

Defect Details

NC No.	7000984362
NC Date	10/02/2024
NC Submission Date	
Part No.	F1FA01333M
Part Name	FORK PIPE MACHINED-K86A
Supplier Name & Code	101109-TUBE INVESTMENTS OF INDIA LIMI
ETL Plant	1136-ETL Suspension Sanand
Defect Details	RUSTY-Rust material

1. Problem Description

Defect Description	Rusty Fork Pipe OD
Detection Stage	Inprocess
Problem Severity	Aesthetic
NG Quantity	472
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	anandms@tii.murugappa.com
Plant Head/CEO Email ID	girisha@tii.murugappa.com
MD Email ID	mukeshahuja@tii.murugappa.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	2500	0	0	1000	8200	11700
Check Qty	2500	0	0	1000	8200	11700
NG Qty	472	0	0	23	2900	3395

Action taken on NG part

Scrap	0
Rework	3395
Under Deviation	0

Containment Action

100% visual inspection done for Rust on Machined Area at customer end & In- House end.

3. Process Flow

Process Flow Description

RM - CNC MACHINING - DRILLING - DEBURRING - FINAL INSPECTION - BIN PACKING - DISPATCH.

4. Process Details

Process / Operation	CNC MACHINING & INSPECTION
Outsource	No
Machine / Cell	CNC MACHINING
Machine / Cell No.	CELL NO - 5

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Material	RM in rusty Condition	Verified the Inward Records & no Rusty RM Receipt evident	X
Machine	Coolant Concentration % not Adequate	Coolant Concentration % checked & found not Within Specification	O
Man	Operator Skill	Verified & observed skilled operator availability	X

6. Inspection Method Analysis (Current)

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

7. Root Cause Analysis (Occurance)

Why 1	Fork pipe OD observed Rusty
Why 2	Coolant Concentration %, not Adequate
Why 3	Coolant Concentration % preparation done by using the wrong inspection method
Why 4	Lack of awareness regarding the use of Refractometer
Why 5	
Root Cause (Occurance)	Lack of awareness regarding the use of Refractometer.

Root Cause Analysis (Outflow)

Why 1	Fork pipe OD observed Rusty
Why 2	Not detected during the Final Inspection
Why 3	Lack of awareness to the final inspector regarding the rust issue in the machined tubes supplies
Why 4	
Why 5	
Root Cause (Outflow)	Lack of awareness to the final inspector regarding the rust issue in the machined tube supplies

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	Arabian rust Coat RPO Oil application started	Mr. Palak Shah	08/03/2024	08/03/2024	Completed
Outflow	Awareness training given to the final inspector regarding the rust issue in the machined tube supplies	Mr. Anaand Nagare	10/03/2024	08/03/2024	Completed
Occurance	Authorized person for coolant preparation identified & Supervisory level approval defined	Mr. Omkar Wagale	10/03/2024	08/03/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100 % Inspection to be done for the rusty Issue
Inspection Method	Other
Other Inspection Method	Visual Inspection
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidence of Countermeasure

Occurance (Before)	No Authorized person for coolant preparation was identified & No Supervisory-level approval was defined 675_Occurance_Before.pdf
Occurance (After)	Authorized person for coolant preparation identified & Supervisory level approval defined 675_Occurance_After.pdf
Outflow (Before)	No Awareness to the final inspector regarding the rust issue in the machined tube supplies & WI for RPO Application 675_Outflow_Before.pdf
Outflow (After)	Awareness training given to the final inspector regarding the rust issue in the machined tube supplies 675_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	K0PG

12. Document Review

Documents	WISOP
Specify Other Document	WI & Authorization

13. Effectiveness Of Action

Reviewed Quantity	5
Reason for submission	Rust problem in fork pipe K0PG

