QFR No - 8000814841

Defect Details

NC No.	8000814841
NC Date	20/12/2022
NC Submission Date	
Part No.	F2FA21433M
Part Name	FORK PIPE MACHINED (K17A FF)
Supplier Name & Code	101024-TUBE INVESTMENTS OF INDIA LTD
ETL Plant	1126-ETL Pantnagar
Defect Details	DEPTH U/SIZE.-CAULKING DEPTH UNDER SIZE

1. Problem Description

Defect Description	Caulking depth under size in fork pipe K17
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	235
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	AmitVD@tii.murugappa.com
Plant Head/CEO Email ID	guptaajay@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	2000	0	0	0	4500
Check Qty	2500	2000	0	0	0	4500
NG Qty	235	5	0	0	0	240

Action taken on NG part

Scrap	240
Rework	0
Under Deviation	0

Containment Action
100% segregation done at customer end & 100% segregation done at warehouse

3. Process Flow

Process Flow Description
1. Parting 2. CNC Machining First 3. CNC Machining 2nd 4. Drilling

4. Process Details

Process / Operation	Machining & Drilling
Outsource	No
Machine / Cell	MACHINE SHOP
Machine / Cell No.	CNC MACHINE -01

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	Inspection Instruments & Lux Level	Inspection with DPG, Lux level- 620	O
Man	Operator	Untrained operator given Wrong offset in Programme	X
Material	Tube Id & Machining Margin	As per Specs.	O
Tool	Temperature & Humidity	No Issue	O
Machine	CNC Programme execution	Programme not Locked	X

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	No
Checking Freq.	100%
Sampling	No
Sample Size	5

7. Root Cause Analysis (Occurance)

Why 1	Fork Pipe Caulking Depth Undersize
Why 2	Depth Less maintained during CNC Machining
Why 3	Due to wrong offset given in the Programme by operator
Why 4	Programme was not Locked
Why 5	
Root Cause (Occurance)	Operator was Untrained and CNC programme was not Locked, Due to Which wrong offset given in Programme by the Operator.

Root Cause Analysis (Outflow)

Why 1	Fork Pipe Caulking Depth Undersize Part received at Customer end
Why 2	Caulking Depth Inspection done on sampling basis.
Why 3	100% Inspection not defined in the WI
Why 4	Because This type of defect not reported in past
Why 5	
Root Cause (Outflow)	This Parameter was checking on Sampling basis, because This type of defect not reported in past.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	1. CNC Programme Locked 2. Only Production Supervisor will give the offset. 3. After any correction Quality Line Inspector will recheck the parts and provide approval.	TANVEER	16/12/2022	15/12/2022	Completed
Outflow	1. After every 50Parts, operator will check this parameter with Attribute Gauge. 2. 100% Inspection Started at PDI Stage.	TANVEER	16/12/2022	15/12/2022	Completed

9. Inspection Method After Customer Complaint

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

10. Evidance of Countermeasure

Occurance (Before)	CNC Programme Not Locked 323_Occurance_Before.jpeg
Occurance (After)	CNC Programme Locked 323_Occurance_After.jpeg
Outflow (Before)	After every 50 Parts, operator will check this parameter with Attribute Gauge.ONLY BASIC TRAINING GIVEN 323_Outflow_Before.jpg
Outflow (After)	100% Inspection Started at PDI Stage. 323_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All Models

12. Document Review

Documents	ControlPlan, PFMEA, WISOP, InspCheckSheet
Specify Other Document	QUALITY ALERT

13. Effectiveness Of Action

Reviewed Quantity	1

Reason for submission	ok