QFR No - 8000788086

Defect Details

NC No.	8000788086
NC Date	19/05/2022
NC Submission Date	
Part No.	C3MD00402B
Part Name	COMPRESSION SPRING 64kg
Supplier Name & Code	100185-HELICAL SPRINGS
ETL Plant	1132-ETL K-226/1 TRANSMISSION
Defect Details	MISSMATCH-WIRE DIA OBS 1.78 AGAINST 1.90+/-0.03MM

1. Problem Description

Defect Description	Wire dia observed 1.78 against 1.90+/-0.03 mm
Detection Stage	Inprocess
Problem Severity	Function
NG Quantity	1
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	Prabhat@helicalsprings.in
Plant Head/CEO Email ID	awadhwa@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	0	0	0	18000	0	18000
Check Qty	0	0	0	5000	0	5000
NG Qty	0	0	0	2	0	2

Action taken on NG part

Scrap	2
Rework	0
Under Deviation	0

Containment Action
Segregation of material at helical end found no part NG

3. Process Flow

Process Flow Description
RM->COILING->SR1->GRINDING->SHOT -PEENING->SR2->FINAL INSPECTION->SURFACE FINISHING(OILING)->DESPATCH\PACKING

4. Process Details

Process / Operation	PACKING\DESPATCH
Outsource	No
Machine / Cell	NONE
Machine / Cell No.	NONE

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	NEW OPERATOR	NO NEW MANPOER.ALL MANPOWER MIN. 2 YEAR EXPERIENCED	O
Method	ERROR IN INSPECTION	WIRE DIA CHECK AT COILING STATION FOUND OK	O
Method	SIMILIAR PART MIXUP	LEF OUT PART OF WIRE DIA 1.90 STORE IN RACK AND 1.8 WIRE DIA IS ALSO STORE	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	10

7. Root Cause Analysis (Occurance)

Why 1	Wire dia 1.80 mm AGAINST 1.90MM (MIX-UP)
Why 2	Different model Spring got mixed up during packing
Why 3	Both springs are same in Geometrically
Why 4	unidentified other model (left out parts) loose springs packed during packing.
Why 5	All model Springs left out parts are store in single racks
Root Cause (Occurance)	unidentified other model (left out parts) loose springs packed during packing.

Root Cause Analysis (Outflow)

Why 1	Wire dia 1.80 mm AGAINST 1.90MM (MIX-UP)
Why 2	Wrong model mix -up
Why 3	Could not detect during sampling inspection
Why 4	
Why 5	
Root Cause (Outflow)	Could not detected in sampling plan

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	1. Training given to oiling and packing person for how to handle the loose springs. 2.)Separate packing station to be defined for both the parts.(Under discussion) 3.) Diffrent Loaction is defiend to store the bothe parts (Under discussion) 4.) Display Similar parts list	Arunesh	31/05/2022	30/05/2022	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	No
Change Details	no change is inspection method
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	20

10. Evidance of Countermeasure

Occurance (Before)	location not defined 129_Occurance_Before.jpg
Occurance (After)	location defined 129_Occurance_After.jpg
Outflow (Before)	wire dia not checking at final inspection 129_Outflow_Before.jpg
Outflow (After)	wire dia checking at final inspection as per sampling 129_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	similar part matrix displayed

12. Document Review

Documents	PFMEA
Specify Other Document	Work instruction

13. Effectiveness Of Action

Reviewed Quantity	50000
Reason for submission	Inspection side action not full proof need 100% inspection for ID to catch wire dia variation