

Defect Details

NC No.	8000878738
NC Date	18/06/2024
NC Submission Date	
Part No.	520HK00102
Part Name	LIP SEAL SUPPORT
Supplier Name & Code	100106-SHARP ENGINEERS.
ETL Plant	1136-ETL Suspension Sanand
Defect Details	DIAMETER OVER SIZE-OD OVERSIZE

1. Problem Description

Defect Description	OD observation 51.596 mm (OD Oversize) against specification 51.556~51.575 mm.
Detection Stage	Customer End
Problem Severity	Fitment
NG Quantity	1
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality@sharp-engineers.com
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	2000	0	0	112	0	2112
Check Qty	2000	0	0	112	0	2112
NG Qty	1	0	0	112	0	113

Action taken on NG part

Scrap	1
Rework	0
Under Deviation	0

Containment Action

All pipeline material checked for OD with Identification Tag

3. Process Flow

Process Flow Description

Rm inward-Parting-Normalizing-CNC 1st-CNC2nd-CNC3rd-Final Inspection-PDI-Packing and Forwarding

4. Process Details

Process / Operation	CNC
Outsource	No
Machine / Cell	CNC
Machine / Cell No.	CNC

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Unskilled Operator	Skilled manpower deployed	O
Material	Incorrect RM Grade	Material found ok as per TC	O
Method	Insert Not Change at defined frequency	Insert change at defined frequency but Part not validated by operated	X
Method	Part not validated after replacement of insert	affect	X
Material	Hardness Variation in RM	Hardness found ok as per specification	O
Method	Part not clamp properly	Clamping pressure found ok as per process parameter	O
Machine	Power cut	No effect as we are Rejecting all power cut parts	O
Machine	Insert Broken	Operator Doing inspection with APG for ID and visual 100%.	O
Machine	Insert Wearout	No effect	O
Tool	Insert Change	Variation in dimensions	X
Method	Fixture Not clean Properly	Fixture cleaning done as per SOP	O
Man	Wrong setting done by operator	Setting done ok also setup approval report evident	O
Material	Variation in RM OD	No effect	O
Man	New manpower	Regular manpower deployed	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	No
Checking Freq.	Sampling
Sampling	No
Sample Size	0

7. Root Cause Analysis (Occurance)

Why 1	OD oversized
Why 2	Observed 51.596mm against 51.556~51.575mm
Why 3	Insert changed and part not verify by operator and supervisor.
Why 4	No Pokayoke for insert life monitoring
Why 5	
Root Cause (Occurance)	No Pokayoke for insert life monitoring

Root Cause Analysis (Outflow)

Why 1	OD oversized
Why 2	Skip from inspection
Why 3	Part not validated by operator or supervisor.
Why 4	
Why 5	
Root Cause (Outflow)	Part not validated by operator or supervisor.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Combining all CNC operation 40,50&60 in One Setup to avoid defect also New machine having pokayoke for insert change.	Manoj Kadam	26/06/2024	26/06/2024	Completed
Outflow	Only Supervisor can Clear insert change alarm after verification of part because tool life programing is protected with key.	Pankaj Khadse	26/06/2024	26/06/2024	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. Evidence of Countermeasure

Occurance (Before)	No Pokayoke for insert life monitoring, 875_Occurance_Before.pdf
Occurance (After)	Combining all CNC operation 40,50&60 in One Setup to avoid defect also New machine having pokayoke for insert change. 875_Occurance_After.pdf
Outflow (Before)	Part not validated by operator or supervisor. 875_Outflow_Before.jpeg
Outflow (After)	Only Supervisor can Clear insert change alarm after verification of part because tool life programing is protected with key. 875_Outflow_After.jpeg

11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	NA

12. Document Review

Documents	ControlPlan, PFMEA, WISOP, ProcessFlowChart
Specify Other Document	NA

13. Effectiveness Of Action

Reviewed Quantity	5
Reason for submission	OD observation 51.596 mm (OD Oversize) against specification 51.556~51.575 mm