FMEA Template

Manufacturing Process / 4 May 2023 / Arlene Nelson

Complete

Score	**92.67%**	Flagged items	**0**	Actions	**2**

Product/Process Name	Manufacturing Process
Location	Birmingham, AL 35222, USA (33.5251664, -86.7667756)
Prepared by	Arlene Nelson
Conducted on	04.05.2023 19:53 PST

Actions

2 actions

Inspection / Failure Modes and Effects Analysis / FUNCTION / FUNCTION 1

Potential Failure Mode

Dirty sixups

To Do | Priority **High** | Due **12.05.2023 17:00 PST** | Created by **SafetyCulture Staff**

Clean fixtures before loading

Use the SafetyCulture app to schedule daily cleaning inspection of fixtures for less particulates and higher yields.

Inspection / Failure Modes and Effects Analysis / FUNCTION / FUNCTION 2

Potential Failure Mode

Overspray from the bottom gun settling on unpainted parts

To Do | Priority **High** | Due **12.05.2023 17:30 PST** | Created by **SafetyCulture Staff**

Orient bottom gun last

Instead of using ineffective pen and paper setup sheet, we should start doing our tools and equipment check using SafetyCulture. We can take photos as proof that we inspected everything before using them and increase productivity.

Inspection 2 actions, 92.67%

Failure Modes and Effects Analysis

2 actions, 92.67%

Specify the function (process step or input)

FUNCTION

2 actions, 92.67%

FUNCTION 1

1 action, 100%

Function

Fixture cleanliness for loading

Potential Failure Mode

Dirty sixups

To Do | Priority High | Due 12.05.2023 17:00 PST | Created by SafetyCulture Staff

Clean fixtures before loading

Use the SafetyCulture app to schedule daily cleaning inspection of fixtures for less particulates and higher yields.

Potential Failure Effect

High particulates, lower yields

Severity Rating **10**
From 0 to 10

Potential Cause

Not cleaned often enough

Occurrence Rating **10**
From 0 to 10

Current Controls

None

Detection Rating **10**
From 0 to 10

RPN 1000

FUNCTION 2

1 action, 100%

Function

Orientation of gun sets

Potential Failure Mode

Overspray from the bottom gun settling on unpainted parts

To Do | Priority High | Due 12.05.2023 17:30 PST | Created by SafetyCulture Staff

Orient bottom gun last

Instead of using ineffective pen and paper setup sheet, we should start doing our tools and equipment check using SafetyCulture. We can take photos as proof that we inspected everything before using them and increase productivity.

Potential Failure Effect

High particulates, lower yields

Severity Rating **10**
From 0 to 10

Potential Cause

Bottom gun is oriented first instead of last

Occurrence Rating **10**
From 0 to 10

Current Controls

Setup sheet

Detection Rating **10**
From 0 to 10

RPN 1000

FUNCTION 3 93.33%

Function

Booth dynamics and cleanliness for paint application

Potential Failure Mode

Increased airborne contamination

Potential Failure Effect

Higher than normal particulate scrap at the start

Severity Rating **8**
From 0 to 10

Potential Cause

Unstable process, needs to reach equilibrium

Occurrence Rating	**10** From 0 to 10
Current Controls	
None	
Detection Rating	**10** From 0 to 10
RPN	800
FUNCTION 4	86.67%
Function	
Gun setup by operator	
Potential Failure Mode	
Inadequate preventive maintenance	
Potential Failure Effect	
Lower transfer efficiency, higher costs	
Severity Rating	**9** From 0 to 10
Potential Cause	
Poor discipline or adherence to procedures	
Occurrence Rating	**7** From 0 to 10
Current Controls	
Maintenance log	
Detection Rating	**10** From 0 to 10
RPN	630
FUNCTION 5	83.33%
Function	
Paint removal filter for basecoat	
Potential Failure Mode	
Improperly sized	

Potential Failure Effect

Create particulates

Severity Rating 8
From 0 to 10

Potential Cause

Improper specification

Occurrence Rating 7
From 0 to 10

Current Controls

None

Detection Rating 10
From 0 to 10

RPN 560

Completion

Full Name and Signature of Facilitator

Arlene Nelson (Process Improvement)
04.05.2023 19:59 PST

FMEA Team

MEMBER

MEMBER 1

Full Name and Signature of Team Member

Marco Bernal (Quality Assurance)
04.05.2023 19:59 PST

MEMBER 2

Full Name and Signature of Team Member

Pearl Deercove (Product Design)
04.05.2023 20:00 PST

MEMBER 3

Full Name and Signature of Team Member

Leonard Mulberry (Manufacturing)
04.05.2023 20:00 PST