

## Defect Details

<b>NC No.</b>	7000842723
<b>NC Date</b>	17/06/2022
<b>NC Submission Date</b>	
<b>Part No.</b>	53BHT00807
<b>Part Name</b>	OUTER SPRING POWDER COATED-VAVE
<b>Supplier Name &amp; Code</b>	101048-STUMPP SCHUELE AND SOMAPPA SPR
<b>ETL Plant</b>	1136-ETL Suspension Sanand
<b>Defect Details</b>	POWDER COATING NOT OK-Powder coating Defects .

## 1. Problem Description

<b>Defect Description</b>	Powder coating Defects like White Spot, Heavy Hanger Marke, Pin Hole, Paint Uncover & Dry etc.
<b>Detection Stage</b>	Receipt
<b>Problem Severity</b>	Aesthetic
<b>NG Quantity</b>	271
<b>Is Defect Repeatative?</b>	No
<b>Defect Sketch / Photo</b>	

## Supplier Communication Details

<b>Quality Head Email ID</b>	vipin.shukla@ssssprings.com
<b>Plant Head/CEO Email ID</b>	udham.singh@ssssprings.com
<b>MD Email ID</b>	rln@ssssprings.com

## 2. Stock Details &amp; action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
<b>Total Qty</b>	1120	0	0	1120	0	2240
<b>Check Qty</b>	1120	0	0	1120	0	2240
<b>NG Qty</b>	8	0	0	0	0	8

## Action taken on NG part

<b>Scrap</b>	8
<b>Rework</b>	0
<b>Under Deviation</b>	0

## Containment Action

100% Visual Inspection

## 3. Process Flow

## Process Flow Description

Receipt & inspection - Storage of material - Winding - Stress Relieving-1 - Grinding - Shot peening - Stress Relieving-2 - Scragging - Length,e1,e2 sorting - powder coating - Final inspection - Packing

## 4. Process Details

<b>Process / Operation</b>	Powder Coating
<b>Outsource</b>	No
<b>Machine / Cell</b>	PC Line
<b>Machine / Cell No.</b>	Powder Coating

## 5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Tool	improper handling of the parts	Verified and found that parts fall down during hanging process and got dust accumulated	X
Method	OK and NG parts mix up during inspection	Inspected OK parts and Parts pending for inspection got mix up	X
Material	parts not cleaned during PT process	Process verified and found satisfactory PT process	O
Man	Unskilled person deputed for powder coated springs	Verified the skill level of the inspector and found OK	O
Machine	Powder coating gun parameters not as per specification	Verified all the machine parameters & found within specification	O

## 6. Inspection Method Analysis (Current)

<b>Inspection Method</b>	Other
<b>Other Inspection Method</b>	Visual inspection
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	100%
<b>Sampling</b>	No
<b>Sample Size</b>	100%

## 7. Root Cause Analysis (Occurance)

<b>Why 1</b>	Problem occurred during powder coating process.
<b>Why 2</b>	Dust accumulation during process
<b>Why 3</b>	Few parts dropped down while loading/hanging to hangers & loaded again without cleaning.
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Occurance)</b>	Few parts dropped down while loading/hanging to hangers & loaded again without cleaning.

## Root Cause Analysis (Outflow)

<b>Why 1</b>	Defective part escaped through inspection
<b>Why 2</b>	NG parts mixed up with OK parts.
<b>Why 3</b>	Inspected OK parts and parts pending for inspection got mix up
<b>Why 4</b>	
<b>Why 5</b>	

**Root Cause (Outflow)**

Inspected OK parts and parts pending for inspection got mix up

**8. Countermeasure ( Occurrence , Outflow & System side Actions )**

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Design of the hangers modified to avoid the fall of spring during hanging process	Mr Shashank	23/06/2022		Pending
Outflow	Separator provided at inspection table to avoid the mix up of "Inspection finished parts" and "parts pending for inspection"	Mr. Shashank	22/06/2022		Pending

**9. Inspection Method After Customer Complaint**

<b>Change In Inspection System</b>	Yes
<b>Change Details</b>	Separator provided at inspection table to avoid the mix up of "Inspection finished parts" and "parts pending for inspection"
<b>Inspection Method</b>	Pokayoke
<b>Other Inspection Method</b>	
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	100%
<b>Sampling</b>	No
<b>Sample Size</b>	100%

**10. Evidence of Countermeasure**

<b>Occurance (Before)</b>	No work instruction found for the treatment of fallen parts during hanging of springs during powder coating process <a href="#">181_Occurance_Before.pdf</a>
<b>Occurance (After)</b>	Work instruction revised for the instructions on treatment of fallen parts <a href="#">181_Occurance_After.pdf</a>
<b>Outflow (Before)</b>	Inspection finished parts and Inspection pending parts were kept together without separator. <a href="#">181_Outflow_Before.png</a>
<b>Outflow (After)</b>	Separator provided to avoid accumulation at inspection table for the inspected parts and inspection pending parts <a href="#">181_Outflow_After.png</a>

**11. Horizontal Deployment**

<b>Horizontal Deployment Required</b>	Yes
<b>Applicable Machine / Model / Plant</b>	Horizontal deployment for Occurrence and Outflow actions for all OC springs

**12. Document Review**

<b>Documents</b>	WISOP
<b>Specify Other Document</b>	No

**13. Effectiveness Of Action**

<b>Reviewed Quantity</b>	
<b>Reason for submission</b>	