QFR No - 8000874507

Defect Details

NC No.	8000874507
NC Date	16/05/2024
NC Submission Date	
Part No.	F2LG07102B
Part Name	SEAT PIPE - J1D
Supplier Name & Code	100539-N P ENTERPRISES
ETL Plant	1117-ETL K-228/9 Suspension
Defect Details	NOT AS PER SPECIFICATION-CRACK - MATERIAL DEFECT

1. Problem Description

Defect Description	CRACK - MATERIAL DEFECT
Detection Stage	Receipt
Problem Severity	Safety
NG Quantity	1
Is Defect Repeatative?	No
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	960	20000	0	0	0	20960
Check Qty	960	20000	0	0	0	20960
NG Qty	1	0	0	0	0	1

Action taken on NG part

Scrap	1
Rework	0
Under Deviation	0

Containment Action
Segregated all material at the customer end and NP end.

3. Process Flow

Process Flow Description
Process Flow Description 1.0 Raw Material 2.0 Cutting 3.0 Drawing 4.0 Head Formation 5.0 Rough Grinding 6.0 Punching 7.0 CNC Head Turning 8.0 CNC Boring & Facing 9.0 Tapping 10.0 Chamfering 11.0 ID Deburring 12.0 Finish Grinding 13.0 Final Inspection 14.0 Cleaning 15.0 Oiling 16.0 Packing &Dispatch.

4. Process Details

Process / Operation	Raw material
Outsource	Yes
Machine / Cell	--
Machine / Cell No.	--

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	setting part mixed with ok material	During verification we found possibility of setting part mixing	X
Method	part was skipped at final Q gate (NPC)	Part was skipped during visual inspection	X
Material	Designated Grade not use	Material Observed as per specification	O
Method	Process Parameters NG	After verification we found OK	O
Method	Preventive Maintenance	Preventive maintenance carried out at defined interval	O
Man	Un skilled Operator	Checked & Observed that skilled operator was running the line.	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	one pc head crack found at customer end
Why 2	NG crack setting parts got mixed with ok material
Why 3	NG part kept in open bin
Why 4	Locked bin not available at Draw
Why 5	
Root Cause (Occurance)	Locked bin not available at Draw

Root Cause Analysis (Outflow)

Why 1	Part was skipped at final inspection.
Why 2	Crack was not visible during inspection.
Why 3	Crack might be microscopic and not detectable by naked eye.
Why 4	Inspector may have lacked sufficient training to detect micro-cracks.
Why 5	
Root Cause (Outflow)	The inspector may have lacked sufficient training to detect micro-cracks.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	Q -Alert to be displayed at the final Q-gate	Mr. Princ	17/05/2024	16/05/2024	Completed
Outflow	Micro crack detection regarding training to be given to NPC final inspection inspectors.	Mr. Gurpreet singh	20/05/2024	17/05/2024	Completed
Occurance	Open red bin to be replaced with locked red bin in forging area	Mr. Narinder	20/05/2024	18/05/2024	Completed
Occurance	Training to be given to all setters and operators for setting process regarding.	Mr. Kulwant	21/05/2024	18/05/2024	Completed

9. Inspection Method After Customer Complaint

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

10. Evidance of Countermeasure

Occurance (Before)	Open Red bin used 810_Occurance_Before.jpeg
Occurance (After)	Open red bin to be replaced with locked red bin in forging area 810_Occurance_After.jpeg
Outflow (Before)	N/A 810_Outflow_Before.png
Outflow (After)	Micro crack detection regarding training to be given to NPC final inspection inspectors. & Q -Alert to be displayed at the final Q-gate 810_Outflow_After.png

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All similar model

12. Document Review

Documents	PFMEA, WISOP
Specify Other Document	NA

13. Effectiveness Of Action

Reviewed Quantity	100
Reason for submission	ok