QFR No - 8000895936

Defect Details

NC No.	8000895936
NC Date	17/10/2024
NC Submission Date	
Part No.	550PJ00102
Part Name	VALVE SEAT
Supplier Name & Code	100990-JAIRAJ ANCILLARIES PVT LTD
ETL Plant	1117-ETL K-228/9 Suspension
Defect Details	NOT AS PER SPECIFICATION-HOLE

1. Problem Description

Defect Description	Hole observed in part surface
Detection Stage	Inprocess
Problem Severity	Function
NG Quantity	42
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	planthead.aurangabad@jairajgroup.com
Plant Head/CEO Email ID	vp@jairajgroup.com
MD Email ID	rajiv@jairajgroup.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	5000	0	0	1000	0	6000
Check Qty	5000	0	0	1000	0	6000
NG Qty	42	0	0	5	0	47

Action taken on NG part

Scrap	47
Rework	0
Under Deviation	0

Containment Action
All available stock at ETL checked 100% and found 47 no. defective parts out of 5000 no. checked. Also checked 100% FG stock inhouse & found 5 parts defective.

3. Process Flow

Process Flow Description
Injection Moulding

4. Process Details

Process / Operation	Injection Moulding
Outsource	No
Machine / Cell	Injection Moulding
Machine / Cell No.	IMM-01

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Machine	Clamping pressure low	Verified as per CP & OCS found ok, as per standard specification	O
Machine	OCS & Control plan not followed by machine operator	Verified as per CP & OCS found ok, as per standard specification	O
Method	Sampling Inspection	Verified & found that defects are checked on sampling basis	X
Man	Man power does not aware about this defect	Verified that operator, In process inspector & final inspector are aware of this defect	O
Tool	Core cavity butting not adequate	Checked with blue matching and found ok	O
Tool	Ejector pin butting in cavity after mould clamping	Verified and found ejector pin head bend and butt in cavity	X

6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	Sampling
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	5

7. Root Cause Analysis (Occurance)

Why 1	Hole on part due to Ejector pin butt in cavity
Why 2	Due to Ejector pin head broken
Why 3	Due to Ejector pin came out from Ejector assembly
Why 4	Due to Round shape Head the Head loose due to continuous to & fro motion.
Why 5	Round shape head loose & came out from locking plate.
Root Cause (Occurance)	Due to Round shape Head , it came out from locking plate & loosened resulting in butting with cavity..

Root Cause Analysis (Outflow)

Why 1	Hole on part not captured during final Inspection.
Why 2	Part checked on Sampling basis
Why 3	Checking method inadequate for hole defect.
Why 4	
Why 5	

Root Cause (Outflow)	Checking method inadequate for hole defect.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Ejector Pin Head changed from Round shape to D shape	Ganesh Mhaske	18/10/2024	18/10/2024	Completed
Occurance	Given training to operator to check the part in process for Hole by visual inspection and given instruction for not to run the production if he found any out of tolerance .	Mr Sandip Rode	18/10/2024	18/10/2024	Completed
Outflow	Inspection standard displayed on machine as well as firewall inspection stations	Sandip Rode	19/10/2024	19/10/2024	Completed
Outflow	Given on job training to Inspector to check the parts 100% for visual inspection for hole and aesthetic defects and Given instruction not to pass .	Sandip Rode	19/10/2024	19/10/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100% Inspection at firewall through Visual Inspection.
Inspection Method	Other
Other Inspection Method	100% Inspection
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	Before -Earlier Ejector Pin head as Round shape resulting in loosening from locking plate with to & from motion . 1154_Occurance_Before.jpg
Occurance (After)	After - Ejector Pin Head changed from Round Shape to D Shape. 1154_Occurance_After.jpg
Outflow (Before)	Inspection is on Sampling basis. 1154_Outflow_Before.pdf
Outflow (After)	Inspection is 100 % and Inspection standard, PFMEA , CP updated 1154_Outflow_After.xlsx

11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	NIL

12. Document Review

Documents	ControlPlan, PFMEA, InspCheckSheet

Specify Other Document	NIL

13. Effectiveness Of Action

Reviewed Quantity	50
Reason for submission	5. Problem Analysis - Judgment not ok - Provide `O` for OK judgment and `X` for NG 7. Root Cause Analysis (Occurrence) - Due to Round shape Head the Head loose - Why loose? 8. Countermeasure (Occurrence , Outflow & System side Actions) Ejector Pin Head changed from Round shape to D shape - Validation missing?