

## Defect Details

<b>NC No.</b>	7000851996
<b>NC Date</b>	27/07/2022
<b>NC Submission Date</b>	
<b>Part No.</b>	S2KH01502B
<b>Part Name</b>	REBOUND SPRING K55G
<b>Supplier Name &amp; Code</b>	100185-HELICAL SPRINGS
<b>ETL Plant</b>	1136-ETL Suspension Sanand
<b>Defect Details</b>	SHARP EDGE & BURR-sharp Edge at end coil Id

## 1. Problem Description

<b>Defect Description</b>	Sharp edge at end coil cutting edge towards ID
<b>Detection Stage</b>	Receipt
<b>Problem Severity</b>	Function
<b>NG Quantity</b>	1384
<b>Is Defect Repeatative?</b>	No
<b>Defect Sketch / Photo</b>	

## Supplier Communication Details

<b>Quality Head Email ID</b>	Prabhat@helicalsprings.in
<b>Plant Head/CEO Email ID</b>	awadhwa@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>	20000	15000	0	10000	0	45000
<b>Check Qty</b>	20000	15000	0	10000	0	45000
<b>NG Qty</b>	1384	0	0	0	0	1384

## Action taken on NG part

<b>Scrap</b>	1384
<b>Rework</b>	0
<b>Under Deviation</b>	0

## Containment Action

Segregation of these material at customer end and our end.

## 3. Process Flow

## Process Flow Description

R/M Inspection->Coiling->SR-1->Grinding->Shot peening->SR-2->Final Inspection-> Packing /Despatch

## 4. Process Details

<b>Process / Operation</b>	Coiling
<b>Outsource</b>	No
<b>Machine / Cell</b>	Coiling Machine
<b>Machine / Cell No.</b>	HTC-45B

## 5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Competency level less	verify the skill matrix , competency level 4	O
Machine	Setting problem	Verify the Set-up report found ok	O
Material	wire grade Ng	verify the setup report found ok	O
Method	checking method	verify the defect monitoring sheet	O
Tool	Shearing tool blunt	tool history card	X

## 6. Inspection Method Analysis (Current)

<b>Inspection Method</b>	Gauge
<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>	0

## 7. Root Cause Analysis (Occurance)

<b>Why 1</b>	Sharp edge at the End Coil ID
<b>Why 2</b>	During Coiling mandrel was blunt.
<b>Why 3</b>	Operator was not check the mandrel Before completion of 50000 cycle.
<b>Why 4</b>	Mandrel Checking frequency was define 50000 cycle to cut spring after completion of 50,000 cycle than operator was checked the mandrel.
<b>Why 5</b>	
<b>Root Cause (Occurance)</b>	After simulation , during run the machine Observed the mandrel , mandrel was blunt before completion 50000 cycle. but here mandrel checking frequency define after completion of 50000 cycle.

## Root Cause Analysis (Outflow)

<b>Why 1</b>	Sharp edge at the End Coil ID
<b>Why 2</b>	This type of defect inspector did not capture.
<b>Why 3</b>	Inspector was semi skilled .
<b>Why 4</b>	
<b>Why 5</b>	

<b>Root Cause (Outflow)</b>	After simulation observed the inspector negligence.
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## 8. Countermeasure ( Occurrence , Outflow & System side Actions )

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Provided the training all concern person.	Arunesh	29/07/2022		Completed
Outflow	Depute the skilled person	Bharat	01/08/2022		Completed
Outflow	Poison test organised	Bharat	03/08/2022		Inprocess
Occurance	Revised the mandril frequency. 50000 replace to 40000.	Sumer	01/08/2022		Completed
Occurance	Displayed the Quality alert .	Bharat	29/07/2022		Completed

## 9. Inspection Method After Customer Complaint

<b>Change In Inspection System</b>	No
<b>Change Details</b>	no
<b>Inspection Method</b>	Other
<b>Other Inspection Method</b>	Visual
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	100%
<b>Sampling</b>	No
<b>Sample Size</b>	0

## 10. Evidance of Countermeasure

<b>Occurance (Before)</b>	Tool history card before customer complaint <a href="#">210_Occurance_Before.jpg</a>
<b>Occurance (After)</b>	Tool history card after complaint. <a href="#">210_Occurance_After.jpg</a>
<b>Outflow (Before)</b>	Was not fix the inspector <a href="#">210_Outflow_Before.pptx</a>
<b>Outflow (After)</b>	Fix the operator <a href="#">210_Outflow_After.pptx</a>

## 11. Horizontal Deployment

<b>Horizontal Deployment Required</b>	Yes
<b>Applicable Machine / Model / Plant</b>	poison test monthly plan for critical parameter and customer complaint defect.

## 12. Document Review

<b>Documents</b>	PFMEA
<b>Specify Other Document</b>	NO

### 13. Effectiveness Of Action

Reviewed Quantity	
Reason for submission	