1. **Purpose:** 
   1. To define the global standard for the use of Electric Actuators within GHSP manufacturing facilities.
2. **Scope:** 
   1. This global standard applies to all GHSP manufacturing facilities.
3. **Definitions:** N/A
4. **References:**
   1. CP-WI-MFG-X301 Global Standard Production Equipment Safety, Ergonomic, and Delivery Checklist
   2. CP-WI-MFG-X334 Global Standard Strain Gauge (PCB applications only)
5. **Method:**
   1. **Electric Actuators Selection**
      1. Preferred Brands

*Selection outside the preferred brand requires approval by the Advanced Process Engineer and Global Standards Team*

* Allen-Bradley Kinetix Servo Motors
* Tolomatic Actuators
* IAI
* Janome Industrial Equipment
* Parker
* SMC Electric Actuators
* FESTO Electric Actuators
* Applied Motion Products
* Kollmorgen
  + 1. Actuator Selection and Sizing
* Provide Move Profile to OEM for recommended sizing
* Establish Move Profile for each application
  + Required resolution
  + Move distance
  + Move time
  + Max speed
    - Recommended working speed should be 50-65% of the total max speed
  + Dwell time after moving
  + Total load
  + Total force
    - Recommended working force should be 50-65% of the total force
  + Total stroke length
    - Recommended working stoke length should be 50-65% of the total stroke length
  + Cycles per minute
  + Duty/Life Cycle
    - Targeting a 20-year machine run expectancy with a Performance Level d
    - Application to be designed to meet vendors total service life requirement (i.e. no axial or shock loading)
    1. Actuator Communication
* EtherNet/IP
  + 1. Actuator Programming
* When able, programing should be thru RSLOGIX

1. **Records:** N/A