Defect Details

| NC No. | 8000897821 | |
|-----------------------|---|--|
| NC Date | 29/10/2024 | |
| NC Submission Date | | |
| Part No. | 520PA01602 | |
| Part Name | TUBE RING BOTTOM | |
| Supplier Name & Code | 101255-MAHAVIR INDUSTRIES | |
| ETL Plant | 1118-ETL E-92,93 Suspension | |
| Defect Details | ID UNDERSIZE-ID U/S SPE=29.0+/-0.10 OBS=28.40 | |

1. Problem Description

| Defect Description | ID UNDERSIZE-ID U/S SPE=29.0+/-0.10 OBS=28.40 |
|---------------------------|---|
| Detection Stage | Inprocess |
| Problem Severity | Fitment |
| NG Quantity | 49 |
| Is Defect Repeatative? | No |
| Defect Sketch / Photo | |

Supplier Communication Details

| Quality Head Email ID | quality@mahavirind.co.in |
|------------------------------|----------------------------|
| Plant Head/CEO Email ID | planthead@mahavirind.co.in |
| MD Email ID | |

2. Stock Details & action taken for NG parts

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|-----------|---------|-----------|---------|-------------|--------------|-------|
| Total Qty | 1800 | 0 | 0 | 0 | 0 | 1800 |
| Check Qty | 1800 | 0 | 0 | 0 | 0 | 1800 |
| NG Qty | 49 | 0 | 0 | 0 | 0 | 49 |

Action taken on NG part

| Scrap | 49 |
|------------------------|----|
| Rework | 0 |
| Under Deviation | 0 |

| Containment Action |
|--|
| All Material segregation at Customer End |

3. Process Flow

Process Flow Description

RM inward - store - Traub Machining -1 -chamfer Machining -2- Final Inspection - Packing - Dispatch - Transport

4. Process Details

| Process / Operation | Traub Machining |
|---------------------|-----------------|
| Outsource | Yes |
| Machine / Cell | Traub No, 5 |
| Machine / Cell No. | Traub Section |

5. Problem Analysis

| Туре | Possible Cause | Fact Verification | Jud |
|----------|--|--|-----|
| Method | Parting Machining Method Change , Inspection Method Change | Traub Machining Method is Correct But pipe ID not Inspection Before parting on Parting Process | Х |
| Material | Wrong Size And other grade Material Use | Grade was ok but ID under size Pipe Mix With ok Raw Material . | Х |
| Tool | Wrong Chamfer Tool Use | No, Insert Type Chamfer Tool Use on chamfer machine . | 0 |
| Machine | Machine Condition Not Ok | As Per PM schedule Traub Machine Found Ok | 0 |
| Man | Unskilled operator | As per Skilled Matrix Operator is skilled | 0 |

6. Inspection Method Analysis (Current)

| Inspection Method | Gauge |
|---------------------------------|----------|
| Other Inspection Method | |
| Check Point at Final Inspection | Yes |
| Checking Freq. | Sampling |
| Sampling | No |
| Sample Size | 20nos |

7. Root Cause Analysis (Occurance)

| Why 1 | D UNDERSIZE-ID U/S |
|------------------------|---|
| Why 2 | ID Under size One Pipe mix With Ok Regular Raw Material. |
| Why 3 | Operator Not aware for ID under size. In Regular Operation. |
| Why 4 | |
| Why 5 | |
| Root Cause (Occurance) | ID Under size One Pipe mix With Ok Regular Raw Material. |

Root Cause Analysis (Outflow)

| Why 1 | D UNDERSIZE-ID U/S |
|--|---|
| Why 2 | ID Under size One Pipe mix With Ok Regular Raw Material. |
| Why 3 | The operator on the Traub machine did not check the first parting piece after loading a new pipe. |
| Why 4 Operator Not aware for ID under size. In Regular Operation. | |
| Why 5 | |
| Root Cause (Outflow) The operator on the Traub machine did not check the first parting piece after loading a new pipe. | |

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

| Туре | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|-----------|---|---------------------|-------------|-------------|-----------|
| Occurance | Work Instructions Display on Traub Machine for Operator Awareness | Production Incharge | 08/11/2024 | 07/11/2024 | Completed |
| Outflow | Plug Gauge Provide On Traub Machine for check the first parting piece after loading a new pipe. | Quality Head | 17/11/2024 | 16/11/2024 | Completed |

9. Inspection Method After Customer Complaint

| Change In Inspection System | Yes |
|------------------------------------|---|
| Change Details | Plug Gauge Provide On Traub Machine for check the first parting piece after loading each and Every a New Pipe |
| Inspection Method | Gauge |
| Other Inspection Method | |
| Check Point at Final Inspection | Yes |
| Checking Freq. | Sampling |
| Sampling | No |
| Sample Size | 20Pcs |

10. Evidance of Countermeasure

| Occurance (Before) | ID Under size One Pipe mix With Ok Regular Raw Material. 1196_Occurance_Before.docx |
|--------------------|---|
| Occurance (After) | Work Instructions Display on Traub Machine for Operator Awareness. 1196_Occurance_After.docx |
| Outflow (Before) | The operator on the Traub machine did not check the first parting piece after loading a new pipe. 1196_Outflow_Before.docx |
| Outflow (After) | lug Gauge Provide On Traub Machine for check the first parting piece after loading a new pipe. 1196_Outflow_After.xlsx |

11. Horizontal Deployment

| Horizontal Deployment Required | Yes |
|---------------------------------------|----------------|
| Applicable Machine / Model / Plant | All Tube Rings |

12. Document Review

| Documents | ControlPlan, PFMEA, WISOP |
|------------------------|---------------------------|
| Specify Other Document | No |

13. Effectiveness Of Action

