QFR No - 8000822381

Defect Details

NC No.	8000822381
NC Date	03/03/2023
NC Submission Date	
Part No.	520LW00202
Part Name	SLIDE BUSH 31DIA.
Supplier Name & Code	101164-BBL DAIDO P. LTD
ETL Plant	1117-ETL K-228/9 Suspension
Defect Details	BORE DIA. U/SIZE.-PART MIX-UP ISSUE

1. Problem Description

Defect Description	Dia 31 slide bush found mix-up
Detection Stage	Receipt
Problem Severity	Fitment
NG Quantity	25
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	rajamani@bbldaido.com
Plant Head/CEO Email ID	rajamani@bbldaido.com
MD Email ID	vinod@bbldaido.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	8470	3080	0	0	0	11550
Check Qty	8470	3080	0	0	0	11550
NG Qty	4	0	0	0	0	4

Action taken on NG part

Scrap	4
Rework	0
Under Deviation	0

Containment Action
Segregation completed available parts at ETL and all other locations

3. Process Flow

Process Flow Description
RM receipt - RM Inspection - Slitting - Slitting storage- Welding & Grinding - Size rolling - Facing & Chamfering -Straightening- Blanking and forming - Coining - Final Inspection - Visual inspection - Cleaning and oiling - Packing - Despatch

4. Process Details

Process / Operation	Bush manufacturing - 8A line
Outsource	No
Machine / Cell	Coining Machine , WIP and Inspection packing
Machine / Cell No.	8A

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	Defect unable to detect	Similar parts unbale to detect	X
Machine	Parts skipped on the Washing basket	found ok	O
Method	WIP - Similar parts storage very near	Found near similar parts 33X20 and 36X20	X
Method	100% Visual inspection not done	On verification 100% is being inspection done	O
Method	Inspector Misjudgement	Found OK	O
Method	Setting work standard not followed	Found OK- Set up and First off found ok	O
Man	Part handling rule not followed	Found Followed	O
Machine	Conveyor off during coining machine Off	found ok	O
Machine	parts Stuck on machine guard	Found OK	O
Method	Inspector Skill level low	Verified found Mr. Venkatesh skill level 4 meeting the requirement	O
Method	Inspection methods not adequate	Found OK	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	20 nos

7. Root Cause Analysis (Occurance)

Why 1	WIP - Similar parts storage very near
Why 2	WIP temporary storage area allotted to keep all WIP parts.
Why 3	Keeping similar part with different area not identified
Why 4	Separation of similar parts and control to prevent mix up not adequate.
Why 5	Similar parts identification and separate location not specified.
Root Cause (Occurance)	Similar parts identification and separate location not specified.

Root Cause Analysis (Outflow)

Why 1	Defect unable to detect.

Why 2	Both parts are similar in appearance
Why 3	Part size comparison not easy to find out difference..
Why 4	Both parts are not applicable for batch code identification
Why 5	Automated detection controls not available
Root Cause (Outflow)	Automated detection controls not available

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Similar parts location arranged to avoid mix up of parts at WIP	Ramesh san	30/03/2023	29/03/2023	Completed
Occurance	Identification tag modiffied with indicating parts size for better understanding and avoid mix up	Rajamani	30/03/2023	29/03/2023	Completed
Outflow	Poka yoke to be implemented in the automated packing machine by chute setting block and controls	Rajamani	29/03/2023	29/03/2023	Completed
Outflow	Production plan guide introduction that is recommendation as smaller parts to bigger parts reverse bush planning	Rajamani	30/03/2023	29/03/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Poka yoke implemented
Inspection Method	Pokayoke
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	WIP Layout not market part size wise to avoid mix up 385_Occurance_Before.pptx
Occurance (After)	Layout marking provided and indicated the size and location 385_Occurance_After.pptx
Outflow (Before)	Poka yoke not available if other bigger size mixed in the lot 385_Outflow_Before.pptx
Outflow (After)	Poka yoke implemented chute width controlled by controller 385_Outflow_After.pptx

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All other parts 34X20 , 36X20 , 40X20 bushes

12. Document Review

Documents	PokayokeCheckSheet, PFMEA, WISOP
Specify Other Document	Training sheet

13. Effectiveness Of Action

Reviewed Quantity	300
Reason for submission	Verified next 3 lot and found ok