QFR No - 7000834209

## Defect Details

| | |
|---|---|
| **NC No.** | 7000834209 |
| **NC Date** | 30/04/2022 |
| **NC Submission Date** | |
| **Part No.** | 520FN01902 |
| **Part Name** | CLUTCH HOLDER BM-150 |
| **Supplier Name & Code** | 202375-ADVANTECH ENGINEERING COMPANY |
| **ETL Plant** | 1132-ETL K-226/1 TRANSMISSION |
| **Defect Details** | DIMETER UNDERSIZE-4Hole Dia 6.2+01 o/s no go Gauge Qualyfn |

## 1. Problem Description

| | |
|---|---|
| **Defect Description** | 4 Hole Dia 6.2+01 oversize no go Gauge Qualifying |
| **Detection Stage** | Receipt |
| **Problem Severity** | Function |
| **NG Quantity** | 320 |
| **Is Defect Repeatative?** | No |
| **Defect Sketch / Photo** | |

## Supplier Communication Details

| | |
|---|---|
| **Quality Head Email ID** | quality@advantechgroup.co.in |
| **Plant Head/CEO Email ID** | info@advantechgroup.co.in |
| **MD Email ID** | harishpathade@advantechgroup.co.in |

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

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|---|---|---|---|---|---|---|
| **Total Qty** | 1200 | 0 | 0 | 1500 | 800 | 3500 |
| **Check Qty** | 1200 | 0 | 0 | 1500 | 800 | 3500 |
| **NG Qty** | 320 | 0 | 0 | 0 | 0 | 320 |

Action taken on NG part

| | |
|---|---|
| **Scrap** | 320 |
| **Rework** | 0 |
| **Under Deviation** | 0 |

| Containment Action |
|---|
| On VMC PCD Hole Carbide step drill (size 6.28 mm) replaced and new size of drill 6.24 mm for maintain hole ID 6.2+0.1 mm. Drill change frequency after 40000 nos. |

## 3. Process Flow

| Process Flow Description |
|---|
| Receiving of Casting + CNC Turning -- VMC 4 hole drilling --- Final inspection --Dispatch |

## 4. Process Details

| | |
|---|---|
| **Process / Operation** | CNC- Turning, VMC- PCD hole Drill |
| **Outsource** | No |
| **Machine / Cell** | Machine Shop |
| **Machine / Cell No.** | VMC - 01 |

## 5. Problem Analysis

| Type | Possible Cause | Fact Verification | Jud |
|---|---|---|---|
| Machine | PCD hole ID 6.2+0.1 mm taken higher side. | No Go pass | 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** | 32 |

## 7. Root Cause Analysis (Occurance)

| | |
|---|---|
| **Why 1** | PCD Hole ID 6.2+0.1 mm No GO Passed |
| **Why 2** | PCD hole ID 6.2 +0.1 taken higher side as per customer requirement. |
| **Why 3** | PCD hole step drill size 6.28 mm |
| **Why 4** | |
| **Why 5** | |
| **Root Cause (Occurance)** | On VMC PCD hole step drill size 6.28 mm |

## Root Cause Analysis (Outflow)

| | |
|---|---|
| **Why 1** | PCD Hole ID 6.2+0.1 mm No GO Passed |
| **Why 2** | PCD hole ID - inspection not done with plug gauge at final stage. |
| **Why 3** | PCD hole ID by Plug gauge - I Do I check by operator at Machining stage. |
| **Why 4** | |
| **Why 5** | |
| **Root Cause (Outflow)** | PCD hole ID by Plug gauge - I Do I check by operator at Machining stage. |

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

| Type | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|---|---|---|---|---|---|
| Occurance | 1. On VMC PCD hole step drill size 6.28 mm replaced with new size 6.24 mm 2. Hole ID inspection started by Plug gauge at final stage on sampling basis. | Mr. Kuldeep /Vasant | 03/05/2022 | 03/05/2022 | Completed |

## 9. Inspection Method After Customer Complaint

| | |
|---|---|
| **Change In Inspection System** | Yes |
| **Change Details** | Hole ID inspection started by Plug gauge at final stage on sampling basis. |
| **Inspection Method** | Gauge |
| **Other Inspection Method** | |
| **Check Point at Final Inspection** | Yes |
| **Checking Freq.** | Sampling |
| **Sampling** | No |
| **Sample Size** | 10 |

## 10. Evidance of Countermeasure

| | |
|---|---|
| **Occurance (Before)** | PCD Hole Step Drill Size-6.28 mm<br>83_Occurance_Before.xlsx |
| **Occurance (After)** | PCD Hole Step Drill Size-6.24 mm<br>83_Occurance_After.xlsx |
| **Outflow (Before)** | Plug Gauge inspection at VMC machine after hole drill operation<br>83_Outflow_Before.xlsx |
| **Outflow (After)** | Plug gauge inspection started at final stage as per sampling plan<br>83_Outflow_After.jpg |

## 11. Horizontal Deployment

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

## 12. Document Review

| | |
|---|---|
| **Documents** | ControlPlan, WISOP, InspCheckSheet |
| **Specify Other Document** | NA |

## 13. Effectiveness Of Action

| | |
|---|---|
| **Reviewed Quantity** | 10000 |
| **Reason for submission** | Cause side and inspection side action not proper |