### QFR No - 8000826277

### Defect Details

NC No.	8000826277
NC Date	14/04/2023
NC Submission Date	
Part No.	S2HT11707B
Part Name	OUTER SPRING POWDER COATED
Supplier Name & Code	101225-HELICAL SPRINGS
ETL Plant	1118-ETL E-92,93 Suspension
Defect Details	BEND-BEND

# 1. Problem Description

Defect Description	Taper Coil Observed Bend
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	264
Is Defect Repeatative?	No
Defect Sketch / Photo	

# Supplier Communication Details

Quality Head Email ID	amitpatel.24@rediffmail.com
Plant Head/CEO Email ID	shaikhmoin@helicalsprings.in
MD Email ID	ataneja@helicalsprings.in

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	14160	0	0	0	300	14460
Check Qty	14160	0	0	0	300	14460
NG Qty	395	0	0	0	0	395

## Action taken on NG part

Scrap	395
Rework	0
Under Deviation	0

100% Segregation done	

Process Flow Description		
As per PFD		

#### 4. Process Details

Process / Operation	Coling
Outsource	No
Machine / Cell	
Machine / Cell No.	

### 5. Problem Analysis

Туре	Possible Cause	Fact Verification	Jud
Method	No concentricity check at coiling	No method to check concentricity at coiling	0

## 6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	VIsual
Check Point at Final Inspection	No
Checking Freq.	100%
Sampling	No
Sample Size	100

## 7. Root Cause Analysis (Occurance)

Why 1	Spring bend at small ID side
Why 2	Taper coil at small ID shift
Why 3	Concentricity of spring ID not Ok
Why 4	Concentricity approved by visual Check
Why 5	No Concentricity Gauge Defined at coiling
Root Cause (Occurance)	No Concentricity Gauge Defined at coiling

### Root Cause Analysis (Outflow)

Why 1	Bend Spring Not arrested in inspection
Why 2	No Check point of Spring Concentricity.
Why 3	
Why 4	
Why 5	
Root Cause (Outflow)	No Check point of Spring Concentricity.

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

Туре	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	Concentricity Checking Gauge during Dock Audit	AP	14/04/2023	14/04/2023	Completed

Occurance	Concentricity Checking Gauge introduced at coiling	NK	14/04/2023	17/04/2023	Completed
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# 9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Concentricity Checking Gauge during Dock Audit
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	5

### 10. Evidance of Countermeasure

Occurance (Before)	No Gauge introduced before 412_Occurance_Before.pdf
Occurance (After)	Concentricity gauge Introduced 412_Occurance_After.pdf
Outflow (Before)	No Gauge introduced before 412_Outflow_Before.pdf
Outflow (After)	Concentricity gauge Introduced 412_Outflow_After.pdf

## 11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	K1 Old

#### 12. Document Review

Documents	PFMEA, WISOP, InspCheckSheet
Specify Other Document	OPL

### 13. Effectiveness Of Action

Reviewed Quantity	1000
Reason for submission	No Defect Reported after Action