QFR No - 7000949879

## Defect Details

| | |
|---|---|
| **NC No.** | 7000949879 |
| **NC Date** | 04/10/2023 |
| **NC Submission Date** | |
| **Part No.** | 520PP01902 |
| **Part Name** | WHEEL CLUTCH FINISHED UPGRADE |
| **Supplier Name & Code** | 100656-MADHURA DIE CAST PVT.LTD |
| **ETL Plant** | 1132-ETL K-226/1 TRANSMISSION |
| **Defect Details** | NOT AS PER SPECIFICATION-Tepar M/c 6.+0.5 u/s 4.95~5.95mm |

## 1. Problem Description

| | |
|---|---|
| **Defect Description** | Tapper Machining -Dimn 6+0.5 mm found 4.95~5.95 mm |
| **Detection Stage** | Receipt |
| **Problem Severity** | Fitment |
| **NG Quantity** | 1650 |
| **Is Defect Repeatative?** | Yes |
| **Defect Sketch / Photo** | |

## Supplier Communication Details

| | |
|---|---|
| **Quality Head Email ID** | madhuradiecast@gmail.com |
| **Plant Head/CEO Email ID** | madhuradiecast@gmail.com |
| **MD Email ID** | madhuradiecast@gaikegroup.in |

## 2. Stock Details & action taken for NG parts

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|---|---|---|---|---|---|---|
| **Total Qty** | 500 | 0 | 0 | 500 | 500 | 1500 |
| **Check Qty** | 500 | 0 | 0 | 500 | 500 | 1500 |
| **NG Qty** | 2 | 0 | 0 | 1 | 0 | 3 |

Action taken on NG part

| | |
|---|---|
| **Scrap** | 3 |
| **Rework** | 0 |
| **Under Deviation** | 0 |

| Containment Action |
|---|
| 1.Casting 2.fetling 3. CNC 1st Set-up 4.CNC 2nd Set-up 5.Drilling & Tapping 6.Final Inspection |

## 3. Process Flow

| Process Flow Description |
|---|
| 1.Casting 2.fetling 3. CNC 1st Set-up 4.CNC 2nd Set-up 5.Drilling & Tapping 6.Final Inspection |

## 4. Process Details

| | |
|---|---|
| **Process / Operation** | CNC 2nd Set-up |
| **Outsource** | No |
| **Machine / Cell** | 02 |
| **Machine / Cell No.** | CNC |

## 5. Problem Analysis

| Type | Possible Cause | Fact Verification | Jud |
|---|---|---|---|
| Material | Burr resting on face | Verified & Found ok | O |
| Man | Unskilled operator was operate machine | Skill Matrix verify found OK | O |
| Machine | Loader dia is less as compare to part resting area | Loader dia is found not ok | X |

## 6. Inspection Method Analysis (Current)

| | |
|---|---|
| **Inspection Method** | Other |
| **Other Inspection Method** | Visual inspection |
| **Check Point at Final Inspection** | Yes |
| **Checking Freq.** | 100% |
| **Sampling** | No |
| **Sample Size** | 1:1 |

## 7. Root Cause Analysis (Occurance)

| | |
|---|---|
| **Why 1** | Tapper Machining-Dimn 6+0.5 mm found 4.95~5.95 mm |
| **Why 2** | Taper machining Problem on friction face |
| **Why 3** | CNC Machine Loader not covering complete resting area of part. |
| **Why 4** | Loader dia is less as compare to part resting area |
| **Why 5** | |
| **Root Cause (Occurance)** | Loader dia is less as compare to part resting area |

## Root Cause Analysis (Outflow)

| | |
|---|---|
| **Why 1** | Taper Machining not checking at Final stage. |
| **Why 2** | Taper Machining checking not added in final inspection check sheet |
| **Why 3** | |
| **Why 4** | |
| **Why 5** | |
| **Root Cause (Outflow)** | Taper Machining checking not added in final inspection check sheet. |

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

| Type | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|---|---|---|---|---|---|
| Outflow | 1. Started 100% Visual inspection of taper machining at Final Stage. 2. OPL displayed at Final stage. 3. Quality alert is displayed at Final Stage. | Quality Supervisor | 15/10/2023 | 11/10/2023 | Completed |
| Occurance | Before loader dia was 48.0 mm & now increased by 59.0 mm as per part resting area. | Production Supervisor | 15/10/2023 | 11/10/2023 | Completed |

## 9. Inspection Method After Customer Complaint

| | |
|---|---|
| **Change In Inspection System** | Yes |
| **Change Details** | Started 100% Visual inspection of taper machining at Final Stage. |
| **Inspection Method** | Other |
| **Other Inspection Method** | Visual Inspection |
| **Check Point at Final Inspection** | Yes |
| **Checking Freq.** | 100% |
| **Sampling** | No |
| **Sample Size** | 1:1 |

## 10. Evidance of Countermeasure

| | |
|---|---|
| **Occurance (Before)** | Before loader dia was 48.0 mm<br>567_Occurance_Before.jfif |
| **Occurance (After)** | now increased by 59.0 mm as per part resting area.<br>567_Occurance_After.jpg |
| **Outflow (Before)** | Taper Machining checking not added in final inspection check sheet.<br>567_Outflow_Before.pdf |
| **Outflow (After)** | 1. Started 100% Visual inspection of taper machining at Final Stage. 2. OPL displayed at Final stage. 3. Quality alert is displayed at Final Stage.<br>567_Outflow_After.pdf |

## 11. Horizontal Deployment

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

## 12. Document Review

| | |
|---|---|
| **Documents** | ControlPlan, PFMEA, InspCheckSheet |
| **Specify Other Document** | OPL,QUALITY ALERT |

## 13. Effectiveness Of Action

| | |
|---|---|
| **Reviewed Quantity** | 1000 |
| **Reason for submission** | OK |