

Defect Details

NC No.	8000831919
NC Date	07/06/2023
NC Submission Date	
Part No.	F2DZ03912B
Part Name	FORK BOLT-AABM
Supplier Name & Code	100539-N P ENTERPRISES
ETL Plant	1117-ETL K-228/9 Suspension
Defect Details	NOT AS PER SPECIFICATION- IMPROPER BUFFING OBSERVED

1. Problem Description

Defect Description	Buffing step mark on the top face of fork bolt (AABM)
Detection Stage	Receipt
Problem Severity	Aesthetic
NG Quantity	440
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality@npcindustries.in
Plant Head/CEO Email ID	anand@npcindustries.in
MD Email ID	ajay@npcindustries.in

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	1000	1200	0	0	0	2200
Check Qty	1000	1200	0	0	0	2200
NG Qty	440	300	0	0	0	740

Action taken on NG part

Scrap	0
Rework	740
Under Deviation	0

Containment Action

Checked visually

3. Process Flow

Process Flow Description

10 - Raw Material 20 - Cutting and Forging(1st) 30-Forging(2nd) 40-Annealing 50-Phosphating 60 - Forging(3rd) I.D 70-Forging(4th) Hex 80 - CNC(1st) 90 - CNC(2nd) 100 - CNC(3rd) 110 - CNC drilling and Chamfering 120 - Final inspection 130 - Packing & Dispatch 140 - Buffing-1st 150 - Buffing 2nd 160 - Plating

4. Process Details

Process / Operation	Buffing
Outsource	Yes
Machine / Cell	Buffing
Machine / Cell No.	Buffing Machine

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Unskilled operator used for Buffing operation	Operator observed to be skilled	O
Man	Operator unaware of defect	Operator observed to be aware	O
Material	Chemical composition not as per Std	Chemical composition observed as per Std	O
Tool	Use Wrong Size tool	After verification we found operator was use wrong size of tool	X
Method	Rejected material mixed	After verification we found Rejected material was not mix with ok parts	O

6. Inspection Method Analysis (Current)

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

7. Root Cause Analysis (Occurance)

Why 1	Step mark observed on fork bolt.
Why 2	Excess material remove from the work pieces.
Why 3	Use High grain size ceramic belt use .
Why 4	Belt size did not define.
Why 5	
Root Cause (Occurance)	Ceramic Belt grain size did not define

Root Cause Analysis (Outflow)

Why 1	Could not be detected during Sampling inspection
Why 2	Sampling plan unable to catch defective part
Why 3	Sampling plan inadequate
Why 4	IS 2500 Sampling plan used
Why 5	
Root Cause (Outflow)	Sampling plan is not sufficient.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	Q- alert to be displayed at buffing station & inspection station.	Mr. Princ	09/06/2023	08/06/2023	Completed
Outflow	100% inspection for Fork Bolt .	Mr. Deepak	04/07/2023	10/06/2023	Completed
Occurance	Change Ceramic Belt grain size 80 and 120 to 220 and 620	Mr. Gurpreet Singh	28/06/2023	13/06/2023	Completed
Occurance	use of warn buffing wheel for better finishing.	Mr. Gurpreet Singh	28/06/2023	13/06/2023	Completed

9. Inspection Method After Customer Complaint

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

10. Evidence of Countermeasure

Occurance (Before)	used of wrong size belt 466_Occurance_Before.png
Occurance (After)	belt replace with wheel and currently using of warn buffing wheel. 466_Occurance_After.png
Outflow (Before)	used of sampling inspection plan 466_Outflow_Before.jpg
Outflow (After)	100% inspection should be done after buffing 466_Outflow_After.png

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	Buffing Shop

12. Document Review

Documents	ControlPlan, PFMEA, WISOP, ProcessFlowChart, InspCheckSheet
Specify Other Document	no

13. Effectiveness Of Action

Reviewed Quantity

100

Reason for submission

Verified and found ok