

Defect Details

| | |
|---------------------------------|---------------------------------------|
| NC No. | 7000877598 |
| NC Date | 19/11/2022 |
| NC Submission Date | |
| Part No. | 520KU00302 |
| Part Name | ROD GUIDE |
| Supplier Name & Code | 100177-SPECIALITY SINTERED PRODUCTS P |
| ETL Plant | 1116-ETL K-120 Suspension |
| Defect Details | DIMETER UNDERSIZE-i d undersize |

1. Problem Description

| | |
|-------------------------------|--------------------------------|
| Defect Description | Inner dia. undersize observed. |
| Detection Stage | Receipt |
| Problem Severity | Fitment |
| NG Quantity | 208 |
| Is Defect Repeatative? | Yes |
| Defect Sketch / Photo | |

Supplier Communication Details

| | |
|--------------------------------|---|
| Quality Head Email ID | ganesh.padwalkar@specialitysintered.com |
| Plant Head/CEO Email ID | sandeep.gaikwad@specialitysintered.com |
| MD Email ID | lalit.chaudhari@ssplpune.com |

2. Stock Details & action taken for NG parts

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|------------------|---------|-----------|---------|-------------|--------------|-------|
| Total Qty | 10000 | 30000 | 0 | 0 | 1000 | 41000 |
| Check Qty | 10000 | 30000 | 0 | 0 | 1000 | 41000 |
| NG Qty | 208 | 0 | 0 | 0 | 0 | 208 |

Action taken on NG part

| | |
|------------------------|-----|
| Scrap | 208 |
| Rework | 0 |
| Under Deviation | 0 |

Containment Action

100% inspection done with PPG go gauge

3. Process Flow

Process Flow Description

Raw Material Inspection - Compaction - Sintering - Debarring - sizing - Grooving - Predispatch Inspection - Oiling - Packaging - Dispatch

4. Process Details

| | |
|----------------------------|----------|
| Process / Operation | Grooving |
| Outsource | Yes |
| Machine / Cell | CNC |
| Machine / Cell No. | CNC Cell |

5. Problem Analysis

| Type | Possible Cause | Fact Verification | Jud |
|----------|-----------------------------------|---|-----|
| Man | Unskill operator | verified operator by interviewing and observed skill ok | X |
| Tool | sizing CO rod wear out | verify sizing co rod and observed spec as per specification | X |
| Machine | Process concern | verified machining process observed burr observed at ID groove | O |
| Material | incorrect raw material used | verified supplier TC and Third party report and observed raw materia as per drawing | X |
| Method | Inspection method at supplier end | verified inspection method at supplier end observed Inspection with PPG gauge | X |

6. Inspection Method Analysis (Current)

| | |
|--|----------|
| Inspection Method | Gauge |
| Other Inspection Method | |
| Check Point at Final Inspection | Yes |
| Checking Freq. | Sampling |
| Sampling | No |
| Sample Size | IS2500 |

7. Root Cause Analysis (Occurance)

| | |
|-------------------------------|--|
| Why 1 | ID Under Size |
| Why 2 | During The ID Grooving Process Part Get ID U/S |
| Why 3 | Id Groove Burr Fold In ID . |
| Why 4 | Process Concern |
| Why 5 | |
| Root Cause (Occurance) | Process Concern |

Root Cause Analysis (Outflow)

| | |
|-----------------------------|------------------------------------|
| Why 1 | ID Under Size |
| Why 2 | Not Detected In final Inspection . |
| Why 3 | Inspection Done On Sampling Basis. |
| Why 4 | |
| Why 5 | |
| Root Cause (Outflow) | Inspection Done On Sampling Basis. |

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

| Type | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|-----------|--|-----------------|-------------|-------------|-----------|
| Occurance | Reaming Operation Started After Grooving Operation | Mahesh Narkhede | 25/11/2022 | 25/11/2022 | Completed |
| Outflow | 100 % ID Inspection Started | Sunil Shejwal | 20/11/2022 | 20/11/2022 | Completed |

9. Inspection Method After Customer Complaint

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

10. Evidence of Countermeasure

| | |
|---------------------------|--|
| Occurance (Before) | No Reaming Operation After Grooving 303_Occurance_Before.xlsx |
| Occurance (After) | Reaming Operation Added Before Grooving. 303_Occurance_After.xlsx |
| Outflow (Before) | Sampling Inspection 303_Outflow_Before.pdf |
| Outflow (After) | 100 % Inspection Started 303_Outflow_After.pdf |

11. Horizontal Deployment

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

12. Document Review

| | |
|-------------------------------|-------------------------|
| Documents | PFMEA, ProcessFlowChart |
| Specify Other Document | Quality Alert |

13. Effectiveness Of Action

| | |
|------------------------------|------------|
| Reviewed Quantity | 100 |
| Reason for submission | Completed. |

