1. **Revision Log**

|  |
| --- |
| Revision Log |
| Revision Level | Revision Date | Section | Description | Revised By |
| REL | 5-18-2020 | ---- | Initial Release | TPC |
| A | 12/1/23 | Header | Replaced GHSP logo with newer version | B. Balok |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Approval: | CN: RS,FS | MX: JH |
| US: JA | Other (as req’d): DRW |

1. **Purpose:**
	1. To define the global standard for the use of Cleaning Methods for inprocess product cleaning and air filtration/extraxtion.
2. **Scope:**
	1. This global standard applies to all GHSP manufacturing facilities.
3. **Definitions:**
	1. **Part Cleaning**
		1. Ionized Air
		2. CO2/Blown Ion
		3. Plasma
		4. Filtration
4. **References:**
	1. CP-WI-MFG-X301 Global Standard Production Equipment Safety, Ergonomic, and Delivery Checklist
	2. CP-WI-MFG-X327-Global Standard Assembly Equipment Manual
	3. Job Aids (Operating Standards 🡪 Job Aids 🡪8.5-Job-Aids-prod-service 🡪 Global Standards)
	4. ISO 16232-10 Cleanliness Code Test “E”
5. **Method:**
	1. **Cleaning Equipment**
		1. Preferred Brands

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

* CO2 Cleaning
	+ Cool Clean CO2
	+ CleanLogix
* Plasma treating/Blown Ion
	+ Plasmatreat
	+ Enercon Industries Corperation
		- Start Up best practice
			* Gap nozzle to surface 3/8” +/- ¼”
			* Speed 50fpm or faster
* Ionized Air Knife
	+ Nex Flow
* Air Filtration/Extraction
	+ Bofa - Fumes
	+ Purex – Laser dust
		1. PLC Communication

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

* EtherNet/IP
* Serial
* Discrete I/O
	1. **Verification**
		1. Tin foil Coverage verification (example 6.1.1-6.1.2)
		2. ISO test Partical extraction
		3. Gravimetric
		4. Filtrex partical counter
		5. Dyne Pen
		6. Suface Analyzer
			1. Kruss (brand)
	2. **Audible Alert**
1. **Records:**
	1. **Tin foil test for CO2 cleaning coverage. (save in Sharepoint program file: Documents/Manufacturing/Advanced Procesing/Deliverable)**
		1. **Poor**
			1. 
		2. **Good**
			1. 