QFR No - 7000952518

Defect Details

NC No.	7000952518
NC Date	14/10/2023
NC Submission Date	
Part No.	F2FA19033M
Part Name	K0PG FORK PIPE MACHINED
Supplier Name & Code	101109-TUBE INVESTMENTS OF INDIA LIMI
ETL Plant	1136-ETL Suspension Sanand
Defect Details	DENT ON FACE-Dent on Face,Rusty,Ring mark ,Other part

1. Problem Description

Defect Description	Dent of face of Fork pipe K0PG
Detection Stage	Receipt
Problem Severity	Fitment
NG Quantity	47
Is Defect Repeatative?	Yes
Defect Sketch / Photo	boyp50s1ep5zxm1shntow0gh.jpg

Supplier Communication Details

Quality Head Email ID	anandms@tii.murugappa.com
Plant Head/CEO Email ID	vijayakumarv@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	9500	0	0	4000	5000	18500
Check Qty	9500	0	0	4000	5000	18500
NG Qty	47	0	0	0	0	47

Action taken on NG part

Scrap	47
Rework	0
Under Deviation	0

Containment Action
Re-verification done through Visual Inspection of all available material at ETL end & in FG & WIP material with Identification Mark.

3. Process Flow

Process Flow Description
RM Inward - Storage - CNC Machining - Drilling - Deburring - Inspection - Bin Packing - Dispatch.

4. Process Details

Process / Operation	WIP Material Storage
Outsource	No
Machine / Cell	Trollys
Machine / Cell No.	Trolly

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Machine	Compresser Air Dryer Not working	Verified & found in not working condition.	X
Material	In coming Raw tube Rusty & dent damage	Verified & found OK	O
Man	SOP not Followed	Verified through Gemba observation and found Operator has followed the SOP.	O
Machine	Machining Parameter	Verified through Gemba observation and found all Machine Parameter as per Control Plan	O
Method	Coolant concentration	Verified through Gemba observation and found Coolant concentration 3 - 4%.	X
Man	Material falls from Bins.	Verified & found that in dispatch Vehicle stacking bin Height is high.t	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	100%

7. Root Cause Analysis (Occurance)

Why 1	K0PG FORK PIPE MACHINED found Rusty & dent Mark on Machined Area at customer end.
Why 2	1.rust generated on Machined area after CNC machining process 2.Water comes in contact through compressed air in cleaning Operation.
Why 3	1.due to Less coolant concentration used in CNC machine rust get formed on machined area .2. Compressor Air Dryer Not working Condition.
Why 4	
Why 5	
Root Cause (Occurance)	1. Less coolant concentration used in CNC machine , 2. Compressor Air Dryer Not working Condition.

Root Cause Analysis (Outflow)

Why 1	K0PG FORK PIPE MACHINED found Rusty & dent Mark on Machined Area at customer end.
Why 2	Part not capture in final 100 % Visual Inspection

Why 3	
Why 4	
Why 5	
Root Cause (Outflow)	Visual Inspection

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Coolant concentration increased to 5-6 % from 3 - 4%	Mr. Palak Shah	16/10/2023	16/10/2023	Completed
Occurance	Air Dryer repaired & now in working condition	Mr. Palak Shah	16/10/2023	16/10/2023	Completed
Outflow	Training given to Operators & Final inspector for inspection of Rust & dent mark on Machined area	Mr. Anand Nagare	16/10/2023	16/10/2023	Completed
Occurance	Bin Stacking height in Dispatch Vehicle is defined.	Mr. Palak Shah	17/10/2023	17/10/2023	Completed

9. Inspection Method After Customer Complaint

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

10. Evidance of Countermeasure

Occurance (Before)	1. due to Less coolant (3-4%)concentration used in CNC machine rust get formed on machined area 2.Water comes in contact through compressed air in cleaning Operation due to Air Dryer Not Working.3.Over Stacking of bins in vehicle bins can falls in loading & unloading material cause dent & damage on Machining Area. 584_Occurance_Before.pptx
Occurance (After)	1. Coolant concentration increased to 5-6 % from 3 - 4%. 2. Compressor Air dryer repaired & in working condition . 3.Stacking position define (Red color marking for maximum stacking of material) 584_Occurance_After.pptx
Outflow (Before)	Part not capture in final 100 % Visual Inspection 584_Outflow_Before.pdf
Outflow (After)	Training given to Inspector for Visual Inspection for Rust & Dent & Damage 584_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	FORK PIPEMACHINED K86 / Sanand

12. Document Review

Documents	
Specify Other Document	NO

13. Effectiveness Of Action

Reviewed Quantity	5
Reason for submission	Rust and dent in fork pipe