

## Defect Details

|                                 |  |
|---------------------------------|--|
| <b>NC No.</b>                   | 8000808154   |
| <b>NC Date</b>                  | 17/10/2022   |
| <b>NC Submission Date</b>       |  |
| <b>Part No.</b>                 | 550FA17433   |
| <b>Part Name</b>                | FORK PIPE MACHINED                                       |
| <b>Supplier Name &amp; Code</b> | 100503-DIVYA INDUSTRIES                                  |
| <b>ETL Plant</b>                | 1116-ETL K-120 Suspension                                |
| <b>Defect Details</b>           | NOT AS PER SPECIFICATION-THREADING,CLUCKING,LENGTH NOTOK |

## 1. Problem Description

|                               |   |
|-------------------------------|---|
| <b>Defect Description</b>     | Dimensional NG concern:- During assembly operation fitment parameters, like threading, caulking ID, total length observed not ok. |
| <b>Detection Stage</b>        | Inprocess   |
| <b>Problem Severity</b>       | Fitment   |
| <b>NG Quantity</b>            | 114   |
| <b>Is Defect Repeatative?</b> | Yes   |
| <b>Defect Sketch / Photo</b>  |   |

## Supplier Communication Details

|                                |                             |
|--------------------------------|-----------------------------|
| <b>Quality Head Email ID</b>   | quality@mahavirind.co.in    |
| <b>Plant Head/CEO Email ID</b> | production@mahavirind.co.in |
| <b>MD Email ID</b>             | rajesh@mahavirind.co.in     |

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

| Location         | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|------------------|---------|-----------|---------|-------------|--------------|-------|
| <b>Total Qty</b> | 2600    | 0         | 0       | 0           | 0            | 2600  |
| <b>Check Qty</b> | 2600    | 0         | 0       | 0           | 0            | 2600  |
| <b>NG Qty</b>    | 114     | 0         | 0       | 0           | 0            | 114   |

## Action taken on NG part

|                        |     |
|------------------------|-----|
| <b>Scrap</b>           | 10  |
| <b>Rework</b>          | 104 |
| <b>Under Deviation</b> | 0   |

## Containment Action

All material Segregation at Customer End

## 3. Process Flow

## Process Flow Description

1)RM pipe Cutting Inward- 2)Store- 3)CNC 1st Caulking Side Machining -4)CNC 2nd side Machining -5) F1.5mm Drilling --6) Final Inspection -7) Packing - Dispatch

## 4. Process Details

|                            |                                   |
|----------------------------|-----------------------------------|
| <b>Process / Operation</b> | 3)CNC 1st Caulking Side Machining |
| <b>Outsource</b>           | No                                |
| <b>Machine / Cell</b>      | Fork Pipe CNC machine Shop.       |
| <b>Machine / Cell No.</b>  | CNC-5                             |

## 5. Problem Analysis

| Type     | Possible Cause                                       | Fact Verification                                      | Jud |
|----------|--|--|-----|
| Material | Fork Pipe face Unclean / Depth Under Size By0.2 -0.5 | Length Under Size by 0.2-0.5 of Fork Pipe Raw Material | X   |

## 6. Inspection Method Analysis (Current)

|  |       |
|--|-------|
| <b>Inspection Method</b>               | Gauge |
| <b>Other Inspection Method</b>         |       |
| <b>Check Point at Final Inspection</b> | Yes   |
| <b>Checking Freq.</b>                  | 100%  |
| <b>Sampling</b>                        | No    |
| <b>Sample Size</b>                     | ..... |

## 7. Root Cause Analysis (Occurance)

|                               |  |
|-------------------------------|--|
| <b>Why 1</b>                  | Caulking Depth Under size  |
| <b>Why 2</b>                  | Caulking Side Face Unclean                                       |
| <b>Why 3</b>                  | CNC-1st Side - Caulking Side Facing Not Proper as Require Length |
| <b>Why 4</b>                  | Raw Material Length Short  |
| <b>Why 5</b>                  |  |
| <b>Root Cause (Occurance)</b> | Raw Material Length Short  |

## Root Cause Analysis (Outflow)

|                             |  |
|-----------------------------|--|
| <b>Why 1</b>                | Caulking Depth Under size                              |
| <b>Why 2</b>                | Face Unclean Defect Not Detect During Final Inspection |
| <b>Why 3</b>                | Inspector Not Aware Of Face Unclean                    |
| <b>Why 4</b>                | New Inspector  |
| <b>Why 5</b>                |  |
| <b>Root Cause (Outflow)</b> | Inspector Not Aware Of Face Unclean                    |

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

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

|         |   |                                   |            |            |           |
|---------|---|-----------------------------------|------------|------------|-----------|
| Outflow | 1)Raw material Length Short. 2)New Final Inspector. | Mr Gadekar And Mr. Suresh Kapgate | 20/10/2022 | 20/10/2022 | Completed |
|---------|---|-----------------------------------|------------|------------|-----------|

## 9. Inspection Method After Customer Complaint

|  |  |
|--|--|
| <b>Change In Inspection System</b>     | Yes  |
| <b>Change Details</b>                  | 1) Defected Samples display at Final Inspection And Machine .2) OJT to Machine Operator & New Inspector. |
| <b>Inspection Method</b>               | Sp. Gauge  |
| <b>Other Inspection Method</b>         |  |
| <b>Check Point at Final Inspection</b> | Yes  |
| <b>Checking Freq.</b>                  | 100%   |
| <b>Sampling</b>                        | No   |
| <b>Sample Size</b>                     | ...  |

## 10. Evidance of Countermeasure

|                           |  |
|---------------------------|--|
| <b>Occurance (Before)</b> | Caulking Side face Unclean / Caulking side Depth Under Size<br><a href="#">289_Occurance_Before.jpeg</a> |
| <b>Occurance (After)</b>  | One Point Lesson Display / OJT to operators<br><a href="#">289_Occurance_After.xlsx</a>                  |
| <b>Outflow (Before)</b>   | Raw Material Length Short form Source Area<br><a href="#">289_Outflow_Before.jpeg</a>                    |
| <b>Outflow (After)</b>    | Ram material Inspection start<br><a href="#">289_Outflow_After.xlsx</a>                                  |

## 11. Horizontal Deployment

|   |                     |
|---|---------------------|
| <b>Horizontal Deployment Required</b>     | Yes                 |
| <b>Applicable Machine / Model / Plant</b> | All Types Fork Pipe |

## 12. Document Review

|                               |                                    |
|-------------------------------|------------------------------------|
| <b>Documents</b>              | ControlPlan, PFMEA, InspCheckSheet |
| <b>Specify Other Document</b> | Raw material Inward                |

## 13. Effectiveness Of Action

|                              |  |
|------------------------------|--|
| <b>Reviewed Quantity</b>     |  |
| <b>Reason for submission</b> |  |