ISO 9001:2015 Process Control Plan (PCP) - Industry Vetted

4 Aug 2025 / Novella Veum

Complete

Score	0 / 0 (0%)	Flagged items	0	Actions	2
PCP#					000001
Site				Ur	nanswered
Conducted on				04.08.2025	13:00 PST
Prepared by				Nov	vella Veum
Location				305 N Bruce Ave, Boise (43.6112824, -116	USA
Process Name					
				Powder Coating of Stee	el Brackets
Process Owner				-	el Brackets n Delgado

Actions 2 actions

Process Control Plan / Process Overview

Process Inputs: (Materials, equipment, tools required.)

Powder coating material (RAL 7016 Anthracite Grey) Spray booth with electrostatic gun (Nordson Encore XT) Conveyor system Pre-treatment line with degreasing tank Curing oven PPE: gloves, masks, goggles



Photo 1

To do | Priority: High | Due: 05.08.2025 09:30 PST | Created by: SafetyCulture Staff

Replace dirty booth filters

Hi Norwich, please replace the dirty booth filters

Process Control Plan / Risk and Failure Mode Analysis / Risk and Failure Mode Analysis 1

Mitigation activities

Weekly gun calibration using manufacturer's test block Operator training refresher every 6 months Preventive action label: PC_LABEL_COATCAL

To do | Priority: Low | Due: 06.08.2025 13:00 PST | Created by: SafetyCulture Staff

Schedule monthly calibration and include in CMMS asset register

Hi Tess, please finalize the schedule for monthly calibration and include in CMMS asset register. Thanks

Process Control Plan 2 actions

Process Overview 1 action

Process Description: (Briefly describe the process and its purpose.)

Powder coating is an electrostatic finishing process where a dry powder is applied to metal brackets and cured under heat to form a protective, decorative finish. The process enhances durability, corrosion resistance, and aesthetic appeal.

Applicable Standards/Procedures: (List relevant ISO, ASTM, ASME, or internal procedures.)

ISO 9001:2015 – Quality Management Systems ASTM D3359 – Standard Test Methods for Adhesion ASTM D3363 – Film Hardness (Pencil Method) Internal WI-PC-007 – Powder Coating Work Instructions SOP-MAINT-003 – Spray Gun Maintenance Procedure

Process Inputs: (Materials, equipment, tools required.)

Powder coating material (RAL 7016 Anthracite Grey)
Spray booth with electrostatic gun (Nordson Encore XT)
Conveyor system
Pre-treatment line with degreasing tank
Curing oven
PPE: gloves, masks, goggles



Photo 1

To do | Priority: High | Due: 05.08.2025 09:30 PST | Created by: SafetyCulture Staff

Replace dirty booth filters

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Process Outputs: (Final product, service, or result.)

Coated steel brackets with uniform, defect-free finish , and coating thickness report

Process	Control	Details

Process Control Details 1

Process step	Electrostatic powder application
Process parameters	Spray voltage (60–90 kV), gun distance (20–25 cm), ambient humidity
Specification/Tolerance	Coating thickness 60–80 µm

Control method	Digital coating thickness gauge (PosiTector 6000)		
Measurement frequency	First piece + every 10th bracket		
Responsible party	Coating Technician		
Reaction plan (if out of spec)	Adjust gun distance/voltage, retest thickness, quarantine affected parts		
Risk and Failure Mode Analysis	1 action		
Risk and Failure Mode Analysis 1	1 action		
Create preventive action items with the Process Control label			
Process risk	Uneven coating thickness due to operator error or poor gun calibration		
Mitigation activities Weekly gun calibration using manufacturer's test block Operator training refresher every 6 months Preventive action label: PC_LABEL_COATCAL To do Priority: Low Due: 06.08.2025 13:00 PST Created by	: SafetyCulture Staff		
Schedule monthly calibration and include in CMMS asset register Hi Tess, please finalize the schedule for monthly calibration and include in CMMS asset register. Thanks			
Control & Monitoring Methods			
In-Process Inspections: (List checkpoints during the process.) Coating coverage visual inspection after spray Thickness test on the first and every 10th part Oven temp monitoring during curing			
Final Inspection Criteria: (List acceptance criteria before release.)	See attached list of final inspection criteria.		
Final Inspection Criteria.pdf			
Testing Requirements: (List any required tests—NDT, functional, dimensional.)	See attached list of testing requirements.		

Preventive Maintenance Requirements: (List equipment checks, calibrations, and schedules.)

Testing Requirements.pdf

See attached list of maintenance requirements.

Maintenance Requirements.pdf

Create an asset and corresponding action items and inspection schedules for all calibrations, registrations and checks.

Documentation & Record Keeping

Documentation & Record Keeping 1

Process control records

Coating thickness reports

Storage & retention requirements

Digital format in QMS for 7 years

Responsible party

Quality Control Supervisor

Frequency

Weekly

Documentation & Record Keeping 2

Process control records

Equipment maintenance logs

Storage & retention requirements

Digital format in QMS for 7 years

Responsible party

Quality Control Supervisor

Frequency

Weekly

Ensure that maintenance logs are scanned weekly to prevent backlog during audits.

Approvals

Reviewed by

Kory Stark

Kory Stark 06.08.2025 08:13 PST

Please see my observations.

Kory Stark Notes.pdf

Approved by

Gregory Bins

Gregory Bins 06.08.2025 08:14 PST

Gregory Bins Feedback.pdf

Media summary



Photo 1

File summary

Final Inspection Criteria.pdf
Testing Requirements.pdf
Maintenance Requirements.pdf
Kory Stark Notes.pdf
Gregory Bins Feedback.pdf