

Defect Details

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|---------------------------------|--|
| NC No. | 8000825774 |
| NC Date | 07/04/2023 |
| NC Submission Date | |
| Part No. | F2GN12502B |
| Part Name | MAIN SPRING J1A & J1D |
| Supplier Name & Code | 100180-BHALLA TECHTRAN INDUSTRIES LIM |
| ETL Plant | 1117-ETL K-228/9 Suspension |
| Defect Details | NOT AS PER SPECIFICATION-SQUARENESS FOUND NOT OK |

1. Problem Description

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|-------------------------------|--|
| Defect Description | Squareness found 2 mm against the spec of 1 mm |
| Detection Stage | Receipt |
| Problem Severity | Function |
| NG Quantity | 201 |
| Is Defect Repeatative? | No |
| Defect Sketch / Photo | |

Supplier Communication Details

| | |
|--------------------------------|--------------------------|
| Quality Head Email ID | quality@btlspings.com |
| Plant Head/CEO Email ID | plant1@btlspings.com |
| MD Email ID | amitbhalla.btl@gmail.com |

2. Stock Details & action taken for NG parts

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|------------------|---------|-----------|---------|-------------|--------------|-------|
| Total Qty | 2000 | 3000 | 0 | 1200 | 0 | 6200 |
| Check Qty | 2000 | 3000 | 0 | 1200 | 0 | 6200 |
| NG Qty | 201 | 12 | 0 | 0 | 0 | 213 |

Action taken on NG part

| | |
|------------------------|-----|
| Scrap | 0 |
| Rework | 212 |
| Under Deviation | 0 |

Containment Action

Check the all material lying at customer end, ware house and in plant FG with proper stand on surface plate

3. Process Flow

Process Flow Description

Coiling, Stress relieving 1st, End grinding, Shot peening, Stress relieving 2nd, Scragging, Final Inspection, PDI, Packing & Dispatch

4. Process Details

| | |
|----------------------------|--------------|
| Process / Operation | End Grinding |
| Outsource | No |
| Machine / Cell | CNC Grinder |
| Machine / Cell No. | WNJ |

5. Problem Analysis

| Type | Possible Cause | Fact Verification | Jud |
|----------|------------------------------------|-------------------------|-----|
| Method | Grinding wheel dressing not proper | Dresser plate worn out | X |
| Man | Unskilled operator | Operator skill level OK | O |
| Material | RM not as per specification | RM found OK | O |
| Tool | Wheel dresser unit not OK | Dresser plate worn out | X |

6. Inspection Method Analysis (Current)

| | |
|--|------------|
| Inspection Method | Instrument |
| Other Inspection Method | |
| Check Point at Final Inspection | Yes |
| Checking Freq. | Sampling |
| Sampling | No |
| Sample Size | 05 Pcs |

7. Root Cause Analysis (Occurance)

| | |
|-------------------------------|--|
| Why 1 | End grinding was in taper |
| Why 2 | Grinding wheel surface not parallel |
| Why 3 | Grinding wheel dressing was not proper |
| Why 4 | Dresser plate worn out |
| Why 5 | Dresser plate changing freq. not decided |
| Root Cause (Occurance) | Dresser plate changing freq. not decided |

Root Cause Analysis (Outflow)

| | |
|-----------------------------|---|
| Why 1 | Defected parts not detect in PDI |
| Why 2 | Sampling inspection |
| Why 3 | 100% inspection not possible with instruments |
| Why 4 | |
| Why 5 | |
| Root Cause (Outflow) | Defected parts not detect due to sampling inspection on PDI stage |

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

| Type | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|-----------|--|----------------|-------------|-------------|-----------|
| Occurance | Dresser plate changing freq. decided after 18000 nos. | Rajesh | 10/04/2023 | 10/04/2023 | Completed |
| Outflow | 100% inspection started, Parts stand on surface plate before packing | Rajesh | 11/04/2023 | 11/04/2023 | Completed |

9. Inspection Method After Customer Complaint

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|--|--|
| Change In Inspection System | Yes |
| Change Details | 100% inspection started before packing, Parts should be stand on surface plate |
| Inspection Method | Instrument |
| Other Inspection Method | |
| Check Point at Final Inspection | Yes |
| Checking Freq. | 100% |
| Sampling | No |
| Sample Size | all |

10. Evidence of Countermeasure

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|---------------------------|--|
| Occurance (Before) | PFD & Control plan 400_Occurance_Before.xls |
| Occurance (After) | Revised PFD & Control plan 400_Occurance_After.xls |
| Outflow (Before) | Sampling Inspection 400_Outflow_Before.xlsx |
| Outflow (After) | 100 % Inspection, parts should be stand on surface plate 400_Outflow_After.xlsx |

11. Horizontal Deployment

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|---|----------------------|
| Horizontal Deployment Required | Yes |
| Applicable Machine / Model / Plant | CNC GRINDING MACHINE |

12. Document Review

| | |
|-------------------------------|--------------------------------------|
| Documents | ControlPlan, WISOP, ProcessFlowChart |
| Specify Other Document | NO |

13. Effectiveness Of Action

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|------------------------------|-----------------------|
| Reviewed Quantity | 300 |
| Reason for submission | Verified and found ok |