QFR No - 7001018333

Defect Details

NC No.	7001018333
NC Date	29/05/2024
NC Submission Date	
Part No.	F1GN01102B
Part Name	MAIN SPRING K86A
Supplier Name & Code	100186-SAGAR SPRINGS PRIVATE LIMITED
ETL Plant	1136-ETL Suspension Sanand
Defect Details	THICKNESS UNDERSIZE-End coil tip thickness undersize

1. Problem Description

Defect Description	End coil thickness found 0.5 mm against specification 0.8 mm (Min).
Detection Stage	Receipt
Problem Severity	Function
NG Quantity	4000
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality@sagarsprings.com
Plant Head/CEO Email ID	ajai.singh@sagarsprings.com
MD Email ID	sagar@sagarsprings.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	8000	0	0	2000	0	10000
Check Qty	8000	0	0	2000	0	10000
NG Qty	4000	0	0	100	0	4100

Action taken on NG part

Scrap	4100
Rework	0
Under Deviation	0

Containment Action
Scrap

3. Process Flow

Process Flow Description
COILING,TEMPRING,GRINDING.,SHOT PEENING ,2ND TEMPRING,WAVINESS

4. Process Details

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

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Unksilled operator not set machine properly and check it properly result in togeneration of rejecti	Found operator deputed are well understood of grinidng process and deffect itcause and counter meas	O
Material	Wrong grade wheel result on grinding performance	Check the grade of wheel used ie ceramic wheel	O
Method	Faulty program will result into more feed, full grinding, less grinding or tapergrinding in some ca	Check the program used for grinding it was found OK	O
Method	Grinding angle more	Grinding angle found 300-350deg and tip thickness found less than 0.80 mm	X

6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	Sampling
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	Sample Pla

7. Root Cause Analysis (Occurance)

Why 1	Grinding angle more
Why 2	Grinding angle measures 300° to 350° against specification 320° minimum
Why 3	Grinding angle maintained at higher band causing thickness less
Why 4	
Why 5	
Root Cause (Occurance)	Grinding angle maintained at higher band (300° to 350°) causing thickness less

Root Cause Analysis (Outflow)

Why 1	Tip thickness less
Why 2	Inspection done on sampling basis
Why 3	
Why 4	
Why 5	
Root Cause (Outflow)	Inspection done on sampling basis

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	At grinding stage grinding angle will be maintained 320deg minimum to maintain tip thickness more than 0.80mm	VDP	01/06/2024	01/06/2024	Completed
Outflow	100% Visual inspection started for grinding angle at grinding stage	VDP	01/06/2024	01/06/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	No
Change Details	No Change
Inspection Method	Other
Other Inspection Method	100% Visual Inspecti
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	sample Pla

10. Evidance of Countermeasure

Occurance (Before)	Grinding Angle 300° to 350° 826_Occurance_Before.pdf
Occurance (After)	Grinding Angle 320° minimum tip thickness more than 0.80 mm 826_Occurance_After.pdf
Outflow (Before)	Sampling Inspection at Grinding stage 826_Outflow_Before.pdf
Outflow (After)	100% Visual Inspection at Grinding stage 826_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	This action is applicable for this spring only.

12. Document Review

Documents	ControlPlan, PFMEA
Specify Other Document	In process Inspectio

13. Effectiveness Of Action

Reviewed Quantity	5
Reason for submission	Tip thickness found less against specified 0.8 mm min.