QFR No - 7001065590

Defect Details

| NC No. | 7001065590 |
|----------------------|---|
| NC Date | 19/10/2024 |
| NC Submission Date | |
| Part No. | S3KJ00202B |
| Part Name | REBOUND STOP |
| Supplier Name & Code | 100990-JAIRAJ ANCILLARIES PVT LTD |
| ETL Plant | 1118-ETL E-92,93 Suspension |
| Defect Details | NOT AS PER SPECIFICATION-I/D STEP SPE=12.50+0.10STPIN 12.50 N.PAS |

1. Problem Description

| Defect Description | NOT AS PER SPECIFICATION-I/D STEP SPE=12.50+0.10 STD PIN 12.50 NOT PASS |
|------------------------|---|
| Detection Stage | Inprocess |
| Problem Severity | Fitment |
| NG Quantity | 10000 |
| 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 | 50000 | 0 | 0 | 2500 | 0 | 52500 |
| Check Qty | 50000 | 0 | 0 | 2500 | 0 | 52500 |
| NG Qty | 10200 | 0 | 0 | 428 | 0 | 10628 |

Action taken on NG part

| Scrap | 10628 |
|-----------------|-------|
| Rework | 0 |
| Under Deviation | 0 |

Containment Action

All available material checked 100 % at ETL end and found 10200 no. defective out of 50000 no. checked. All available inhouse FG material checked 100% and found 428 no. defective parts out of 2500 no. checked.

4. Process Details

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

5. Problem Analysis

| Туре | Possible Cause | Fact Verification | Jud |
|----------|---|--|-----|
| Machine | OCS & control plan not followed by Machine Operator | Verified as per CP & OCS found ok , as per standard specification | Х |
| Tool | Mould Cooling Time High/low | Checked with CP & OCS and found OK as per specification | Х |
| Machine | Barrel Temperature High/Low | Checked with CP & OCS and found OK as per specification | Х |
| Material | RM Grade not as per CP | Check with MTC & found ok as per specification. | Х |
| Man | Man Power does not aware about this defect . | Slight change in ID shift not identified by Process & final Inspector | 0 |
| Method | Checking method for OD checking | Verified as per CP/OCS and found checking method adequate for ID/OD Checking | х |
| Tool | Mould Cooling Water flow rate at Cooling Outlet | Verified as per Tool PM checksheet and found as per specification | Х |
| Tool | Core & cavity centre not matched. | Verified as per tool design and found ID centre shift | 0 |

6. Inspection Method Analysis (Current)

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

7. Root Cause Analysis (Occurance)

| Why 1 | Defective parts are introduced. (le Step in ID) |
|------------------------|--|
| Why 2 | Due to mould core half loose observed with respect to cavity half. |
| Why 3 | Due to one Non operator Guide pin loosen in Core half. |
| Why 4 | Core & cavity half centre not matched. |
| Why 5 | |
| Root Cause (Occurance) | Core & cavity half centre not matched. |

Root Cause Analysis (Outflow)

| Why 1 | Defective parts are skipped from final inspection |
|-------|--|
| Why 2 | Part dimensionally check on sampling basis |
| Why 3 | Operator not aware of this defect of step formation in ID. |

| Why 4 | On job training not given to Operator |
|----------------------|--|
| Why 5 | Operator awareness of this defect is not evident |
| Root Cause (Outflow) | Operator awareness of this defect is not evident |

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

| Туре | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|-----------|--|------------------|-------------|-------------|-----------|
| Occurance | Mould check sheet follow before LPA / FPA. | Mr Ganesh Mhaske | 24/10/2024 | 24/10/2024 | Completed |
| Occurance | Verified the Guide Pins & Clamps during mould change over process. | Mr Ganesh Mhaske | 24/10/2024 | 24/10/2024 | Completed |
| Outflow | Defect matrix to display on work station. | Mr Sandip Rode | 26/10/2024 | 25/10/2024 | Completed |
| Outflow | On the job training given to In process & Firewall operator. | Mr Sandip Rode | 26/10/2024 | 25/10/2024 | Completed |

9. Inspection Method After Customer Complaint

| Change In Inspection System | Yes |
|------------------------------------|---|
| Change Details | 100% Inspection at firewall through Plug Gauge. |
| 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) | Mould Loading Unloading WI not evident for Core Cavity Alignment . 1174_Occurance_Before.pdf |
|--------------------|---|
| Occurance (After) | Training Record to Machine as well as In process Inspection Operator for Step Formation in ID. 1174_Occurance_After.pdf |
| Outflow (Before) | Training Record and awareness not evident to final Inspection Operator for Step formation in ID. 1174_Outflow_Before.pdf |
| Outflow (After) | Inspection standard made for final Inspector & Operator awareness 1174_Outflow_After.pdf |

11. Horizontal Deployment

| Horizontal Deployment Required | Yes |
|---------------------------------------|-------------------------|
| Applicable Machine / Model / Plant | Rebound Stop S3KJ00302O |

12. Document Review

| Documents | ControlPlan, PFMEA, WISOP, InspCheckSheet |
|------------------------|---|
| Specify Other Document | NIL |

13. Effectiveness Of Action

| Reviewed Quantity | 100 |
|-----------------------|-----------------------|
| Reason for submission | NO ID STEP OBSERVRED. |