1. **Revision Log**

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| 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 |
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| 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