

Defect Details

| | |
|---------------------------------|---|
| NC No. | 7000943533 |
| NC Date | 11/09/2023 |
| NC Submission Date | |
| Part No. | 520FG13402 |
| Part Name | PRIMARY GEAR ASSEMBLY_ATUL AUTO |
| Supplier Name & Code | 100985-IGL INDUSTRIES LIMITED |
| ETL Plant | 1132-ETL K-226/1 TRANSMISSION |
| Defect Details | DIMETER UNDERSIZE-rusty issue & boss hight obs 24.03 mm |

1. Problem Description

| | |
|-------------------------------|---|
| Defect Description | OPD found undersize up to 124.36~124.51 mm against 124.6±0.035 mm |
| Detection Stage | Receipt |
| Problem Severity | Fitment |
| NG Quantity | 136 |
| Is Defect Repeatative? | No |
| Defect Sketch / Photo | |

Supplier Communication Details

| | |
|--------------------------------|--------------------|
| Quality Head Email ID | qa@indsur.in |
| Plant Head/CEO Email ID | pcwadile@indsur.in |
| MD Email ID | |

2. Stock Details & action taken for NG parts

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|------------------|---------|-----------|---------|-------------|--------------|-------|
| Total Qty | 90 | 0 | 0 | 57 | 0 | 147 |
| Check Qty | 87 | 0 | 0 | 56 | 0 | 143 |
| NG Qty | 3 | 0 | 0 | 1 | 0 | 4 |

Action taken on NG part

| | |
|------------------------|---|
| Scrap | 4 |
| Rework | 0 |
| Under Deviation | 0 |

Containment Action

Parts segregated at ET and IGL.

3. Process Flow

Process Flow Description

Blanks receipt - Hobbing - Shaving - Heat treatment - ID grinding - bush fitting - OD & ID grinding - Teeth chamfering - Washing - Final inspection - oiling and packing - Dispatch

4. Process Details

| | |
|----------------------------|---------------|
| Process / Operation | Grainding |
| Outsource | No |
| Machine / Cell | Granding Cell |
| Machine / Cell No. | 01 |

5. Problem Analysis

| Type | Possible Cause | Fact Verification | Jud |
|------|---|---|-----|
| Man | excess offset given by operator during correction | excess Offset given by operator during correction | 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 | Height & Dia Under size |
| Why 2 | Off-set not provided properly |
| Why 3 | More offset provided during wear tear of tools |
| Why 4 | Offset Interlock not Available on CNC machine |
| Why 5 | |
| Root Cause (Occurance) | excess offset provided after re-setting of wear tear tools |

Root Cause Analysis (Outflow)

| | |
|-----------------------------|--|
| Why 1 | Defected parts Skipped to costumer |
| Why 2 | Setting not ok part mixed up with OK part While inspection |
| Why 3 | set up part handling procedure not available |
| Why 4 | |
| Why 5 | |
| Root Cause (Outflow) | Setting part handling procedure not Ava liable |

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

| Type | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|------|------------------------|----------------|-------------|-------------|--------|
|------|------------------------|----------------|-------------|-------------|--------|

| | | | | |
|-----------|---|---------------|------------|---------|
| Occurance | Offset interlock of 0.02mm provided on CNC machine | Santosh Mokal | 06/12/2023 | Pending |
| Outflow | Set up part handling procedure made & displayed Training given to operator through OPL | Santosh Mokal | 10/12/2023 | Pending |

9. Inspection Method After Customer Complaint

| | |
|--|--|
| Change In Inspection System | Yes |
| Change Details | 100% inspection started in place of sampling inspection. |
| 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) | Manual setting for offset 548_Occurance_Before.xlsx |
| Occurance (After) | Offset Inter lock system Provided in programme 548_Occurance_After.xlsx |
| Outflow (Before) | sampling insp 548_Outflow_Before.xlsx |
| Outflow (After) | 100 % insp 548_Outflow_After.xlsx |

11. Horizontal Deployment

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|---|-------------------------------|
| Horizontal Deployment Required | Yes |
| Applicable Machine / Model / Plant | Supplier END all CNC Machines |

12. Document Review

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|-------------------------------|------------------------------------|
| Documents | ControlPlan, WISOP, InspCheckSheet |
| Specify Other Document | no |

13. Effectiveness Of Action

| | |
|------------------------------|-------------------|
| Reviewed Quantity | 1000 |
| Reason for submission | No Action updated |