QFR No - 8000820869

Defect Details

NC No.	8000820869
NC Date	20/02/2023
NC Submission Date	
Part No.	F2FA08833M
Part Name	FORK PIPE MACHINED (K-9207)
Supplier Name & Code	101030-TUBE INVESTMENTS OF INDIA LTD
ETL Plant	1117-ETL K-228/9 Suspension
Defect Details	TAPPING O/SIZE.-THREADING NOT OK

1. Problem Description

Defect Description	Threading Not Ok
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	4
Is Defect Repeatative?	Yes
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	1300	0	0	400	0	1700
Check Qty	1300	0	0	400	0	1700
NG Qty	4	0	0	0	0	4

Action taken on NG part

Scrap	4
Rework	0
Under Deviation	0

Containment Action
1) All K-9207 TFF Model Stock checked at ETL K-228 WIP & SM sales Inhouse FG for Trending Not OK Concern. 2)Total NG Part Qty: 4 Nos. at ETL K-228 end. 3) 100 % WIP Material checked at TPI Aurangabad M/C Center (SM Sales) Also Blue Marker marking done as A Identification for Inspection & No NG Part Observed at TPI Aurangabad M/C Center (SM Sales)

3. Process Flow

Process Flow Description
Incoming Material - Inward Inspection - Storage - CNC Machining Threading Side - CNC Machining Caulking Side - Drilling - Deburring - Final Inspection - Packing in Bins - Dispatch to ETL.

4. Process Details

Process / Operation	CNC Machining Threading Side
Outsource	No
Machine / Cell	CNC Machining Cell
Machine / Cell No.	CNC N0.10

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Tool	Threading Major Dia Undersize	Verified through Gemba observation Threading Insert found wear before decided frequency	X
Method	Inspection SOP not Followed	Verified through Gemba visit found Inspection for Threading done by using TPG on sampling Basis	O
Man	Unskilled Operator	Verified found Skilled Operator	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	2 Nos./Hrs

7. Root Cause Analysis (Occurance)

Why 1	Threading Not OK
Why 2	Major Dia observed Undersize
Why 3	Threading Insert observed wear out before defined Insert change frequency.
Why 4	
Why 5	
Root Cause (Occurance)	Threading Insert observed wear out before defined Insert change frequency.

Root Cause Analysis (Outflow)

Why 1	Threading Not OK
Why 2	Not detected during the Inspection by using Thread plug gauge
Why 3	Not Detected as the Inspection on Sampling basis 2 Nos./Hrs
Why 4	
Why 5	
Root Cause (Outflow)	Not Detected as the Inspection on Sampling basis 2 Nos./Hrs

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	After Discussion with Production Incharge of machining Cell, Threding Insert change frequency changed from 450 Nos. per Corner to 350 Nos. per Corner	Mr. Rathod	23/02/2023	23/02/2023	Completed
Outflow	Sampling Inspection Qty. increased during hourly inspection by 2 Nos./Hrs to 5 Nos.	Mr. Sandip Johare	23/02/2023	23/02/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100 % Inspection for Threading by using Thread plug gauge & Blue Marker marking done as A Identification for next 3 lot
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)	1) Threading Insert observed wear out before defined Insert change frequency. 2)Threading Insert change frequency was 450 Nos. per Corner. 376_Occurance_Before.pdf
Occurance (After)	Threading Insert change frequency has been changed from 450 Nos. per Corner to 350 Nos. per Corner 376_Occurance_After.pdf
Outflow (Before)	Not Detected as the Inspection on Sampling basis 2 Nos./Hrs 376_Outflow_Before.pdf
Outflow (After)	Sampling Inspection Qty. increased during the hourly inspection by 2 Nos./Hrs to 5 Nos. 376_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All M/c`s at CNC Machining Cell

12. Document Review

Documents	InspCheckSheet
Specify Other Document	Tool History Card

13. Effectiveness Of Action

Reviewed Quantity	100

Reason for submission	Ok