

System Assessment Cover Sheet
-
g Processing at this Facility:
Process Table G: N/A
Dip-Spin & Zinc Flake
Process Table H: N/A
Autodeposition
, acceptance
Process Table I: N/A
Cure
Process Table J: N/A
Anodizing and Hard Coat Anodizing
Process Table K:
Equipment
Phone:
260-925-0623 x212
260-925-0623 x 214
Phone:
260-925-0623 x 212

CQI-12

Special Process: Coating System Assessment Version 3, Issued 7/2020

AIAG	)
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## Section 1 - Management Responsibility & Quality Planning

1.1 There shall be a dedicated and qualified surface finishing person on site.

- To ensure readily available expertise, there shall be a dedicated and qualified surface finishing person on site.
- This individual shall be a full-time employee and the position shall be reflected in the organization chart.
- A job description shall exist identifying the qualifications for the position including coating and surface finishing knowledge.
- The qualifications shall include a minimum of 5 years experience in surface finishing operation or a combination of a minimum of 5 years of relevant formal education and surface finishing experience.

Guidance	Objective Evidence	Conforming Nonconforming NA
What is this person's title?	Production Supervisor and Quality Manager and/or Plant manager	conforming
Is this position reflected in the organizational chart?	yes, form 100	conforming
Is there a documented job description listing all the required qualifications and responsibilities of this position?	yes, Job 108	conforming
Describe in detail this person's educational background and practical experience.	on-the-job and tech training with chemical mfg	conforming
How many years of process experience at a coating facility does this person have?	5+ years	conforming
Is this individual a full-time employee at the location being audited?	yes - all full time	conforming

#### Comments:

## Section 1 - Management Responsibility & Quality Planning

1.2 The facility shall perform advanced quality planning.

The organization shall incorporate a documented advanced product quality planning process.

- A feasibility study shall be performed and internally approved for each new part or process. Similar parts can be grouped into part families for this effort as defined by the organization.
- After the part approval process is approved by the customer, no process changes are allowed unless approved by the customer.
- The organization shall contact the customer when clarification of process changes is required. This clarification of process changes shall be documented.

Guidance	Objective Evidence	Conforming Nonconforming NA
Does the facility use a documented advanced quality planning process?	no - Not required under ISO 9001:2015	N/A
	yes part feasibility completed prior to processing, Need for feasibility ID'ed during quoteing process.	conforming
What is the procedure for changing the process after PPAP?	PRO -101	conforming

#### Comments:

#### Section 1 - Management Responsibility & Quality Planning

1.3 The facilities FMEAs shall be up to date and shall reflect the current process.





- The organization shall incorporate the use of a documented Failure Mode and Effects Analysis (FMEA) and ensure the FMEAs are updated to reflect current part quality status.
- The FMEA shall be written for each part or part family or they may be process specific and written for each process.
- FMEAs shall address every process step from part receipt to part shipment.
- A cross-functional team shall be used in the development of the FMEA.
- All special characteristics, as defined by the organization and its customers, shall be identified, defined, and addressed in the FMEA.

Guidance	Objective Evidence	Conforming Nonconforming NA
Does the facility have a documented Failure Mode and Effects Analysis (FMEA) in use?	yes, updated 2025 (west line) & 2020 (phospate)	conforming
Identify the names and job function of the team members used in the development of the FMEA.	D. Obran, M. Ihrie, J. Cooper, D. Lovel	Conforming
Identify if the FMEA is written for each part, part family or process specific.	Process (line)	conforming
Are all FMEAs consistent with all associated documentation such as control plans, work instructions and shop travelers?	yes	conforming
Do all FMEAs include every process step from part receipt to part shipment?	yes	conforming
Are special characteristics, as defined by the organization and its customers, identified, defined, and addressed in the FMEAs?	no special characteristics ID'ed by our customers for our process - so not ID'ed on our documentation	conforming
Provide evidence that the FMEA has been updated in response to quality issues.	Update in 2025 was related to quality concerns	conforming

#### Comments:

	Section 1 - Management Responsibility & Quality Planning
1.4	The process control plans shall be up to date and shall reflect the current process.

- The organization shall incorporate the use of a documented control plan and ensure the control plans are updated to reflect current controls.
- The control plans shall be written for each part or part family or they may be process-specific.
- The control plans shall address all process steps from part receipt to part shipment and identify all equipment used and all key surface finishing process parameters as defined by the organization.
- A cross-functional team shall be used in the development of control plans, which shall be consistent with all associated documentation such as work instructions, shop travelers, and FMEAs.
- All special characteristics, as defined by the organization and its customers, shall be identified, defined, and addressed in the control plans.
- The control plan shall detail the product and process characteristics, and controls including testing frequency and sample size.

Guidance	Objective Evidence	Conforming Nonconforming NA
Does the facility have a documented control plan in use?	yes, same revision dates as FMEA	conforming
Identify if the control plan is written for each part, part family or process specific.	process specific	conforming
Do all control plans include every process step from part receipt to part shipment?	yes	conforming
Does the control plan identify all key surface finishing process parameters?	yes	conforming
Identify the names and job function of the team members used in the development of the control plan.	D. Obran, M. Ihrie, J. Cooper, D. Lovel	conforming
Are the control plans consistent with all associated documentation such as work instructions, shop travelers, specifications and FMEAs?	yes	conforming
Provide evidence that sample sizes and frequencies for evaluation of process and product characteristics are addressed and consistent with the minimum requirements.	Control plans state frequency of titrations and these match the titration logs	conforming





Are s	special characteristics, as defined by the organization and its customers, identified, defined, and addressed in the control plans?	no special characteristics ID'ed by our customers for our process - so not ID'ed on our documentation	conforming			
Prov	Provide evidence that the control plan has been updated in response to quality issues, customer requirements and process changes. update in 2025 was related to quality concerns confe					
Com	ments:					
	Section 1 - Management Responsibility & Quality Planning					
1.5	All surface finishing related and referenced specifications shall be up to date and available.  For example: SAE, AIAG, ASTM, General Motors, Ford, FCA, Toyota, Volvo Truck.					

- A document control system is pertinent for the handling and internal distribution of received customer specifications and to keep up to date with national or global standards related to surface finishing processes. To ensure all customer requirements are understood and satisfied, the organization shall have all related surface finishing and customer referenced standards and specifications available for use and a process to ensure that they are current.
- The organization shall have a process to ensure the timely review, distribution, and implementation of all customer and industry engineering standards and specifications and changes based on customer required schedule. This process shall be executed as soon as possible and shall not exceed two weeks.
- The organization shall document this process of review and implementation, and it shall address how customer and industry documents are obtained, how they are maintained within the organization, how the current status is established, and how the relevant information is cascaded to the shop floor within the two week period.
- The organization shall identify who is responsible for performing these tasks.

Guidance		Objective Evidence	Conforming Nonconforming NA
Does the organization have all related surface finishing and customer referenced standards and	specifications available for use?	yes, as received from our customers	conforming
How are standards and specifications obtained?		from our customers	conforming
Describe the system and timing used to maintain the standards and specifications to ensure that	they are up to date.	we update during quote process when new rev is provided to us from our customer	conforming
	ards and specifications throughout	QM reviews any updated relivent information and relays these updates to appropriate line supervisors within a 48 hr period	conforming
Describe the system and timing used to maintain the standards and specifications to ensure that  Define that process used to review and communicate within the two week period updated stand the organization. Include the names and job functions of the responsible personnel.		we update during quote process when new rev is provided to us from our customer QM reviews any updated relivent information and relays these	co

#### Comments:

# Section 1 - Management Responsibility & Quality Planning 1.6 There shall be documented process instructions.

- The organization shall have written process instructions for all active parts or family of parts, including relevant part specific requirements. Examples of part specific requirements include process line, coating type, load size, and rectifier settings.
- These process instructions may take the form of work instructions, job card, computer-based recipes, or other similar documents.

Guidance	Objective Evidence	Conforming Nonconforming NA
	we utiilzie process map and job sheets - these can be both customer specific, part specific or even family specific	conforming
	work instruciton, compuoter based recipes, job sheets. We do not utilize job card or job travelers.	conforming

conforming



What is the process to retain these records?

Comn	nents:		n 3, Issued 7/20
	Section 1 - Management Responsibility & Qual	ity Planning	
1.7			
after a Initi for th	emonstrate each process is capable of yielding acceptable product, the organization shall perform product capability studies a major change of any process or equipment. The organization shall define what constitutes a major change. all product capability studies shall be conducted for all surface finishing processes per line as defined in scope of work and in a e surface finishing product characteristics (e.g., surface finishing thickness, corrosion resistance). ction plan shall exist to address the steps to be followed in case capability indices fall outside customer requirements or estate	ccordance with customer requirements. Capability study techniques sl	
	Guidance	Objective Evidence	Conforming Nonconformin NA
Has a	n initial product capability study been performed?	Coating weight capability studies completed for each process when onboarded	conforming
Are st	udies conducted for each surface finishing process for each line in the facility?	as noted above (3 lines total)	conforming
	new study been completed after relocation of any process equipment, major rebuild of any equipment, or any significant e in process chemistry?	yes as defined in PRO-100	conforming
How	loes the organization define what constitutes a major change?	It is defined in PRO-100	conforming
What	steps are followed when capability indices fall outside specified requirements?	Steps outlined in PrO-105	conforming
Comn	nents:		l .
	Section 1 - Management Responsibility & Qual	ity Planning	
1.8	The organization shall collect, analyze, and react to product ar	nd process data over time.	
• Met	analysis of product characteristics and processes parameters over time can yield vital information for defect prevention effort hods of analysis shall include ongoing trend or historical data analysis of special product and process parameters. organization shall determine which parameters to include in such analysis.	ts.	
	Guidance	Objective Evidence	Conforming Nonconformin
What	product characteristics and process parameters are used?	Coating weight and tank titrations, conductivity, as defined on control plans	conforming
How i	s the ongoing trend or historical data reviewed and analyzed?	through titration logs, nonconformance reports	conforming
How	loes the organization use this data to prevent future failures and improve the quality system?	through our CI program and risk assesments	conforming
Comn	nents:		•
	Section 1 - Management Responsibility & Qual	ity Planning	
1.9	1.9 All process control and testing records must be retained for a minimum of one calendar year after the year in which they were created.		
	Guidance	Objective Evidence	Conforming Nonconformin NA

PRO - 102



release?

		Vers	sion 3, Issued 7/20	
What is the pro-	cess for retention of customer specific documents with longer retention times?	PRO - 102	Conforming	
Comments:				
	Section 1 - Management Responsibility & Quality Planning			
1.10	There shall be a process in place to review the monitoring systems/logs at specified intervals.			
_	or management designee shall review the monitoring systems/logs at specified intervals. ion shall have reaction plans for nonconformances to process requirements.			
	Guidance	Objective Evidence	Conforming Nonconforming NA	
Define the proc	tess in place to gather and review this information.	PRO - 100	conforming	
Identify the mai	nager or management designee reviewing the process records from the monitoring systems/logs.	PM / QM - Management responsible for the overal QMS	conforming	
Describe reaction	on plans for nonconformances to the written process requirements.	Hold product, adjust baths, notify and rework as required	conforming	
Comments:				
	Section 1 - Management Responsibility & Qua	ality Planning		
1.11	Internal assessments shall be completed at a minimum once every 12 months using the late	st revision of the AIAG CQI-12 Coating System Assessment.		
•	Guidance	Objective Evidence	Conforming Nonconforming NA	
What is the date	e of the last AIAG CQI-12 Coating System Assessment?	10/1/2024	conforming	
Comments:			I	
	Section 1 - Management Responsibility & Qua	ality Planning		
1.12	There shall be an internal system in place to authorize reprocess	ing and it shall be documented.		
<ul><li>The reprocess</li><li>All reprocessir</li><li>Records shall</li></ul>	nanagement system shall include a documented process for reprocessing that shall include authorization from the questing procedure shall describe product characteristics for which reprocessing is allowed as well as those characteristing activity shall require a separate rework specific process control sheet or other identification method issued by que clearly indicate when and how any material has been reprocessed.  If material shall comply with the customer's specifications and/or requirements.	ics for which reprocessing is not permissible.	modifications.	
	Guidance	Objective Evidence	Conforming Nonconforming NA	
Describe the pro	ocedure for authorizing reprocessing of nonconforming material.	PRO - 100	conforming	
Does the reproc	cessing procedure describe product characteristics that allow or not allow reprocessing?	Yes, as defined in the procedure	conforming	
Did the quality r	manager or manager's designee authorize the rework and determine the reprocessing procedure?	Yes, as defined in the procedure	conforming	
How do you ide	entify that material has been reprocessed?	noted on LOT tag	conforming	
Do the records	clearly indicate when and how any material has been reprocessed including the quality manager's authorization of	yes, noted on LOT tag and inspection logs	conforming	





Provide evidence that the rework complies with your customer's specifications and/or requirements.		Coating weight	conforming
Comments:			
Section 1 - Manager	ment Responsibility & Qualit	y Planning	
1.13 The Quality Department shall review,	address, and document custo	omer and internal concerns.	
The quality management system shall include a process for documenting, reviewing, and addressing cus	stomer concerns and any other	er concerns internal to the organization.	
Guidance		Objective Evidence	Conforming Nonconforming NA
Describe the procedure for reviewing and addressing external customer and internal concerns.		Nonconforming log + CAR / CI log	conforming
Describe the problem solving approach that is used.		8D / 5-Why - When requested	conforming
Describe the communication process used to respond to the originator.		email w/ documentation - initial response within 24 hrs	conforming
Provide a recent example of this procedure in use.		CAR 20240529	conforming
Comments:			
Section 1 - Manager	ment Responsibility & Qualit	y Planning	
1.14 The organization shall	Il have a continual improveme	ent process.	
<ul> <li>The continual improvement process shall be designed to achieve improvements in quality and product</li> <li>Identified actions shall be prioritized and shall include timing (estimated completion dates).</li> <li>The organization shall show evidence of program effectiveness.</li> </ul>	tivity.		
Guidance		Objective Evidence	Conforming Nonconforming NA
Describe the continual improvement process used to achieve improvements in quality and productivity.		LOG-103 + QMS objectives to monitor involvement	conforming
Provide a recent example of how actions are identified, prioritized and completion dates assigned.		review in bi-weekly staff meeting & post status	confoming
Describe how the organization measures the effectiveness.		>2 implimented per QTR	conforming
Comments:			
Section 1 - Manager	ment Responsibility & Qualit	y Planning	
1.15 There shall be predefined personnel res	sponsible for management of	materials in quarantine area.	
Only the quality manager or designee may authorize the disposition of material from quarantine status.			
Guidance		Objective Evidence	Conforming Nonconforming NA
		PRO-100	conforming
Define the process for release of material from quarantine.			
		PM, QM, Production Supervisor	conforming
Define the process for release of material from quarantine.  List the authorized personnel with job titles.  Review evidence that only these persons are releasing materials from the quarantine area.		PM, QM, Production Supervisor as defined in PRO-100	conforming



#### Section 1 - Management Responsibility & Quality Planning

1.16 There shall be documented procedures and/or work instructions for all processes and they shall be available to all of the organization's personnel.

- There shall be procedures or work instructions available to personnel covering their responsibilities.
- These documents shall include instructions for addressing potential emergencies (such as power failure), equipment start-up, equipment shut-down, product segregation (See 2.3, 2.8), product inspection, and general operating procedures.

Guidance	Objective Evidence	Conforming Nonconforming NA
Review the procedure/work instruction for process start-up and shut-down.	as defined in line specific process manual	conforming
Review the procedure/work instruction for process control during operation.	as defined in line specific process manual and control plan	conforming
What is the procedure in place to address potential emergencies? (Such as power outage and/or equipment failure).	as defined in our contigency planning	conforming
Review the procedures for inspection of the product, in process or after completion.	as defined in WI 309 and WI 201	conforming
Verify that these procedures/work instructions are accessible to personnel performing the job at all times.	located on plant floor and accessible to personnel	conforming

#### Comments:

#### Section 1 - Management Responsibility & Quality Planning

1.17 The organization and management shall provide employee training.

- The organization shall provide employee training for all operations.
- All employees, including backup and temporary employees, shall be trained.
- Documented evidence shall be maintained showing the employees trained and the evidence shall include an employee assessment.
- · Management shall define the qualification requirements for each function, and ongoing or follow-up training shall also be addressed.

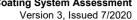
Guidance	Objective Evidence	Conforming Nonconforming NA
Review the process for initial training of all employees, including backup and temporary.	Form 115, training flowchart	conforming
Review the process for ongoing and/or follow-up training.	Form 116, employee evaluations & Form 112, additional training	conforming
Provide a recent copy of the training matrix.	Job-100 skill matrix last updated 4-1-2025	conforming
Provide documented evidence that shows how the organization verifies effectiveness of training.	Form 116, employee evaluations	conforming

#### Comments:

#### Section 1 - Management Responsibility & Quality Planning

1.18 Essential management and supervisory functions shall be performed by qualified personnel at all times and a matrix of these essential responsibilities shall be available for review.

- The organization shall maintain a responsibility matrix identifying all essential management and supervisory functions and list the qualified personnel who may perform such functions.
- It shall identify both primary and secondary (backup) personnel for the essential functions (as defined by the organization).
- This matrix shall be readily available to management at all times.





Guidance	Objective Evidence	Conforming Nonconforming NA
Review and provide an example of the most recent matrix.	Job 100	conforming
Confirm that the matrix includes both primary and secondary persons.	includes all CCI employees	conforming
Describe how and where this information is made available.	it is posted in two locations in the plant	conforming

#### Comments:

#### Section 1 - Management Responsibility & Quality Planning

1.19 There shall be a preventive maintenance program and maintenance data shall be utilized to form a predictive/preventive maintenance program.

- The organization shall have a documented preventive maintenance program for essential process equipment (as identified by the organization).
- The program shall be a closed-loop process that tracks maintenance efforts from request to completion to assessment of effectiveness.
- Equipment operators shall have the opportunity to report problems and problems shall also be handled in a closed-loop manner.
- Company data (e.g., downtime, quality rejects, first time-through capability, recurring maintenance work orders, and operator-reported problems) shall be used to improve the preventive maintenance program.
- Maintenance data shall be collected and analyzed as part of a preventive maintenance program.

Guidance	Objective Evidence	Conforming Nonconforming NA
Show evidence that a documented preventive maintenance program exists.	PM 40, 50 and 20	conforming
Describe the process for reporting problems.	PRO-103	confomring
Provide a recent example showing that the person reporting the problem received feedback after the problem was resolved.	forktruck with leak, tagged and placed in maintenance. Feedback proficed in staff meeting	conforming
Give a recent example of how the program was used to prevent/predict potential equipment failure.		n/a
How is the data being generated reviewed with management to improve the quality system?	during management review and staff meetings	confomring

#### Comments:

#### Section 1 - Management Responsibility & Quality Planning

1.20 The organization shall develop a critical spare part list and the parts must be available to minimize production disruptions.

• Spare part suppliers, minimum quantity and lead times shall be documented.

Guidance	Objective Evidence	Conforming Nonconforming NA
Provide the critical spare parts list.	3 individual lists for each line	confomring
Does the critical spare parts list include inventory, lead time and suppliers?	yes it does	conforming
Describe how and when the organization updates the list.	during management review and staff meetings	conforming
What criteria are used to determine whether critical spare parts are kept at the facility or sourced off site?	lead time, cost, replacement history	conforming
Describe the process used to maintain minimum quantities.	inventory completed monthly	conforming
Comments:	·	



#### Section 2 - Floor and Material Handling Responsibility

2.1 The organization shall ensure that customer data entered into the receiving system matches the customer's shipping documents.

It is critical that all customer requirements and lot identification be correctly transferred to internal documents.

- The facility shall ensure that the data entered in the receiving system match the information on the customer's shipping documents.
- Documented processes and evidence of compliance shall exist (e.g., shop travelers, work orders).
- Sometimes the material received does not precisely correspond to customer shipping documents. The facility shall have a detailed procedure in place to resolve receiving discrepancies.
- The requirements stated above apply to captive, in-house, commercial and all involved departments.

Guidance	Objective Evidence	Conforming Nonconforming NA
Describe the receiving process including listing the documentation used.	WI-120	conforming
Describe the process to identify the coating requirements.	Quote, part set up, computer programing, job sheets	conforming
Describe the reaction process when material received does not correspond to the customer's documents.	PRO-100	conforming

#### Comments:

#### Section 2 - Floor and Material Handling Responsibility

2.2 Is product clearly identified and stored throughout the surface finishing process and is lot traceability and integrity maintained?

Procedures are required for part and container identification to avoid incorrect processing or mixing of lots.

- As received, in-process, and finished product or material shall be properly segregated, identified, and stored in a dedicated and clearly defined area.
- Out-going lot(s) shall be traceable to the incoming lot(s).
- The discipline of precisely identifying lots and linking all pertinent information to them enhances the ability to do root cause analysis and continual improvement.

Guidance	Objective Evidence	Conforming Nonconforming NA
Describe the method that ensures the parts and lot numbers are correctly identified and maintained throughout the process.	WI 123	conforming
Verify that received, in-process, and finished product or material is properly segregated, identified, and stored in a dedicated and clearly defined area.	WI-125	conforming

#### Comments:

Section 2 - Floor and Material Handling Responsibility

2.3 Procedures shall be adequate to prevent movement of nonconforming product into and out of the production system.

The control of suspect or nonconforming product is necessary to prevent inadvertent shipment or contamination of other lots.

- Procedures shall be adequate to prevent movement of nonconforming product into the production system.
- Procedures shall exist addressing authorized personnel, appropriate disposition, product identification and tracking of material flow in and out of hold area.
- Nonconforming hold area shall be clearly designated to ensure segregation of such material.

Guidance	Objective Evidence	Conforming Nonconforming NA
Where is the nonconforming holding area, and how is it identified?	South Storage area, red outline, signs	conforming
Describe the procedure to prevent the unauthorized movement of nonconforming products.	PRO-100	conforming



Provid	e evidence that material movement in and out of this area is documented.	QM - non conforming log	conforming
Comn	ents:		1
	Section 2 - Floor and Material Handling Respo	onsibility	
2.4	For bulk processing there shall be a procedure to identify trap points throughout the entire process to	o reduce risk of unfinished, improperly coated and mixed parts.	
• Mor	organization shall have documented procedures to identify and monitor all trap points for each process/equipment. itoring of potential trap points shall occur at minimum every part changeover. points may include baskets, barrels, bins, part containers, loading and unloading equipment, oven belts, load hoppers and tra	nsfer belts.	
	Guidance	Objective Evidence	Conforming Nonconforming NA
Descr	be the procedure to identify and monitor all trap points for each process and/or equipment.	no trap points per design	conforming
Provid	e the list of trap points.	n/a	n/a
Comn	ents:		
	Section 2 - Floor and Material Handling Respo	onsibility	
2.5	The handling, storage and packaging shall be adequate to ensure product quality is	s maintained throughout the entire process.	
• Part	Iling, storage, and packaging shall be adequate to ensure product quality. cleanliness shall be maintained throughout the process. arts shall be stored in a controlled environment.  Guidance	Objective Evidence	Conforming Nonconforming
Which	process steps have dedicated in-process containers?	All coating lines have dedicated in-process containers, depending on geometry of customer part different containers are used as	NA confomring
How a	re containers maintained to preserve part cleanliness?	PM system and inspection	conforming
Descr	be how the containers are inspected to ensure they are free of foreign material.	visual insection from operators	conforming
	is used for liner material of customer containers before packing finished goods for shipment? rials like newspapers, used cardboard and bags should be avoided).	we utilize what the customer has supplied. If they want a special liner they supply that material and it is noted on the job sheet	conforming
	e a list of dedicated storage areas that avoid exposure to contamination and corrosion. ge outdoors, near media blasting and corrosive processes such as acid tanks should be avoided).	storage areas are indoors away from media blasing and coating lines	conforming
Comn	ents:		
	Section 2 - Floor and Material Handling Respo	onsibility	
2.6	Each process step shall be documented and tra	aceable.	
How	oes the operator verify that all process steps have been completed in specified order and in within specified time limits?		
	Guidance	Objective Evidence	Conforming Nonconforming NA



Do yo	ou have a document (e.g., shop travelers, job sheet) that specifies all the processes for each part number/part family?	Process cards - WI-202 Phospate & WI-313 East_west Line	conforming
Defin	ne the procedure that ensures that all processes have been completed in the specified order.	process manuals - controlled process receipe	conforming
Descr	ribe how time sensitive processes are completed in the specified time limits (e.g., wet part transfer).	only time sensitive process is coating - all 3 lines are a inline computer controlled receipe	conforming
Provi	de documentation that this process has been followed.	our exit data shows time of all stages	conforming
Comr	ments:	·	
	Section 2 - Floor and Material Handling Re	sponsibility	
2.7	Part loading shall be specified, documented a	nd controlled.	
	iding parameters shall be specified, documented and controlled. Imples include parts per rack, part position and orientation, weight per barrel/basket or masking.		
	Guidance	Objective Evidence	Conforming Nonconforming NA
Descr	ribe how the loading parameters are communicated to the operator.	job sheets	conforming
.1 4	tify how the loading weight or rack quantity is recorded for each load or rack.	we load per job sheets that has taken in account weight and rack qty	conforming
aent			
	ments:		
	ments: Section 2 - Floor and Material Handling Re		
2.8 Unpla	Section 2 - Floor and Material Handling Re  There shall be a procedure for material handling, containment action and product segre  anned downtime greatly increases the risk of improper processing.	sponsibility	
2.8 Unpla • Wo • Spe	Section 2 - Floor and Material Handling Re There shall be a procedure for material handling, containment action and product segre	sponsibility gation in the event of an unplanned process interruption.	Conforming Nonconforming
2.8 Unpla Wo Spe oluti	Section 2 - Floor and Material Handling Re  There shall be a procedure for material handling, containment action and product segre anned downtime greatly increases the risk of improper processing.  ork instructions specifically addressing potential types of unplanned process interruptions shall be accessible to operators.  scific instructions shall address containment/reaction plans for each step of the process. Where processes are time critical, i ions, current, bake or curing processes.  dence shall exist showing disposition and traceability of affected product.  Guidance	sponsibility gation in the event of an unplanned process interruption.  mmediate actions are required. Examples include process steps exposing  Objective Evidence	Conforming Nonconforming NA
2.8  Jnpla  Wo  Spe  Spe  Oluti	Section 2 - Floor and Material Handling Research There shall be a procedure for material handling, containment action and product segres anned downtime greatly increases the risk of improper processing.  Or instructions specifically addressing potential types of unplanned process interruptions shall be accessible to operators. excific instructions shall address containment/reaction plans for each step of the process. Where processes are time critical, it ions, current, bake or curing processes. dence shall exist showing disposition and traceability of affected product.  Guidance  t procedure is used to address each step of the process?	sponsibility gation in the event of an unplanned process interruption. mmediate actions are required. Examples include process steps exposing	Conforming Nonconforming NA conforming
2.8  Unpla  Wo  Spe  Soluti  Evic	Section 2 - Floor and Material Handling Research There shall be a procedure for material handling, containment action and product segres anned downtime greatly increases the risk of improper processing.  For instructions specifically addressing potential types of unplanned process interruptions shall be accessible to operators. Secific instructions shall address containment/reaction plans for each step of the process. Where processes are time critical, it ions, current, bake or curing processes. Indence shall exist showing disposition and traceability of affected product.  Guidance  t procedure is used to address each step of the process?  Ide all work instructions that address unplanned process interruptions.	sponsibility gation in the event of an unplanned process interruption.  mmediate actions are required. Examples include process steps exposing  Objective Evidence  PRO-100 and control plan	Conforming Nonconforming NA conforming conforming
2.8  Unpla  Wo  Spe  Soluti  Evic	Section 2 - Floor and Material Handling Research There shall be a procedure for material handling, containment action and product segres anned downtime greatly increases the risk of improper processing.  Or instructions specifically addressing potential types of unplanned process interruptions shall be accessible to operators. excific instructions shall address containment/reaction plans for each step of the process. Where processes are time critical, it ions, current, bake or curing processes. dence shall exist showing disposition and traceability of affected product.  Guidance  t procedure is used to address each step of the process?	sponsibility gation in the event of an unplanned process interruption.  mmediate actions are required. Examples include process steps exposing  Objective Evidence  PRO-100 and control plan PRO-100, control plan, WI 301, nonconforming log	Conforming Nonconforming NA conforming
2.8  Unpla  Wo  Spe  Soluti  Evic	Section 2 - Floor and Material Handling Re  There shall be a procedure for material handling, containment action and product segre anned downtime greatly increases the risk of improper processing.  ork instructions specifically addressing potential types of unplanned process interruptions shall be accessible to operators.  cific instructions shall address containment/reaction plans for each step of the process. Where processes are time critical, i ions, current, bake or curing processes.  dence shall exist showing disposition and traceability of affected product.  Guidance  t procedure is used to address each step of the process?  Ide all work instructions that address unplanned process interruptions.  is the affected product traced, dispositioned and documented?	sponsibility gation in the event of an unplanned process interruption.  mmediate actions are required. Examples include process steps exposing  Objective Evidence  PRO-100 and control plan PRO-100, control plan, WI 301, nonconforming log nonconforming log	Conforming Nonconforming NA conforming conforming
2.8  Unplain  Wo  Spe  Soluti  Evid	Section 2 - Floor and Material Handling Research Step of the processing of the process of the pr	sponsibility gation in the event of an unplanned process interruption.  mmediate actions are required. Examples include process steps exposing  Objective Evidence  PRO-100 and control plan PRO-100, control plan, WI 301, nonconforming log  nonconforming log  sponsibility	Conforming Nonconforming NA conforming conforming
2.8 Unplace • Wo • Spe • Soluti • Evic  What How • 2.9	Section 2 - Floor and Material Handling Research States of the processing of the process of the	sponsibility gation in the event of an unplanned process interruption.  mmediate actions are required. Examples include process steps exposing  Objective Evidence  PRO-100 and control plan PRO-100, control plan, WI 301, nonconforming log  nonconforming log  sponsibility	Conforming Nonconforming NA conforming conforming



Provide a copy of the housekeeping procedure.	Supervisor dependent	conforming
Provide a copy of the procedure used to handle dropped or spilled parts.	WI 105	conforming
Describe what is done with loose parts found on the floor of the plant.	WI 105	conforming
Define the process used to review the facility for conditions that are detrimental to quality processing such as chemical spills and inadequate ventilation.	management review / staff meetings	conforming
Comments:		



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	Section 2 - Floor and Material Handling Responsibility						
2.10	Plant lighting shall be adequate in all inspection areas.						
Lightir	Lighting in the part and/or process inspection areas must be adequate for the intended operation.						
	Guidance	Objective Evidence	Conforming Nonconforming NA				
	do you ensure the lighting in the part and/or process inspection areas, including loading and unloading areas, is adequate for tended operation?	management review / staff meetings	conforming				
For pa	art inspection, how do you arrange the lighting to avoid spot lighting, glare, shadows and distracting reflections?	As defined by maintenenace	conforming				



	Section 4 - Coating System Assessment Job Audit - Finished Product Review						
	Job Identity: CCI Lot # 1204915						
	•						
	Customer: Accuger						
	Shop Order Number: n/a						
	Part Number: 68374936						
	Part Description: Pinion Gear						
	Material Substrate: Steel						
	Coating Requirements: 300-1500 mg/sq ft monthly check						
	Specification Number and Revision: MS-4035						
Question Number	Inspection Element	Identify Relevant Documents & Actual Condition (Provide Data or Values & Embed or Attach Documents)	Conforming Nonconforming NA				
4.1	Attach evidence that the documentation for the specific part conforms to the requirements including:  • Advanced quality planning process  • FMEA  • Process Control Plan	FMEA and Control - process specific	conforming				
4.2	What customer specifications or requirements are used for this part?  • List the specification(s) and revision(s)	MS-4035	conforming				
4.3	Provide evidence of receiving inspection.	Lot Tag Issued	confomring				
4.4	Provide the job traveler or attach a copy of this traveler showing:  Customer name  Lot number  Weight/quantity  Process instructions  Inspection requirements	Job sheet revision 11/7/2024 WI 202 Phospate Process card revision 10/1/2025	conforming				
4.5	If the lot is divided, how is the traceability maintained throughout the process?	basket number recored for each batch processed, recoreded on inspection sheet and LOT tag	conforming				
4.6	Describe the method used to document each operation as being completed. Is there a sign-off with time stamp, bar code or scan, etc., after each operation?	exit data - this is controlled via computer receipe	conforming				
4.7	Attach work instructions applicable to this part indicating proper barrel/basket mesh size or perforation (hole size), load size, appropriate rack configuration, appropriate part orientation on rack, etc.	Job sheet revision 11/7/2024 WI 202 Phospate Process card revision 10/1/2025	conforming				
4.8	Identify each process table pertaining to this job audit. Populate the applicable process tables with the actual process results/conditions at the time this part was processed (Columns H and I in Process Tables A through H).	PTA	conforming				
4.9	Were appropriate process steps on the job router/traveler signed off? For electronic systems, a screen print is acceptable.	screen print of exit data showing each process completed	conforming				
4.10	Were all inspection steps, as documented in the control plan, performed?	yes	conforming				



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			-,					
4.11	Were steps/operations performed that were not documented in the control plan?	no	conforming					
4.12	If additional steps were performed, were they authorized?	n/a	n/a					
4.13	If the order was certified, did the certification accurately reflect the process performed?	no cert required for this order	n/a					
4.14	Was the certification signed by an authorized individual?	n/a	n/a					
4.15	Are the parts and containers free of foreign objects or contamination?	We apply a clean unused bag to each customer bin for processed parts - es	conforming					
4.16	Are packaging requirements identified?	Job sheet Revision 11/7/2024 - yes	conforming					
4.17	Are parts packaged to prevent mixing or damage to parts (parts packed over height of container)?  WI-125 outlines how product is stored / handled to prevent mixing.  Was being followed at time of audit.							
4.18	Are storage conditions sufficient to maintain part quality? (e.g., parts are stored indoors in a clean, dry environment) yes, facility is clean with good lighting. No ceiling leaks, area dry.							
4.19	Were the parts properly identified and/or labeled before shipping?	yes, but customer container label and CCI Lot label located on the bin of parts	conforming					
4.20	For the finished part, list each test and inspection requirement per customer specification.  Each part may have one or more requirements determined by the contract parts must meet each requirement. Add additional sections as need to be a section of the finished part, list each test and inspection requirement per customer specification.							
	Below is an <u>example</u> of how to fill out sections in 4.20.x	Inspection Requirement	Conforming Nonconforming NA					
	Test Description:	Corrosion Resistance						
	Test Method:	ASTM B117						
Example only	Test frequency or quantity:	daily, 2 parts	Conforming					
	Test Requirement:	240 hrs. no white / 1000 hours no red						
	Result: Attach evidence:	White corrosion at 168 hours, no red LAB Report 12	Nonconforming					
	Insert audit data below this line. Add additional sections as needed.							
	Insert audit data below this line. Add additional sections as needed.		l					
	Insert audit data below this line. Add additional sections as needed.  Test Description:	Coating Weight						
		Coating Weight Weigh - Strip - Weigh						
4.20.1	Test Description:		conforming					
4.20.1	Test Description: Test Method:	Weigh - Strip - Weigh	conforming					
4.20.1	Test Description: Test Method: Test frequency or quantity:	Weigh - Strip - Weigh 5 rep panel per week	conforming					
4.20.1	Test Description:  Test Method:  Test frequency or quantity:  Test Requirement:  Result:	Weigh - Strip - Weigh  5 rep panel per week  800 mg/ft2 +/- 30%						
4.20.1	Test Description:  Test Method:  Test frequency or quantity:  Test Requirement:  Result:  Attach evidence:	Weigh - Strip - Weigh  5 rep panel per week  800 mg/ft2 +/- 30%  1043.8 mg/ft2 (average reading)						
4.20.1	Test Description:  Test Method:  Test frequency or quantity:  Test Requirement:  Result: Attach evidence:  Test Description:	Weigh - Strip - Weigh  5 rep panel per week  800 mg/ft2 +/- 30%  1043.8 mg/ft2 (average reading)  Total Acid - Lubrite 2 (Mang Phospate coating)						

CQI-12

Special Process: Coating System Assessment

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Test Requirement:	12.5 - 13.5 mls	
Result: Attach evidence:	13.0 mls	conforming

AIAG









## Section 4 - Coating System Assessment Job Audit - Finished Product Review

	Job Identity: CCI204910							
	Customer: Magna Cosma							
	Shop Order Number: n/a Part Number: 1-246-B00-800							
	Part Description: LT7							
	Material Substrate: Aluminum							
	Coating Requirements: 2-8 mg/ft2							
	Specification Number and Revision: GMW16721 April 2023							
Question Number	Inspection Element	Identify Relevant Documents & Actual Condition (Provide Data or Values & Embed or Attach Documents)	Conforming Nonconforming NA					
4.1	Attach evidence that the documentation for the specific part conforms to the requirements including:  • Advanced quality planning process  • FMEA  • Process Control Plan	FMEA and Control plan are processes specific	conforming					
4.2	What customer specifications or requirements are used for this part?  • List the specification(s) and revision(s)	GMW16721 april 2023	conforming					
4.3	Provide evidence of receiving inspection.	lot tags issued	conforming					
4.4	Provide the job traveler or attach a copy of this traveler showing:  • Customer name  • Lot number  • Weight/quantity  • Process instructions  • Inspection requirements	WI 313 East _ West Line Process card rev 4-23-25 Job Sheet rev 11-20-2024	conforming					
4.5	If the lot is divided, how is the traceability maintained throughout the process?	basket number recorded and batch processed	conforming					
4.6	Describe the method used to document each operation as being completed. Is there a sign-off with time stamp, bar code or scan, etc., after each operation?	exit data, this is a computer controled process receipe	conforming					
4.7	Attach work instructions applicable to this part indicating proper barrel/basket mesh size or perforation (hole size), load size, appropriate rack configuration, appropriate part orientation on rack, etc.	WI 313 East _ West Line Process card rev 4-23-25 Job Sheet rev 11-20-2024	conforming					
4.8	Identify each process table pertaining to this job audit. Populate the applicable process tables with the actual process results/conditions at the time this part was processed (Columns H and I in Process Tables A through H).	PT A	conforming					

4.9	Were appropriate process steps on the job router/traveler signed off? For electronic systems, a screen print is acceptable.	exit data available for every load	conforming		
4.10	Were all inspection steps, as documented in the control plan, performed?	yes	conforming		
4.11	Were steps/operations performed that were not documented in the control plan?	no	conforming		
4.12	If additional steps were performed, were they authorized?				
4.13	If the order was certified, did the certification accurately reflect the process performed?	no cert required	n/a		
4.14	.14 Was the certification signed by an authorized individual? no cert required				
4.15	Are the parts and containers free of foreign objects or contamination?	Yes, containers supplied by customer and free of contamination	conforming		
4.16	Are packaging requirements identified?	Job Sheet Rev 11-20-2024	conforming		
4.17	MI-125 outlines how product is stored / handled to prevent mixing Was being followed at time of audit.				
4.18	Are storage conditions sufficient to maintain part quality? (e.g., parts are stored indoors in a clean, dry environment)	Clean and dry facility in all storage and processing areas	conforming		
4.19	Were the parts properly identified and/or labeled before shipping?  yes				
4.20	For the finished part, list each test and inspection requirement per customer specification.	Each part may have one or more requirements determined by the coati Parts must meet each requirement. Add additional sections as needed.	• .		
	Below is an <u>example</u> of how to fill out sections in 4.20.x	Inspection Requirement	Conforming Nonconforming NA		
	Test Description:	Corrosion Resistance			
	Test Method:	ASTM B117			
Example only	Test frequency or quantity:	daily, 2 parts	Conforming		
····,	Test Requirement:	240 hrs. no white / 1000 hours no red			
	Result: Attach evidence:	White corrosion at 168 hours, no red LAB Report 12	Nonconforming		
	Insert audit data below this line. Add additional sections as needed.		•		
	Test Description:	Coating weight			
	Test Method:	xray (portaspec) - measurement of Zi layer			
4.20.1	Test frequency or quantity:	3 samples 1x per week	conforming		

	Test Requirement:	2-8 mg/ft2	
	Result: Attach evidence:	7.13 mg/ft2	conforming
	Test Description:	Bath chemical concentration	
	Test Method:	Titration	
4.20.2	Test frequency or quantity:	Start up / every 4 hrs	conforming
	Test Requirement:	17-18.6 mls	
	Result: Attach evidence:	17.8 mls	confomring



All requirements given below are subordinate to applicable customer/OEM specific requirements.

The customer may have additional requirements, e.g., inspection testing or greater frequencies. When performing the job audit, the auditor shall verify coater is conforming to customer requirements.

Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

If any data points at reduced monitoring frequencies are outside of control limits, then revert back to the frequencies stated under the minimum requirements.

Process Line Identification:

Type of Line: Rack or Barrel

	Category/Process Steps	Type of Control		Monitoring Frequency		Observation/ Comments	Job Audit Measurements	
ITEM #		Minimum Requirement	Actual Condition	Minimum Requirement	Actual Condition	Conforming Nonconforming NA	Range	Actual Measurements supporting time of Job Audit
1.0	Aqueous Cleaning Process (Alkaline or Acid)	East & Phospate lines						
A1.1	There shall be an incoming part assessment procedure with criteria.	Per Control Plan	Per Control Plan	Once per lot and per part change.	once per lot and container	Conforming	WI-123	CCI Lot # issued
A1.2	Time	Automatic / Manual	Automatic; PLC controlled	Automatic Line: Confirm set-up at the start of production and every process change. Manually verify every 3 months or after programming change or equipment maintenance.  Manual Line: Continuously monitor time in each stage of process.	100%	conforming	2-4 mins	120s C-AK 298 360s C-AK 319 180s C-AK 382 R
2.0	Cleaning / Descaling Solution	East & Phospate lines						
A2.1	Pressure for spray rinse. Agitation for immersion tanks.	Automatic / Manual	Automatic; PLC controlled	Once every 8 hours.	100%	confomming	pump circulation	pump circulation
A2.2	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic	Automatic; PLC controlled	Continuous monitoring by controller. Manually verify daily.	100%	conforming	+/- 5 deg	150 deg F East Line 298 140 deg F Phos Line 382 R
A2.3	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)	N/A	Continuous monitoring by controller. Manually verify daily.	n/a	n/a	n/a	n/A
A2.4	Chemical Concentration (Alkaline Cleaner) (If used) Per chemical supplier recommendation such as: - free alkalinity - total alkalinity - pH - conductivity - percentage of cleaner (weight/volume or volume/volume)	Automatic / Manual	Manual	Once every 8 hours.	start up/ 1x per shift or 8 hr	conforming	Log -203 Log -305 Log - 302	All within established ranges for cleaning concentration
A2.5	Chemical Concentration (Acid Cleaner) (If used) Per chemical supplier recommendation such as: - free acidity or concentration - metal contamination	Automatic / Manual	N/A	Once every 8 hours.	start up/ 1x per shift or 8 hr	conforming	Log - 303	C-IC HX-357 East Line only
A2.6	Impurity Content Per chemical supplier recommendation such as: - acid split (oil contamination) - alkalinity ratio - iron content	Manual	N/A	Once every 8 hours.*	start up/ 1x per shift or 8 hr	conforming	Log-207	Iron Content Phospate line only



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Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row. For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

A2.7	Solution Level	Manual	Manual	Once every 8 hours.	start up/ 1x per shift or 8 hr	conforming	East line - autoFill Phos Line - Visual	solution level covering all baskets
A2.8	Solution and tank clean out schedule is documented and followed - Desludging, coalescer, new make-up frequency, etc.	Manual	Manual	Per preventative maintenance program.	As Required	conforming	Visual	PM's completed per schedule
3.0	Rinse	Both Alodine and Phos Lines						
A3.1	Rinse Type - Identify in comment section e.g., Flowing, Counter Flowing, Spray, Stagnant, Drag-in/out.	Automatic	Automatic; PLC controlled	Once every 8 hours.	100%	Conforming		immersion
A3.2	Water Type - Identify in comment section e.g., Municipal, Deionized (DI), Reverse Osmosis (RO).	NA	Municipal	NA	100%	conforming		City after Cleaning RO after Coating
A3.3	Agitation type - Identify in comment section, if applicable. e.g., Mechanical (Describe), Air, Ultrasonic.	Automatic	automatic	NA	100%	n/a		n/a
A3.4	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic	n/a	Continuous monitoring by controller. Manually verify daily.	n/a	n/a		
A3.5	Temperature (Thermocouple), if applicable.	Automatic Max SAT difference allowed +/- 5°C (10°F)	n/a	Continuous monitoring by controller. Manually verify daily.	n/a	n/a		
A3.6	pH, if applicable.	Manual	n/a	Once every 8 hours.*	n/a	n/a		
A3.7	Conductivity, if applicable.	Manual	manual	Once every 8 hours.*	start up/ 1x per shift or 8 hr	conforming	LOG 311	East line stage 10A / 10B only
A3.8	Concentration, if applicable.	Manual	n/a	Once every 8 hours.*	n/a	n/a		
A3.9	Flow rate, if applicable.	Manual	n/a	Once every 8 hours.	n/a	n/a		
A3.10	Spray nozzle condition, if applicable.	Manual	n/a	Once every 8 hours.	n/a	n/a		
A3.11	Verify position of incoming water feed is near the bottom (if immersion tank)	Manual	manual	Per preventative maintenance program.	100%	conforming	at bottom of immersion tank	
A3.12	Tank maintenance schedule documented and followed.	Manual	manual	Per preventative maintenance program.	per PM schedule	conforming	Each tank has its own PM	ontime
4.0	Acid / Neutral Pickling							
A4.1	Concentration	Manual		Once every 8 hours.				
A4.2	Concentration of Fe, per chemical supplier.	Manual		Once per day.				
A4.3	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic		Continuous monitoring by controller. Manually verify daily.				
A4.4	Temperature (Thermocouple), if applicable.	Automatic Max SAT difference allowed +/- 5°C (10°F)		Continuous monitoring by controller. Manually verify daily.				
A4.5	Inhibitor (if used)	Manual		Per supplier data sheet.				



All requirements given below are subordinate to applicable customer/OEM specific requirements.

The customer may have additional requirements, e.g., inspection testing or greater frequencies. When performing the job audit, the auditor shall verify coater is conforming to customer requirements.

Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

4	A4.6	Solution Level	Manual	Once every 8 hours.		
,	A4.7	Solution and tank clean out schedule is documented and followed - Desludging, coalescer, new make-up frequency, etc.	Manual	Per preventative maintenance program.		
,	A4.8	Rinse - See Section 3.0.				



All requirements given below are subordinate to applicable customer/OEM specific requirements.

The customer may have additional requirements, e.g., inspection testing or greater frequencies. When performing the job audit, the auditor shall verify coater is conforming to customer requirements.

Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

5.0	Aluminum Etching							
A5.1	Concentration	Manual		Once every 8 hours.				
A5.2	Concentrations of Al, per chemical supplier.	Manual		Once per day.				
A5.3	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic		Continuous monitoring by controller. Manually verify daily.				
A5.4	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)		Continuous monitoring by controller. Manually verify daily.				
A5.5	Solution and tank clean out schedule is documented and followed - Desludging, coalescer, new make-up frequency, etc.	Manual		Per preventative maintenance program.				
A5.6	Rinse - See Section 3.0.							
6.0	Aluminum Deoxidizing	East Line only						
A6.1	Concentration	Manual	Manual	Once every 8 hours.	start up/ 1x per shift or 8 hr	conforming	LOG 303	
A6.2	Concentrations of AI, per chemical supplier.	Manual	n/a	Once per day.	n/a	conforming	n/a	n/a
A6.3	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic	Automatic; PLC controlled	Continuous monitoring by controller. Manually verify daily.	100%	conforming	LOG 303	104 deg F
A6.4	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)	n/a	Continuous monitoring by controller. Manually verify daily.	n/a	n/a	n/a	n/a
A6.5	Solution and tank clean out schedule is documented and followed - Desludging, coalescer, new make-up frequency, etc.	Manual	manual	Per preventative maintenance program.	As Required	conforming	Per appropriate PM	ontime
A6.6	Rinse - See Section 3.0.							
7.0	Sealing Rinse (if applicable)							
A7.1	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic		Continuous monitoring by controller. Manually verify daily.				
A7.2	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)		Continuous monitoring by controller. Manually verify daily.				
A7.3	Concentration	Manual		Once every 8 hours.				
A7.4	pH, if applicable.	Automatic / Manual		Once every 8 hours.				
A7.5	Solution Level	Manual		Once every 8 hours.				
A7.6	Solution and tank clean out schedule is documented and followed - Desludging, coalescer, new make-up frequency, etc.	Manual		Per preventative maintenance program.				



All requirements given below are subordinate to applicable customer/OEM specific requirements.

The customer may have additional requirements, e.g., inspection testing or greater frequencies. When performing the job audit, the auditor shall verify coater is conforming to customer requirements.

Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

If any data points at reduced monitoring frequencies are outside of control limits, then revert back to the frequencies stated under the minimum requirements.

A7.7 Rinse - See Section 3.0.



## **PROCESS TABLE A - Pretreatment (Aqueous)**

All requirements given below are subordinate to applicable customer/OEM specific requirements.

The customer may have additional requirements, e.g., inspection testing or greater frequencies. When performing the job audit, the auditor shall verify coater is conforming to customer requirements.

Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

8.0	Oil / Wax (if applicable)							
A8.1	Pressure/Agitation	Automatic		Once every 8 hours.				
A8.2	Chemical Analysis: Per chemical supplier recommendation such as: - Concentration - pH - Emulsion Stability - Viscosity - Total Dissolved Solids (TDS)	Manual		If not used at 100% concentration, every 8 hours. If used at 100% concentration, every lot change.				
A8.3	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic		Continuous monitoring by controller. Manually verify daily.				
A8.4	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)		Continuous monitoring by controller. Manually verify daily.				
A8.5	Solution and tank clean out schedule is documented and followed - Desludging, new make-up frequency, etc.	Manual		Per preventative maintenance program.				
9.0	Dry-Off (If Applicable)	Alodine and Phos Lines						
A9.1	Air temperature is monitored and controlled.	Automatic	Automatic; PLC controlled	Once every 8 hours.	start up/ 1x per shift or 8 hr	conforming	per control plan	as defined
A9.2	There is a procedure to ensure dryness of parts prior to subsequent coating.	Visual	visual	Every change of lot number and each container.	100%	conforming	WI105, WI201, WI309	conforming
10.0	Process Equipment							
A10.1	Process equipment shall be verified and calibrated per Process Tab Calibrations shall be certified, posted and up to date. A system shall be used to track calibration dates of equipment. Complete the audit for these identified elements in Process Table K.							
	Guidance			Objective Evidence / Comments				
What in	ternal system is used for conducting and managing calibration of all r	elevant equipment identified in	Process Table K?	? Manual - controlled calibration list w/ calendar reminders				conforming
Provide	Provide the document that lists all relevant equipment identified in Process Table K.			Form 111				conforming
How do	How do you ensure calibrations are up to date?			Calibration date and expire date are both noted with applicable cert #			conforming	
How do	you ensure new equipment has been added to the calibration list and	Reviewed annualy by Quality Manager, with plant audit			conforming			
Are calibration labels present and up to date for listed equipment?				review of equipment used on both lines showed calibration labels				conforming
What is the reaction plan to any failed verification?				Total of equipment acca on som miss chemica campianion has				



All requirements given below are subordinate to applicable customer/OEM specific requirements.

The customer may have additional requirements, e.g., inspection testing or greater frequencies. When performing the job audit, the auditor shall verify coater is conforming to customer requirements.

Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

If any data points at reduced monitoring frequencies are outside of control limits, then revert back to the frequencies stated under the minimum requirements.

A10.2 Barrels, baskets, process tanks, belts/conveyors, racks, fixtures and drive mechanisms shall be maintained.

Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
How do you inspect for the integrity of the barrels, baskets, process tanks, racks, contact points, belts/conveyors and drive mechanisms? (e.g., wear, perforations, trap points, plugged holes, door gaps, other damage) Where are the inspection results documented?	Approprate PM for tanks, baskets, hoists	conforming
What is your preventative maintenance program for barrels, baskets, racks, contact points, process tanks and drive mechanism?	as defined on PM schedule	conforming
What is the maintenance program for mechanical/chemical cleaning of barrels, baskets, racks, contact points and process tanks?	as defined on PM schedule	conforming
How is each basket, barrel, or rack uniquely identified for tracking purposes?	each has its own # at the top of the rack were it would not be placed in the immersion bath	conforming
All filtration equipment shall be maintained.  The organization shall have a preventative maintenance system that is documented and implemented.		
Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
What is the preventative maintenance program for filters?	daily by supervisor	conforming
How is the filter type identified during use?	n/a	n/a
If reusable filters are used, do they meet the supplier's recommendations?	n/a	n/a
If disposable filters are used, do they meet the supplier's recommendations?	yes, recommended by the designer of our lines	conforming
What are your criteria for filter replacement and/or cleaning?	1x daily	conforming
What information is used to determine the required mesh size?	as defined by the manufacture	confomring
How is compatibility with the process determined?	as defined by the manufacture	conforming
Describe the preventive maintenance program for all solution filters to include plate, filter bag and cartridge.	daily by supervisor	conforming
Describe the preventive maintenance program for all air filters used on ovens, dryers, chillers, blowers and fans etc.	n/a	n/a
All process and equipment alarms shall be tested on a quarterly basis at a minimum.  The organization shall have a preventative maintenance system that is documented and implemented.		



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The customer may have additional requirements, e.g., inspection testing or greater frequencies. When performing the job audit, the auditor shall verify coater is conforming to customer requirements.

Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
What is the preventative maintenance program where alarms are used for solution temperature, level control, environmental control, faults, etc.?	as defined on PM schedule	conforming
What are the alarms that are tested and their test frequency?	as defined on PM schedule	conforming
A10.5 Processing equipment is designed/optimized for "soft handling" of parts.		
Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
Are chutes lined to prevent part damage?	n/a	n/a
What technique(s) are used to minimize drop heights?	n/a	n/a
A10.6 Part transfer equipment is maintained.		
Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
What is your program to assure cleanliness of belts, conveyors, chutes, vibratory tables, etc.?	n/a	n/a
What is your maintenance program for belts, conveyors, chutes, vibratory tables, etc.?	n/a	n/a
A10.7 In-process and customer containers are managed and maintained.		
Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
How do you identify and segregate in-process containers for different processes?	We only have in-process containers Size and material type destingueses the different lines	conforming
What is your maintenance program for keeping in-process containers clean and in good condition?	as defined on PM schedule	conforming
How do you ensure that the customer containers do not degrade the quality of the coated parts? (e.g., customer container may arrive damaged, oily, dirty)	receiving inspection	conforming
A10.8 Electrical system shall be maintained.  Coater shall have a preventative maintenance system that is documented and implemented.	as defined on PM schedule	conforming
Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
Describe the preventative maintenance program for rectifiers (e.g., voltage and amperage)	n/a	n/a
All anodes/cathodes, contacts and bussing shall be maintained.  Coater shall have a preventative maintenance system that is documented and implemented.	n/a	n/a
Describe the preventative maintenance program including cleanliness, electrical resistance and electrical shorts.	n/a	n/a



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Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

11.0 Test Equipment (Process Control and Finished Part Quality)					
A11.1  Test Equipment shall be verified and calibrated per Process Table K. Calibrations shall be certified, posted and up to date. A system shall be used to track calibration dates of equipment. Complete the audit for these identified elements in Process Table K.					
Guidance	Objective Evidence / Comments	Conforming Nonconforming NA			
Wet Analysis: Before use, chemicals must be checked for shelf life and/or expiration date	monthly inventory checks for expiration dates	conforming			
pH Meter	per calibration list	conforming			
pH Probes (must be solution compatible)	n/a	n/a			
Laboratory Balance (Weight Scale)	per calibration list	conforming			
Rectifier	n/a	n/a			
Hand Held Thermometer	per calibration list	conforming			
Temperature Controller	n/a	n/a			
Thermocouple	n/a	n/a			
Solution Mixer	n/a	n/a			
Amp Meter/Volt Meter	n/a	n/a			
Filters	per manufacure recommendation	conforming			
Conductivity Meter	per calibration list	conforming			
Conductivity Probes (must be solution compatible)	n/a	n/a			
Ultrasonic Cleaner, if applicable.	n/a	n/a			
Proceed to PT B , PT C or PT H					



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Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

If any data points at reduced monitoring frequencies are outside of control limits, then revert back to the frequencies stated under the minimum requirements.

Process Line Identification:

Process Barrel size:

	Category/Process Steps	Type of Cont	trol	Monitoring Frequency		Observation/ Comments	Job Audit M	easurements
ITEM#		Minimum Requirement	Actual Condition	Minimum Requirement	Actual Condition	Conforming Nonconforming NA	Range	Actual Measurements supporting time of Job Audit
1.0	Conversion Coating Process	both east and phospate						
C1.1	This audit requires the completion of either Table A and/or B.	NA		NA				
C1.2	If the pretreatment and conversion coating is not a continuous process, there shall be a part cleanliness check immediately before conversion coating. Acceptance criteria must be defined.	Manual	N/A - Continuous process	Every start of production cycle, change of lot number and each container.				
C1.3	Cycle time/Line speed setup is checked.	Automatic / Manual	automatic; PLC	For manual process, prior to start of production and every part change. For automated process, at the start of production and every process change.	start up / process change	conforming		
2.0	Conditioner (If Applicable)	Phospate line only						
C2.1	Pressure/Agitation	Automatic		Once every 8 hours.	automatic	conforming		
C2.2	Chemical Analysis: - Concentration - pH	Automatic / Manual		For continuous operations, once every 8 hours. Otherwise, prior to start of each production cycle.	LOG 205	conforming	8-12 ppm	11 ppm
C2.3	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic		Continuous monitoring by controller. Manually verify once every 8 hours.	LOG 205	conforming	80 deg F	80
C2.4	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)		Continuous monitoring by controller. Manually verify daily.	na/	n/a		
C2.5	Solution and tank clean out schedule is documented and followed - Desludging, weir, new make-up frequency, etc.	Manual		Per preventative maintenance program.	Per PM	conforming		



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Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

3.0	Conversion Coating Bath	both east and phospate						
C3.1	Pressure/Agitation	Automatic	automatic	Once every 8 hours.	start up / 1x per shift or 8 hr	conforming		
C3.2	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic	automatic; PLC	Continuous monitoring by controller. Manually verify once every 8 hours.	start up/ 1x per shift or 8hr	conforming	Phos bath - 200 +/- 5 deg F East Line 9B - 90 +/- 5 deg F	200 90
C3.3	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)	n/a	Continuous monitoring by controller. Manually verify daily.	n/a	n/a		
C3.4	Chemical Analysis: - Phosphate: Free Acid, Total Acid, Iron Content, pH, Accelerator (as applicable) - Non-phosphate: Concentration, pH - Chromate: Concentration, pH - Non-chrome: Concentration, pH - Black Oxide: Concentration, billing point	Automatic / Manual	manual	Once every 4 hours.	start up/ 2x per shift or every 4hr		East Line Concentration - 17 - 18.6 mils Phos FA - 2.4 - 2.2 mils	18.4 mils 2.26 mils
C3.5	Fluoride Ion Concentration in zinc phosphate (if aluminum is being coated)	Automatic / Manual	n/a	Once every 4 hours.	n/a	n/a		
C3.6	Coating Weight/Thickness	Manual	manual	Once every 8 hours.*	2x per week or per customer request	conforming		
C3.7	Crystal/Grain Size, if applicable.	Manual	manual	Per customer requirement.	n/a	n/a		
C3.8	Coverage of phosphate coating is visually inspected for streaking, uniform appearance and absence of voids.	Manual	manual	Once every 8 hours.	per load	conforming	final inspection	
C3.9	Sludge accumulation in tank.	Manual	manual	Once per day.*	start up/ 1x per shift or 8hr	conforming		
C3.10	Solution and tank clean out schedule is documented and followed - Desludging, new make-up frequency, etc.	Manual	manual	Per preventative maintenance program.	per PM	conforming		



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Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

4.0	Rinse							
C4.1	Rinse Type - Identify in comment section e.g., Flowing, Counter Flowing, Spray, Stagnant, Drag-in/out.	Automatic	automatic, immersion	NA	100%	conforming		immersion
C4.2	Water Type - Identify in comment section e.g., Municipal, Deionized (DI), Reverse Osmosis (RO).	NA	RO	NA	100%	conforming		RO
C4.3	Agitation type - Identify in comment section, if applicable. e.g., Mechanical (Describe), Air, Ultrasonic.	Automatic	aurtomatic Air	NA	100%	conforming		air
C4.4	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic	automatic; PLC	Once every 8 hours.	n/a	n/a		ambiant
C4.5	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)	na/	Continuous monitoring by controller. Manually verify daily.	n/a	n/a		
C4.6	pH, if applicable.	Manual	n/a	Once every 8 hours.*	n/a	n/a		
C4.7	Conductivity, if applicable.	Manual	manual	Once every 8 hours.*	start up / 1x per shift or 8 hr	conforming	<150 ppm	55 ppm
C4.8	Concentration, if applicable.	Manual	n/a	Once every 8 hours.*	n/a	n/a		
C4.9	Flow rate, if applicable.	Manual	n/a	Once every 8 hours.	n/a	n/a		
C4.10	Spray nozzle condition, if applicable.	Manual	n/a	Once every 8 hours.	n/a	n/a		
C4.11	Verify position of incoming water feed is near the bottom (if immersion tank)	Manual	manual	Per preventative maintenance program.	at bottom of tanks	conforming		
C4.12	Tank maintenance schedule documented and followed.	Manual	manual	Per preventative maintenance program.	PM Program	conforming		



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Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

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To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

5.0	Sealing Rinse (if applicable)							
C5.1	Pressure/Agitation	Automatic		Once every 8 hours.				
C5.2	Chemical Concentration	Automatic / Manual		Once every 8 hours.				
C5.3	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic		Once every 8 hours.				
C5.4	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)		Continuous monitoring by controller. Manually verify daily.				
C5.5	Solution and tank clean out schedule is documented and followed - Desludging, new make-up frequency, etc.	Manual		Per preventative maintenance program.				
6.0	Oil / Wax (if applicable)	Phospate line only						
C6.1	Pressure/Agitation	Automatic		Once every 8 hours.	visual	conforming		
C6.2	Chemical Analysis: Per chemical supplier recommendation such as: - Concentration - pH - Emulsion Stability - Viscosity - Total Dissolved Solids (TDS)	Manual	manual	If not used at 100% concentration, every 8 hours. If used at 100% concentration, every lot change.	LOG 210	conforming	8-12%	10%
C6.3	Solution Temperature is monitored and controlled if required by chemical supplier's technical data sheet.	Automatic	automatic	Once every 8 hours.	star up / 1x per shift or 8 hours	conforming	140 +/- 5 deg	140
C6.4	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)	n/a	Continuous monitoring by controller. Manually verify daily.	n/a	n/a		
C6.5	Solution and tank clean out schedule is documented and followed - Desludging, new make-up frequency, etc.	Manual	manual	Per preventative maintenance program.	per PM	conforming		
7.0	Dry-Off (If Applicable)	East Line Only						
C7.1	Air temperature is monitored and controlled.	Automatic	automatic	Once every 8 hours.	start up / 1x per shift or 8 hr	conforming		
C7.2	Temperature (Thermocouple)	Automatic Max SAT difference allowed +/- 5°C (10°F)	N/a	Continuous monitoring by controller. Manually verify daily.	n/a	n/a		
C7.3	There is a procedure to ensure dryness of parts prior to subsequent coating.	Visual	visual	Every change of lot number and each container.	part of final pack inspection	conforming		



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Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

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If any data points at reduced monitoring frequencies are outside of control limits, then revert back to the frequencies stated under the minimum requirements.

#### 8.0 Process Equipment

Process equipment shall be verified and calibrated per Process Table K.

Calibrations shall be certified, posted and up to date.

A system shall be used to track calibration dates of equipment.

Complete the audit for these identified elements in Process Table K.

Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
What internal system is used for conducting and managing calibration of all relevant equipment identified in Process Table K?		
Provide the document that lists all relevant equipment identified in Process Table K.		
How do you ensure calibrations are up to date?		
How do you ensure new equipment has been added to the calibration list and inactive equipment has been removed?		
Are calibration labels present and up to date for listed equipment?		
What is the reaction plan to any failed verification?		
C8.2 Barrels, baskets, process tanks, belts/conveyors, racks, fixtures and drive mechanisms shall be maintained.		
Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
How do you inspect for the integrity of the barrels, baskets, process tanks, racks, contact points, belts/conveyors and drive mechanisms?  (e.g., wear, perforations, trap points, plugged holes, door gaps, other damage)  Where are the inspection results documented?		
What is your preventative maintenance program for barrels, baskets, racks, contact points, process tanks and drive mechanism?		
What is the maintenance program for mechanical/chemical cleaning of barrels, baskets, racks, contact points and process tanks?		
How is each basket, barrel, or rack uniquely identified for tracking purposes?		



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Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

If any data points at reduced monitoring frequencies are outside of control limits, then revert back to the frequencies stated under the minimum requirements.

C8.3 All filtration equipment shall be maintained.
The organization shall have a preventative maintenance system that is documented and implemented

Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
What is the preventative maintenance program for filters?		
How is the filter type identified during use?		
If reusable filters are used, do they meet the supplier's recommendations?		
If disposable filters are used, do they meet the supplier's recommendations?		
What are your criteria for filter replacement and/or cleaning?		
What information is used to determine the required mesh size?		
How is compatibility with the process determined?		
Describe the preventive maintenance program for all solution filters to include plate, filter bag and cartridge.		
Describe the preventive maintenance program for all air filters used on ovens, dryers, chillers, blowers and fans etc.		



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Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

C8.4	All process and equipment alarms shall be tested on a quarterly basis at a minimum.  The organization shall have a preventative maintenance system that is documented and implemented.		
	Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
	the preventative maintenance program where alarms are used for solution temperature, level control, environmental faults, etc.?		
What a	e the alarms that are tested and their test frequency?		
C8.5	Processing equipment is designed/optimized for "soft handling" of parts.		
	Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
Are chu	tes lined to prevent part damage?		
What te	chnique(s) are used to minimize drop heights?		
C8.6	Part transfer equipment is maintained.		
	Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
What is	your program to assure cleanliness of belts, conveyors, chutes, vibratory tables, etc.?		
What is	your maintenance program for belts, conveyors, chutes, vibratory tables, etc.?		
C8.7	In-process and customer containers are managed and maintained.		
	Guidance	Objective Evidence / Comments	Conforming Nonconforming NA
How do	you identify and segregate in-process containers for different processes?		
What is	your maintenance program for keeping in-process containers clean and in good condition?		
	you ensure that the customer containers do not degrade the quality of the coated parts? stomer container may arrive damaged, oily, dirty)		



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Columns H and I are used for the Job Audit (Section 4).

Regularly scheduled measurements (e.g., temperature, concentrations, pH) are to be entered in the appropriate row.

For sections that are not applicable mark NA in the Comments column.

\*If minimum requirements are not met, provide supporting records to justify actual conditions.

To justify reduced monitoring frequencies, a minimum of 30 consecutive measurements (data points) at stated frequencies must be documented.

If any data points at reduced monitoring frequencies are outside of control limits, then revert back to the frequencies stated under the minimum requirements.

	9.0	Test Equipment (Process Control and Finished Part Quality)
C	9.1	Test Equipment shall be verified and calibrated per Process Table K. Calibrations shall be certified, posted and up to date. A system shall be used to track calibration dates of equipment. Complete the audit for these identified elements in Process Table K.

Guidance	Objective Evidence / Comments	Conforming Non-conforming NA
Wet Analysis: Before use, chemicals must be checked for shelf life and/or expiration date		
pH Meter		
pH Probes (must be solution compatible)		
Laboratory Balance (Weight Scale)		
Hand Held Thermometer		
Paint/Solution Mixer		
Temperature Controller		
Thermocouple		
Filters		
Conductivity Meter		
Conductivity Probes (must be solution compatible)		
Lab Oven Controller		
Salt Spray Cabinet		
Ultrasonic Cleaner		
Coefficient of Friction/Torque Tension (required for fasteners)		
Blacklight (for UV tracer identification)		
Proceed to PT D. PT E. PT F. PT G or PT H		

Proceed to PID, PIE, PIF, PIG or PIH