

Defect Details

NC No.	7001018209
NC Date	29/05/2024
NC Submission Date	
Part No.	520FN04002
Part Name	HOLDER CLUTCH
Supplier Name & Code	101138-HINDUSTAN PRESSINGS PVT.LTD.
ETL Plant	1132-ETL K-226/1 TRANSMISSION
Defect Details	DIMN.O/SIZE.-dimn 2.96 ~3.14 u/s & o/s against 3+0.1

1. Problem Description

Defect Description	Bearing Resting Height found undersize & Oversize up to 2.96~3.14 mm against 3±0.1
Detection Stage	Receipt
Problem Severity	Fitment
NG Quantity	300
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality.p1@hpplindia.com
Plant Head/CEO Email ID	spatil@hpplindia.com
MD Email ID	rakesh@hpplindia.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	300	0	0	0	500	800
Check Qty	300	0	0	0	500	800
NG Qty	300	0	0	0	0	300

Action taken on NG part

Scrap	0
Rework	300
Under Deviation	0

Containment Action

Visit to customer end and witness the quality issue.

3. Process Flow

Process Flow Description

1)Blaking And piercing 2)Sanderling 3)Chamfer 4)machining 5)Final inspection and packeging 6)PDIR and Dispatch

4. Process Details

Process / Operation	Machining
Outsource	Yes
Machine / Cell	CNC machine
Machine / Cell No.	Machine no-1

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Material	THICKNESS VARIATION MAY CAUSE HEIGHT ISSUE DURING MACHING STAGE	100% GAP GAUGE SHOULD BE DONE TO SEGRIGATE THE PARTS, ACCODING TO THCKINESS, WHICH HELPS TO MACHININ	X
Tool	DAMAGED TOOL USED	TOOL CONDITION WAS OK.	O
Machine	MACHINING NOT DONE PROPERLY	MACHINING DONE PROPERLY	O
Man	POOR MATERIAL HANDLING&DURING INPROCESS, INSPECTION.	THERE WAS NO PROPER METHOD TO CHECK PART THICKNESS INDIVIDUALLY	X
Method	RAW MATERIAL THICKNESS USED TO CHECK AT SAMPLE BASIS AT RECEIVING STAGE	AFTER BLANKING STAGE VARIATION IN THICKNESS THAT WAS UNDER TOLERENCE	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	100%

7. Root Cause Analysis (Occurance)

Why 1	Thickness variation in part is causing height issue at machining stage.
Why 2	height dimension checking being done on sample basis.
Why 3	gap gauge was not using for to identify thckiness variation parts.
Why 4	
Why 5	
Root Cause (Occurance)	Due to thickness variation in parts causing height issue at maching stage

Root Cause Analysis (Outflow)

Why 1	Bearing Resting Height found undersize & Oversize up to 2.96~3.14 mm against 3±0.1
Why 2	Defect found at ETL at receipt stage.
Why 3	defect causing fitment issue at assembly line
Why 4	Sample basis inspection done by final inspector but defect not detected.
Why 5	less awareness to inspector regarding depth checking with dail gauge.

Root Cause (Outflow)

less awareness to inspector regarding height issue and how to check properly.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Before sending to machining 100 % gap gauge is must done. So that we can seggrigate thickness variation parts to avoid further height issue..	Mr. Hitendra Patil and Mr, Ningaraj S	21/06/2024	21/06/2024	Completed
Occurance	Awareness given to the inspectors regarding height issue.	Mr.Kiran W	21/06/2024	21/06/2024	Completed
Outflow	1. Training given to inspectors regarding all final inspection activities of 4002 holder, specially focussing on height issue. 2. 100% inspection at HPPL pune from QA person for next 3 lot	Mr.Ningaraj S(HPPL)	21/06/2024	21/06/2024	Completed
Occurance	Work instruction of RM checking updated for the thickness variation acceptance.	Mr Kiran	21/06/2024	21/06/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Before Machining proce we do the gap gauge inspection.
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)	Work instruction of RM inspection. 830_Occurance_Before.pdf
Occurance (After)	Work instruction for RM checking to b updated as per the thickness. 830_Occurance_After.pdf
Outflow (Before)	We have not implemented the gap gauge for checking. 830_Outflow_Before.pdf
Outflow (After)	We check with gap gauge before sending to machining. 830_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	No

12. Document Review

Documents	ControlPlan, WISOP
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Specify Other Document

NO

13. Effectiveness Of Action

Reviewed Quantity

5000

Reason for submission

OK