QFR No - 8000834882

Defect Details

NC No.	8000834882
NC Date	28/06/2023
NC Submission Date	
Part No.	S2AB04412B
Part Name	PRELOAD ADJUSTER
Supplier Name & Code	101273-SAPTAGIRI ENGINEERING PRIVATE
ETL Plant	1116-ETL K-120 Suspension
Defect Details	WELDING NOT OK-WELDING DEFECT

1. Problem Description

Defect Description	Welding NG concern.- Welding incomplete, Blow holes, etc.
Detection Stage	Receipt
Problem Severity	Aesthetic
NG Quantity	228
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality@saptagirigroup.in
Plant Head/CEO Email ID	production@saptagirigroup.in
MD Email ID	

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	2000	0	0	0	0	2000
Check Qty	2000	0	0	0	0	2000
NG Qty	228	0	0	0	0	228

Action taken on NG part

Scrap	228
Rework	0
Under Deviation	0

Containment Action
100 % material verified

3. Process Flow

Process Flow Description
Raw material welding + sheet shearing + Blanking + U bending + First rounding + Second rounding + CO2 welding (single spot) + CO2 welding (Full run) + Weld bead turning & grinding + Buffing + Parting & ID chamfer + Single notch + First flaring + Second flaring + Restracking + OD trimming & 8 nos notching + Face deburring + Buffing + Fe Zn plating + Final inspection + Packing/ storing.

4. Process Details

Process / Operation	Co2 welding opeartion
Outsource	No
Machine / Cell	01
Machine / Cell No.	01

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Machine	Round Bending not uniform (Circular)	Round bending observe uniform (Circular)	O
Method	Sample basis Inspection	While welding and buffing operation only do the sample basis inspection	X
Machine	Excess welding outside the gap	No Excess buffing observed	O
Machine	Uneven round bending	Height variation in both side as well as uneven gap	X
Machine	Round bending gap uneven	In a few part observed uneven gap at top side less (0.54 mm) and bottom side more (1.44 mm	X
Machine	Uneven Welding	Welding run verified and observed evenly (In straight line)	X
Machine	Gap not filled by welding	Gap fully filled by welding operation	O
Machine	Excess buffing on welding bead area	No Excess buffing on welding line	O
Man	Less awareness	Operator and inspector not aware about the weld line open	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	Welding Open after buffing operation
Why 2	Uneven welding fusion or uneven welding filling done
Why 3	Uneven welding gap
Why 4	Uneven round bending
Why 5	Ram entry less or raw material spring back
Root Cause (Occurance)	1. Uneven round bending / Round bending gap uneven 2. Ram entry less or raw material spring back

Root Cause Analysis (Outflow)

Why 1	Welding Open after buffing operation

Why 2	No Inspection after the buffing operation.
Why 3	
Why 4	
Why 5	
Root Cause (Outflow)	No Inspection after the buffing operation.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	100% inspection starts after welding operation.	Mr. Munja Hore	30/06/2023	29/06/2023	Completed
Occurance	Draw route process to be introduce instead of welding process.	Mr. Ramdas Chavan	30/06/2023	29/06/2023	Completed
Outflow	Q-Alert display at Final inspection and welding stage.	Mr. Munja Hore	30/06/2023	29/06/2023	Completed
Outflow	for ID verification Gauge provided after round bending and re stacking	Mr. Munja Hore	30/06/2023	29/06/2023	Completed
Occurance	Re stacking operation started after round bending to uneven gap	Mr. Ramdas Chavan	30/06/2023	29/06/2023	Completed
Occurance	Before Welding operation 100% inspection starts for uneven round bend.	Mr. Munja Hore	30/06/2023	29/06/2023	Completed
Outflow	200% Inspection started along with marking at inner side at Final Inspection	Mr. Munja Hore	30/06/2023	29/06/2023	Completed
Outflow	Training given concern operator and inspector for uneven bending and welding open after the buffing process.	Mr. Munja Hore	30/06/2023	29/06/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	No
Change Details	NA
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)	Action plan 501_Occurance_Before.pptx
Occurance (After)	Action plan 501_Occurance_After.pptx
Outflow (Before)	Comparison of welded and without welded parts 501_Outflow_Before.pdf
Outflow (After)	Comparison of welded and without welded parts 501_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	Other adjuster also (Re- J1a)

12. Document Review

Documents	ControlPlan, PFMEA, ProcessFlowChart
Specify Other Document	Comparison report

13. Effectiveness Of Action

Reviewed Quantity	10
Reason for submission	Ok