QFR No - 7000933342

Defect Details

NC No.	7000933342
NC Date	28/07/2023
NC Submission Date	
Part No.	F2DZ08810B
Part Name	K0PG FORK BOLT
Supplier Name & Code	101037-SHREE PATEL INDUSTRIES
ETL Plant	1136-ETL Suspension Sanand
Defect Details	RUSTY-White rust

1. Problem Description

Defect Description	Rust
Detection Stage	Receipt
Problem Severity	Aesthetic
NG Quantity	450
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality_spi@rediffmail.com
Plant Head/CEO Email ID	planthead_spi@rediffmail.com
MD Email ID	rspatel_spi@rediffmail.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	4480	0	0	0	0	4480
Check Qty	4480	0	0	0	0	4480
NG Qty	450	0	0	0	0	450

Action taken on NG part

Scrap	450
Rework	0
Under Deviation	0

Containment Action
All suspected part checked and rejected part scraped.

3. Process Flow

Process Flow Description
10. Incoming RM 20. Traub Turning 30. CNC 1st set up 40. CNC 2nd set up 50. Plating 60. Inspection 70. Packing & Dispatch

4. Process Details

Process / Operation	Plating
Outsource	No
Machine / Cell	Plating Tank
Machine / Cell No.	Tank No.1

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Machine	Passivation bath tank	During process verification passivation bath tank capacity found ok .	O
Man	Unskilled Helper	Skill matrix verified and all the operators and helper found on required level 2 and level 3.	O
Machine	Current fluctuations of rectifier	No any current flucations during the process visit and last month recorded data verified for curren	O
Machine	Working on low temperature	Temperature monitoring data verified and found ok	O
Material	Plating Passivation	During process verification plating passivation pH found ok	O
Method	Material Handling	During process verification, input and output of parts storage is proper and handle done as per def	O
Method	Improper method of drying after plating	Manual drying procedure not properly maintain by the operator as per given WI of drying.	X
Man	Awareness of operator	Operator was aware with the defects which can be generate due to improper cleaning .	O

6. Inspection Method Analysis (Current)

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

7. Root Cause Analysis (Occurance)

Why 1	White rust/spot part reached at customer end.
Why 2	White rust generated at plating
Why 3	Plating part drying method improper.
Why 4	Plating part hanging with jig and dry with Manual dryer
Why 5	
Root Cause (Occurance)	While drying the part, the moisture and particle applied on the part catches white rust

Root Cause Analysis (Outflow)

Why 1	Heavy rust observed customer end.
Why 2	Inspector not detected dull plated part during final inspection .
Why 3	Inspector was not aware about the defect.
Why 4	No inspection std available at final inspection station.
Why 5	
Root Cause (Outflow)	No inspection std available at final inspection station.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	We will improve the drying process by introduce industrial drying oven to remove all the moisture from the part.	SPI	18/11/2023	04/08/2023	Completed
Outflow	1)Training provided to the final inspector about the problem and inspection std. 2)The visual inspection frequency increase till installation. 3)New fire wall station will be introduce at final inspection for this kind of defect.	SPI	04/08/2023	04/08/2023	Completed

9. Inspection Method After Customer Complaint

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

10. Evidance of Countermeasure

Occurance (Before)	Hanger Photo 512_Occurance_Before.pdf
Occurance (After)	Industrial drying oven will be introduce after plating for drying. 512_Occurance_After.pdf
Outflow (Before)	No inspection std available at final inspection station 512_Outflow_Before.pdf
Outflow (After)	1)Training provided to the final inspector about the problem and inspection std. 2)The visual inspection frequency increase till installation. 3)New fire wall station will be introduce at final inspection for this kind of defect. 512_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	Fork Bolt K86A

12. Document Review

Documents	WISOP, InspCheckSheet
Specify Other Document	Yes

13. Effectiveness Of Action

Reviewed Quantity	
Reason for submission	