

Defect Details

NC No.	8000899141
NC Date	14/11/2024
NC Submission Date	
Part No.	F2PA00202B
Part Name	BOTTOM CASE RING RE J1A
Supplier Name & Code	100990-JAIRAJ ANCILLARIES PVT LTD
ETL Plant	1117-ETL K-228/9 Suspension
Defect Details	NOT AS PER SPECIFICATION-CRACK/BROKEN

1. Problem Description

Defect Description	CRACK/BROKEN
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	44
Is Defect Repeatative?	Yes
Defect Sketch / Photo	xd0zclmakc4kyvbxutjlf4r.jpg

Supplier Communication Details

Quality Head Email ID	planthead.aurangabad@jairajgroup.com
Plant Head/CEO Email ID	vp@jairajgroup.com
MD Email ID	rajiv@jairajgroup.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	1000	0	0	225	0	1225
Check Qty	1000	0	0	225	0	1225
NG Qty	44	0	0	12	0	56

Action taken on NG part

Scrap	56
Rework	0
Under Deviation	0

Containment Action

Checked all available stock of 1000 no. at ETL end 100% and found 44 no. defective parts. Checked 100% all inhouse FG stock available 225 no. and found 12 no. defective parts

3. Process Flow

Process Flow Description

Annealing

4. Process Details

Process / Operation	Annealing
Outsource	No
Machine / Cell	Annealing Tank
Machine / Cell No.	ANL -01

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Material	RM Grade not as per CP . Check with	Check with MTC & found ok as per specification	O
Machine	Barrel Temp High / Low	Verified as per Cp & OCS found ok , As per Standard Specification	O
Tool	Air trapped & air vent inefficient open	Verified the air vent and found ok	O
Method	Annealing surface volume in tank in sufficient to dip the parts in medium.	Verified and found due to small tank top parts are getting float in medium .	X
Method	RM preheating not done	Verified as per CP & OCS found ok , As per Standard Specification	O
Man	Man Power does not aware about this defect .	Verified that operator , In process inspector & Final Inspector aware about this defect .	O
Machine	OCS & control plan not followed by Machine Operator .	Verified as per Cp & OCS found ok	O

6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	Visually
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	5

7. Root Cause Analysis (Occurance)

Why 1	Parts are getting broken erratically on weld line surface.
Why 2	Parts are not getting fully dipped in annealing medium
Why 3	Due to parts are getting floated above the medium surface
Why 4	Due to Annealing tank size small , parts surface not completely annealed.
Why 5	
Root Cause (Occurance)	Due to Annealing tank size small , top parts surface not completely annealed resulting into insufficient annealing . Due to Annealing tank size small , parts surface not completely annealed resulting in breakages erratically.

Root Cause Analysis (Outflow)

Why 1	Parts are getting broken erratically on weld Line surface.
Why 2	Parts are getting skipped from Operator and Final Inspector
Why 3	After annealing process , parts are getting checked on sampling Inspection

Why 4	Lack of awareness of highlighted defect.
Why 5	
Root Cause (Outflow)	Lack of awareness of highlighted defect.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Annealing record Register monitoring started	Ganesh mhaske	22/11/2024	22/11/2024	Completed
Occurance	Big Annealing tank to Incorporate so that max parts are getting covered in one annealing cycle.	Ganesh Mhaske	26/11/2024	27/11/2024	Completed
Outflow	Awareness training given to in process inspector & Final Inspector about highlighted defect .	Sandeep Rode	22/11/2024	22/11/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100% Visual Inspection for part softness after annealing.
Inspection Method	Other
Other Inspection Method	Visual
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	Earlier small Annealing tank does not cover part max occupancy per cycle . Parts are getting open in medium due to floating on surface at top side which may be the probable cause . 1224_Occurance_Before.pptx
Occurance (After)	Now Big Size Annealing tank implemented so that max parts are covered per cycle. Annealing Monitoring record started. 1224_Occurance_After.pdf
Outflow (Before)	Earlier Parts Softness & ductility after annealing process was checked at sampling basis. 1224_Outflow_Before.pdf
Outflow (After)	Parts softness and Ductility checking with 100% Inspection with OJT to In process and Firewall Inspectors. 1224_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	NA

12. Document Review

Documents	ControlPlan, PFMEA, WISOP
Specify Other Document	NA

13. Effectiveness Of Action

Reviewed Quantity	50
Reason for submission	OK