Defect Details

| NC No. | 8000884338 |
|----------------------|---------------------------------------|
| NC Date | 26/07/2024 |
| NC Submission Date | |
| Part No. | 520HL00202 |
| Part Name | OIL LOCK COLLAR |
| Supplier Name & Code | 100176-GKN SINTER METALS PRIVATE LIMI |
| ETL Plant | 1117-ETL K-228/9 Suspension |
| Defect Details | NOT AS PER SPECIFICATION-CRACK |

1. Problem Description

| Defect Description | Crack |
|------------------------|-----------|
| Detection Stage | Inprocess |
| Problem Severity | Safety |
| NG Quantity | 1 |
| Is Defect Repeatative? | Yes |
| Defect Sketch / Photo | |

Supplier Communication Details

| Quality Head Email ID Rajendra.Sethiya@gknpm.com | |
|--|-----------------------------------|
| Plant Head/CEO Email ID | Pratik. Dharanga on kar@gknpm.com |
| MD Email ID | Rajesh.Mirani@gknpm.com |

2. Stock Details & action taken for NG parts

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|-----------|---------|-----------|---------|-------------|--------------|-------|
| Total Qty | 7642 | 8000 | 0 | 0 | 0 | 15642 |
| Check Qty | 7642 | 8000 | 0 | 0 | 0 | 15642 |
| NG Qty | 1 | 0 | 0 | 0 | 0 | 1 |

Action taken on NG part

| Scrap | 1 |
|------------------------|---|
| Rework | 0 |
| Under Deviation | 0 |

Containment Action

Quality Alert raised at In process area. Awareness training given to all concerned stakeholders . All stock is under hold for verification

3. Process Flow

Process Flow Description

Mixing-Forming-Sintering-steam treatment -PDI to Post FG

4. Process Details

| Process / Operation | Forming |
|---------------------|---------------|
| Outsource | No |
| Machine / Cell | Small Segemnt |
| Machine / Cell No. | Plant 1 |

5. Problem Analysis

| Туре | Possible Cause | Fact Verification | Jud |
|----------|---|--|-----|
| Man | New Opeartor | Operator Skill Matrix verified | 0 |
| Method | Part fallen on Rotary table due to conveyor height Mismatch | Past History of Concerned batch verified observed Excess gap creating Impact on OD | Х |
| Material | Wrong Mix | MTR | О |

6. Inspection Method Analysis (Current)

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

7. Root Cause Analysis (Occurance)

| Why 1 | Crack Generated on OD During forming process | |
|------------------------|---|--|
| Why 2 | pact Generated on Part OD on Rotary table during TRansferring From conveyor | |
| Why 3 | Excess gap between rotary table & conveyor chute End | |
| Why 4 | No checkpoint to verify gap | |
| Why 5 | | |
| Root Cause (Occurance) | Excess gap between Rotary table & Conveyor chute end resulted into excess impact on Part OD | |

Root Cause Analysis (Outflow)

| Why 1 | Crack parts outflown to ETL |
|----------------------|--|
| Why 2 | Crack parts not detected during Inspection |
| Why 3 | Inspection frequency not adequate |
| Why 4 | Inspection done on sampling basis |
| Why 5 | |
| Root Cause (Outflow) | Inspection done on sampling basis |

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

| Туре | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|-----------|---|----------------|-------------|-------------|-----------|
| Occurance | Glide path provided between Rotary table & Conveyor Clearence to avoid impact | Rohan G | 30/07/2024 | 30/07/2024 | Completed |
| Outflow | Inspection Frequency revised from 5 Parts/4 hour to 5 Parts/ 1hour | Rohan G | 30/07/2024 | 30/07/2024 | Completed |

9. Inspection Method After Customer Complaint

| Change In Inspection System | Yes |
|------------------------------------|---|
| Change Details | Inspection Frequency revised from 5 Parts/8 hour to 5 parts/ 1 hour |
| Inspection Method | Other |
| Other Inspection Method | Visual |
| Check Point at Final Inspection | Yes |
| Checking Freq. | Sampling |
| Sampling | No |
| Sample Size | 10 Nos |

10. Evidance of Countermeasure

| Occurance (Before) | Excess gap on Rotary table 978_Occurance_Before.pptx |
|--------------------|---|
| Occurance (After) | Gap eliminated to avoid stuck up issue 978_Occurance_After.pptx |
| Outflow (Before) | Before Inspection frequency 5 Parts/8 hour 978_Outflow_Before.pdf |
| Outflow (After) | After Inspection Frequency 5 Parts/ 1 Hour 978_Outflow_After.pdf |

11. Horizontal Deployment

| Horizontal Deployment Required | No |
|---------------------------------------|----|
| Applicable Machine / Model / Plant | NA |

12. Document Review

| Documents | ControlPlan, PFMEA |
|------------------------|--------------------|
| Specify Other Document | NA |

13. Effectiveness Of Action

| Reviewed Quantity | 50 |
|-----------------------|----|
| Reason for submission | ОК |

