

## Defect Details

<b>NC No.</b>	8000802401
<b>NC Date</b>	31/08/2022
<b>NC Submission Date</b>	
<b>Part No.</b>	S2HT11807B
<b>Part Name</b>	OUTER SPRING _B104 E
<b>Supplier Name &amp; Code</b>	101225-HELICAL SPRINGS
<b>ETL Plant</b>	1118-ETL E-92,93 Suspension
<b>Defect Details</b>	POWDER COATING NOT OK-P.COATING ROUGHNESS&SHSDE VERACTION

## 1. Problem Description

<b>Defect Description</b>	Powder coating Uncover & shade variation due to Over backing
<b>Detection Stage</b>	Receipt
<b>Problem Severity</b>	Aesthetic
<b>NG Quantity</b>	190
<b>Is Defect Repeatative?</b>	Yes
<b>Defect Sketch / Photo</b>	

## Supplier Communication Details

<b>Quality Head Email ID</b>	ravindra@helicalsprings.in
<b>Plant Head/CEO Email ID</b>	shaikhmoin@helicalsprings.in
<b>MD Email ID</b>	ataneja@helicalsprings.in

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
<b>Total Qty</b>	1500	0	0	0	2000	3500
<b>Check Qty</b>	1500	0	0	0	2000	3500
<b>NG Qty</b>	190	0	0	0	0	190

## Action taken on NG part

<b>Scrap</b>	0
<b>Rework</b>	190
<b>Under Deviation</b>	0

## Containment Action

Check all material ETL end & helical end.

## 3. Process Flow

**Process Flow Description**

Raw Material Receipt & Inspection > Coiling > Stress Relieving > End Grinding > Shot Peening > Scragging > ID, Length & Angle checking > Surface Finish- Powder Coating > Final Inspection/ PDI > Packing > Dispatch

**4. Process Details**

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

**5. Problem Analysis**

Type	Possible Cause	Fact Verification	Jud
Machine	Machine check Sheet not followed	CLIT verified found Ok	O
Method	Improper Material handling	Material handling done as per process verified found ok	O
Man	unskilled Operator	Skill matrix checked found ok	O
Material	Material Grade	RMTC verified found ok	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>	1000/19

**7. Root Cause Analysis (Occurance)**

<b>Why 1</b>	Powder Coating Shade Varication
<b>Why 2</b>	Imbalance mixing ratio of fresh & recycle powder
<b>Why 3</b>	
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Occurance)</b>	Imbalance mixing ratio of fresh & recycle powder

**Root Cause Analysis (Outflow)**

<b>Why 1</b>	Powder Coating Shade varicaton
<b>Why 2</b>	PDIR done sampling basis
<b>Why 3</b>	Not Detect in sampling
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Outflow)</b>	Not Detect in sampling

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Mixing ratio of fresh & recycle powder defined: 80 - 20 %	Mr. Narayan Shedute	30/09/2022	14/09/2022	Completed
Outflow	Master samples & panels made	Mr.Anuj Shelke	30/09/2022	14/09/2022	Completed

## 9. Inspection Method After Customer Complaint

<b>Change In Inspection System</b>	Yes
<b>Change Details</b>	100% inspection done before dispatch.
<b>Inspection Method</b>	Other
<b>Other Inspection Method</b>	Visual Inspection
<b>Check Point at Final Inspection</b>	No
<b>Checking Freq.</b>	100%
<b>Sampling</b>	No
<b>Sample Size</b>	1000/25

## 10. Evidence of Countermeasure

<b>Occurance (Before)</b>	Mixing ratio of fresh & recycle powder was 70- 30 % <a href="#">236_Occurance_Before.pdf</a>
<b>Occurance (After)</b>	Mixing ratio of fresh & recycle powder defined: 80 - 20 % <a href="#">236_Occurance_After.pdf</a>
<b>Outflow (Before)</b>	Criteria was not defined for shade <a href="#">236_Outflow_Before.pdf</a>
<b>Outflow (After)</b>	Master samples & panels made <a href="#">236_Outflow_After.pdf</a>

## 11. Horizontal Deployment

<b>Horizontal Deployment Required</b>	No
<b>Applicable Machine / Model / Plant</b>	B104 Outer & B106 Big (Brass Gold Coated Part only.)

## 12. Document Review

<b>Documents</b>	WISOP
<b>Specify Other Document</b>	OPL

## 13. Effectiveness Of Action

<b>Reviewed Quantity</b>	1000
<b>Reason for submission</b>	No Defect reported