QFR No - 8000827041

Defect Details

NC No.	8000827041
NC Date	22/04/2023
NC Submission Date	
Part No.	S3GV00112B
Part Name	FIX NUT
Supplier Name & Code	100106-SHARP ENGINEERS.
ETL Plant	1116-ETL K-120 Suspension
Defect Details	LENGTH UNDERSIZE-WIDTH O/S AND U/S

1. Problem Description

Defect Description	Total length observed oversize & undersize. This concern repeated many times before.
Detection Stage	Receipt
Problem Severity	Fitment
NG Quantity	500
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality@apw3.co.in
Plant Head/CEO Email ID	kurund.ma@sharp-engineers.com
MD Email ID	urkhandelwal@sharp-engineers.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	8000	0	0	5000	0	13000
Check Qty	8000	0	0	5000	0	13000
NG Qty	500	0	0	120	0	620

Action taken on NG part

Scrap	0
Rework	620
Under Deviation	0

Containment Action
Segregation done immediately for all the ETL and pipeline material.

3. Process Flow

Process Flow Description
10) RM Inspection 20) Parting, Forming & Drilling 30) Chamfer Ø 8.10 40) Tapping M8X1.25 6H 50) Semi-finished part inspection 60) Plating process (Outsource) 70) Final Inspection 80) 90) Pre-dispatch inspection 100) Packing and dispatch.

4. Process Details

Process / Operation	Parting, Forming and Drilling
Outsource	Yes
Machine / Cell	Traub Machine cell
Machine / Cell No.	SE/A/05

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Material	Incorrect RM grade	Third part inspection verified for chemical composition and hardness testing as per requirement.	O
Method	Wrong checking method/sample size.	Checking done by SESG for sampling basis inspection as per IS:2500	O
Tool	Tool worn out	Tool life for all the tool i.e. forming tool, drill, tap and insert are not defined & not recorded.	X
Man	Un-skilled Operator	Stage wise skill matrix and operator license ar evident as per F/HR/06	O
Machine	Inadequate check Point in JH check sheet	Monthly JH check sheet available on machine and all the check point is being checked and recorded as	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	1:1

7. Root Cause Analysis (Occurance)

Why 1	DIM 15.0+/-0.1 OVER SIZE.
Why 2	Parting tool worn out.
Why 3	Parting tool worn out earlier than defined frequency 300/sharpening
Why 4	Tool life not getting as per defined tool life
Why 5	Coolant concentration is not being monitored.
Root Cause (Occurance)	Parting tool worn out earlier than defined frequency 300/sharpening, because coolant concentration is not being monitored.

Root Cause Analysis (Outflow)

Why 1	DIM. 15.0+/-0.1 over size part reached at ETL
Why 2	Not detected at final inspection stage.
Why 3	Sampling basis inspection as per IS 2500

Why 4	Sample size defined by system.
Why 5	
Root Cause (Outflow)	Sampling basis inspection as per IS:2500, No 100% inspection for Total length 15.0+/-0.1mm

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Tool life re-defined 200/sharpening for parting tool and being monitored as per F/PROD/07. on job training given to operator as per F/HR/05	Mr. Datta Pandhre	03/05/2023	03/05/2023	Completed
Outflow	100% inspection started as per revised control plan and checking is being done by SESG for inspection. OPL displayed at final inspection stage and on job training given to operator.	Mr. Shaikh L.N.	03/05/2023	03/05/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100% inspection started for dimension 15.0+/-0.1mm
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	1:1

10. Evidance of Countermeasure

Occurance (Before)	Parting tool worn out earlier than defined frequency 300/sharpening, because coolant concentration is not being monitored. 432_Occurance_Before.jpg
Occurance (After)	Tool life re-defined 200/sharpening for parting tool and being monitored as per F/PROD/07. on job training given to operator as per F/HR/05 432_Occurance_After.jpg
Outflow (Before)	Sampling basis inspection as per IS:2500, No 100% inspection for Total length 15.0+/-0.1mm 432_Outflow_Before.jpg
Outflow (After)	100% inspection started as per revised control plan and checking is being done by SESG for inspection. OPL displayed at final inspection stage and on job training given to operator. 432_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	FIX NUT (Pulsar Model) part number (520DU00102)

12. Document Review

Documents	ControlPlan, PFMEA, WISOP, InspCheckSheet

Specify Other Document	NA

13. Effectiveness Of Action

Reviewed Quantity	10
Reason for submission	Corrective action parts submission.