QFR No - 8000785257

Defect Details

NC No.	8000785257
NC Date	25/04/2022
NC Submission Date	
Part No.	S2HS21103B
Part Name	OUTER TUBE PLATED K3 NEW
Supplier Name & Code	101273-SAPTAGIRI ENGINEERING PRIVATE
ETL Plant	1118-ETL E-92,93 Suspension
Defect Details	PLATING NOT OK-PLATING PEEL OFF

1. Problem Description

Defect Description	Outer Tube K3 Model Plating peel off issue
Detection Stage	Inprocess
Problem Severity	Aesthetic
NG Quantity	177
Is Defect Repeatative?	No
Defect Sketch / Photo	nda0pbc12ahfych2ukeoeucg.png

Supplier Communication Details

Quality Head Email ID	quality@saptagirigroup.in
Plant Head/CEO Email ID	production@saptagirigroup.in
MD Email ID	

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	5000	0	0	2545	0	7545
Check Qty	5000	0	0	2545	0	7545
NG Qty	1089	0	0	3	0	1092

Action taken on NG part

Scrap	3
Rework	0
Under Deviation	0

Containment Action
We have checked available stock at ETL end

3. Process Flow

Process Flow Description
Raw Material Inward (CEW Tube),Tube Cutting & O.D. Chamfering, Both side I.D. Chamfering ,Forming,CNC Machining,Marking,Buffing,Plating,100% Thread Inspection

4. Process Details

Process / Operation	Plating
Outsource	No
Machine / Cell	Plating
Machine / Cell No.	Line-1

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	Maintain pH of water rinse bath before nickel plating	Low pH of water rinse bath before nickel plating	O

6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	Bend test
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	4

7. Root Cause Analysis (Occurance)

Why 1	peel off in outer tube
Why 2	Outer tube passivate in water rinse after acid dip
Why 3	Low pH of water rinse bath before nickel plating
Why 4	Carryover of acid dip solution to next water rinse
Why 5	Higher concentration of acid dip bath resulted into higher concentrated solution of next bath (i.e. water rinse
Root Cause (Occurance)	Component get passivate due to dipped in High concentrated water rinse bath which is after acid dip.

Root Cause Analysis (Outflow)

Why 1	peel off in outer tube
Why 2	Bend test checking sampling plan less
Why 3	During bend test not detect
Why 4	
Why 5	
Root Cause (Outflow)	During bend test not detect

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status

Outflow	One sample was tested for bend test now we have started 4 nos sample bend test per day.	QA	20/04/2022	20/04/2022	Completed
Occurance	Weekly PM of water rinse bath (Stage no. 17) changed to thrice in a week (i.e. on second day of running condition)	QA / Production	19/04/2022	20/04/2022	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100% file test monitoring to be done for plated Outer Tube.
Inspection Method	Other
Other Inspection Method	Sampling increase
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	4 per day

10. Evidance of Countermeasure

Occurance (Before)	Weekly PM of water rinse bath (Stage no. 17) 66_Occurance_Before.pptx
Occurance (After)	PM of water rinse bath (Stage no. 17) changed to thrice in a week (i.e. on second day of running condition) 66_Occurance_After.pdf
Outflow (Before)	One sample was tested for bend test 66_Outflow_Before.pdf
Outflow (After)	now we have started 4 nos sample bend test per day. 66_Outflow_After.pptx

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All Plated outer tube

12. Document Review

Documents	ControlPlan, PMCheckSheet, WISOP
Specify Other Document	No

13. Effectiveness Of Action

Reviewed Quantity	2000
Reason for submission	Plating peel off on Outer Tube