QFR No - 8000862066

Defect Details

NC No.	8000862066
NC Date	07/02/2024
NC Submission Date	
Part No.	550DZ04702
Part Name	FORK BOLT -UG4.5
Supplier Name & Code	100189-SANGKAJ STEEL PVT LTD.
ETL Plant	1117-ETL K-228/9 Suspension
Defect Details	NOT AS PER SPECIFICATION-M26 THREAD FITMENT ISSUE

1. Problem Description

Defect Description	M26 Thread fitment NG
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	161
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	qualityassurance@sangkaj.com
Plant Head/CEO Email ID	steel@sangkaj.com
MD Email ID	anirudh.2007@hotmail.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	3000	0	0	500	0	3500
Check Qty	3000	0	0	500	0	3500
NG Qty	168	0	0	15	0	183

Action taken on NG part

Scrap	0
Rework	183
Under Deviation	0

Containment Action
100% Sorting done at ETL End & M/s Sangkaj steel end.

3. Process Flow

Process Flow Description
RM - RM inspection - Wire Drawing - cold forging - cold forging inward - CNC operation - Thread rolling - Plating - Final inspection - Dispatch.

4. Process Details

Process / Operation	Thread Rolling
Outsource	No
Machine / Cell	Thread rolling
Machine / Cell No.	TRG Rolling.

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Skipped from inspection.	NG part found at customer end,	X
Machine	Less Or more feed mark speed.	Verified the machine parameter & found okay.	O
Method	Loading & Unloading method not okay at Thread rolling stage.	Gemba visit at rolling operation stage & found okay.	O
Machine	Less or more RPM	Verified the machine parameter & found okay.	O
Method	Loading & unloading method not okay at CNC operation.	Gemba visit at CNC operation stage & found okay.	O
Tool	Thread roll not okay	Verified the thread roll & thread roll not as per standard.	X
Material	Wrong material used.	verified the material TC & found okay.	O
Man	Unskilled operator	Verified the skill matrix at operation stage & found okay,	O

6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	On mating part
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	05 -10nos

7. Root Cause Analysis (Occurance)

Why 1	NOT AS PER SPECIFICATION-M26 THREAD FITMENT ISSUE
Why 2	M26 Thread observed damage mark.
Why 3	Rolling impression mark found on part.
Why 4	Thread roll damage.
Why 5	less thread rolling frequency.
Root Cause (Occurance)	less thread rolling frequency.

Root Cause Analysis (Outflow)

Why 1	Skipped from inspection.
Why 2	NG part not detect at final inspection.
Why 3	Inspection done on sampling basis with mating part.
Why 4	

Why 5	
Root Cause (Outflow)	Inspection done on sampling basis with mating part.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	Inspection done on Sampling Basis, But the Sample Size Increased. Previously only 05 Nos were Checked for thread during Final Inspection, now Sample Size increased to 30%.	Mrs Mukta	22/01/2024	22/01/2024	Completed
Occurance	Frequency increase on thread roll .	Mr Raut.	01/02/2024	01/02/2024	Completed

9. Inspection Method After Customer Complaint

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

10. Evidance of Countermeasure

Occurance (Before)	Thread rolling frequency is less i.e 50000 nos 660_Occurance_Before.pptx
Occurance (After)	Thread rolling frequency is increase from 50000 nos to 40000 nos. 660_Occurance_After.pptx
Outflow (Before)	Less inspection frequency. 660_Outflow_Before.pptx
Outflow (After)	Inspection done on Sampling Basis, But the Sample Size Increased. Previously only 05 Nos were Checked for thread during Final Inspection, now Sample Size increased to 30%.. 660_Outflow_After.pptx

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	Applicable for all type of fork bolt.

12. Document Review

Documents	ControlPlan, PMCheckSheet, PFMEA, InspCheckSheet
Specify Other Document	N/A

13. Effectiveness Of Action

Reviewed Quantity	364
Reason for submission	Verified and found ok