

Defect Details

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|---------------------------------|--|
| NC No. | 7000916467 |
| NC Date | 19/05/2023 |
| NC Submission Date | |
| Part No. | 165PP00517 |
| Part Name | WHEEL CLUTCH-XCD |
| Supplier Name & Code | 100729-EESHWAR METALS |
| ETL Plant | 1132-ETL K-226/1 TRANSMISSION |
| Defect Details | HIGHT O/SIZE.-lug ht obs 24.74 against 24.40-0.20 mm |

1. Problem Description

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|-------------------------------|--|
| Defect Description | 1.Friction Face to Lug Height Oversize upto 24.74 mm against 24.4 -0.2 mm 2.Machining Face to Friction Face Height 7.2-0.1 mm found up to 6.78~6.80 mm |
| Detection Stage | Inprocess |
| Problem Severity | Function |
| NG Quantity | 120 |
| Is Defect Repeatative? | No |
| Defect Sketch / Photo | |

Supplier Communication Details

| | |
|--------------------------------|------------------------------|
| Quality Head Email ID | eeshwarwaluj@emmesmetals.com |
| Plant Head/CEO Email ID | eeshwarwaluj@emmesmetals.com |
| MD Email ID | lalitmohan@emmesmetals.com |

2. Stock Details & action taken for NG parts

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|------------------|---------|-----------|---------|-------------|--------------|-------|
| Total Qty | 860 | 0 | 0 | 1020 | 560 | 2440 |
| Check Qty | 860 | 0 | 0 | 1020 | 560 | 2440 |
| NG Qty | 106 | 0 | 0 | 5 | 0 | 111 |

Action taken on NG part

| | |
|------------------------|-----|
| Scrap | 111 |
| Rework | 0 |
| Under Deviation | 0 |

Containment Action

100% Inspection By Height Gauge with Identification Marking at Back Face

3. Process Flow

Process Flow Description

CNC Operation

4. Process Details

| | |
|----------------------------|-----|
| Process / Operation | CNC |
| Outsource | No |
| Machine / Cell | CNC |
| Machine / Cell No. | 05 |

5. Problem Analysis

| Type | Possible Cause | Fact Verification | Jud |
|---------|---|-------------------|-----|
| Machine | Machine Breakdown due to Production Running condition | Machine Brakedown | O |

6. Inspection Method Analysis (Current)

| | |
|--|----------|
| Inspection Method | Gauge |
| Other Inspection Method | |
| Check Point at Final Inspection | Yes |
| Checking Freq. | Sampling |
| Sampling | No |
| Sample Size | 5 Nos /h |

7. Root Cause Analysis (Occurance)

| | |
|-------------------------------|--|
| Why 1 | Lug Height Over size |
| Why 2 | due to Mechanical Turret Tool Alignment `z` axis Disturb |
| Why 3 | Due to Production Running Condition |
| Why 4 | |
| Why 5 | |
| Root Cause (Occurance) | CNC Machine PM Complete |

Root Cause Analysis (Outflow)

| | |
|-----------------------------|---|
| Why 1 | Frequency of Lug Height Inspection 100% By height Gauge |
| Why 2 | No Marking On Part For Lug Height Inspection |
| Why 3 | |
| Why 4 | |
| Why 5 | |
| Root Cause (Outflow) | started 100 % Lug Height Inspection By Height Gauge |

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

| Type | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|-----------|---------------------------|--------------------|-------------|-------------|-----------|
| Occurance | Machine Breakdown correct | Mr. Kailash Ladone | 20/05/2023 | 19/05/2023 | Completed |

9. Inspection Method After Customer Complaint

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|--|--|
| Change In Inspection System | Yes |
| Change Details | started 100 % Lug Height Inspection By Special Gauge |
| Inspection Method | Gauge |
| Other Inspection Method | |
| Check Point at Final Inspection | Yes |
| Checking Freq. | 100% |
| Sampling | No |
| Sample Size | 100% |

10. Evidence of Countermeasure

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|---------------------------|--|
| Occurance (Before) | Lug Height sampling Inspection done By Height Gauge 452_Occurance_Before.xlsx |
| Occurance (After) | Started 100 % Lug Height Inspection By Special gauge 452_Occurance_After.xlsx |
| Outflow (Before) | CNC Machine Breakdown due to Production running Condition 452_Outflow_Before.jpg |
| Outflow (After) | Corrected Mechanical Turret Tool Alignment ` Z` Axis 0.01 to 0.02 mm 452_Outflow_After.xlsx |

11. Horizontal Deployment

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|---|----------|
| Horizontal Deployment Required | No |
| Applicable Machine / Model / Plant | CNC SHOP |

12. Document Review

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

13. Effectiveness Of Action

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|------------------------------|---|
| Reviewed Quantity | 10000 |
| Reason for submission | Cause side Action not up to the mark & Need to provide attribute type gauge for 100% Inspection |