Defect Details

| NC No. | 7000829982 |
|----------------------|---|
| NC Date | 06/04/2022 |
| NC Submission Date | |
| Part No. | S2BY04007B |
| Part Name | CANISTER M/C, IMPREGNATED & COATED |
| Supplier Name & Code | 101032-ASM CASTINGS PRIVATE LIMITED (|
| ETL Plant | 1118-ETL E-92,93 Suspension |
| Defect Details | POWDER COATING NOT OK-POWDER COATING PEEL OFF |

1. Problem Description

| Defect Description | Canister Failed in Adhesion Test at Receipt |
|------------------------|---|
| Detection Stage | Receipt |
| Problem Severity | Aesthetic |
| NG Quantity | 2000 |
| Is Defect Repeatative? | Yes |
| Defect Sketch / Photo | bxvtf0xyugvyhemmx3w43yva.png |

Supplier Communication Details

| Quality Head Email ID | quality@asmcastings.in |
|-------------------------|------------------------|
| Plant Head/CEO Email ID | skaul@asmcastings.in |
| MD Email ID | rajiv@asmcastings.in |

2. Stock Details & action taken for NG parts

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|------------------|---------|-----------|---------|-------------|--------------|-------|
| Total Qty | 1200 | 0 | 0 | 1650 | 1000 | 3850 |
| Check Qty | 10 | 0 | 0 | 1650 | 1000 | 2660 |
| NG Qty | 0 | 0 | 0 | 1650 | 0 | 1650 |

Action taken on NG part

| Scrap | 10 |
|-----------------|----|
| Rework | 0 |
| Under Deviation | 0 |

Containment Action

Part Checked (10 Nos. each lot for Tape Test) and a chemical added in impregnation process as per M/S Ultraseal's Recommendation (Sealant & Impregnation Unit Supplier)

3. Process Flow

Process Flow Description

R.M. Receiving - Casting - Fattling- CNC Machining - SPM Machining- Impregnation - Pin Pressing - Leakage Testing- Dry in Oven - Inspection & PDI - Packing - Dispatch

4. Process Details

| Process / Operation | Impregnation |
|---------------------|-------------------|
| Outsource | No |
| Machine / Cell | Impregnation Unit |
| Machine / Cell No. | N/A |

5. Problem Analysis

| Туре | Possible Cause | Fact Verification | Jud |
|----------|--|--|-----|
| Machine | Ra not maintained from Shot Blasting Machine | Ra Inspection & Cycle Time Verification in Shot Blasting Machine | Х |
| Tool | Impregnation Unit not working adequately | Ring Test | Х |
| Material | Impregnation Sealant not effective | Impregnation done at Customer End with Other Brand | 0 |
| Man | Operator not aware about process | Skill Matrix | Х |

6. Inspection Method Analysis (Current)

| Inspection Method | Other |
|------------------------------------|------------|
| Other Inspection Method | Tape Test |
| Check Point at Final Inspection | No |
| Checking Freq. | Sampling |
| Sampling | No |
| Sample Size | not detect |

7. Root Cause Analysis (Occurance)

| Why 1 | Powder Coating Peel off at customer end |
|------------------------|--|
| Why 2 | bonding of Powder & Part could not be adequate |
| Why 3 | a layer of chemical sealant deposited at surface of part |
| Why 4 | Damaged /Old Mesh Used in Basket (mesh Not Changed Timely) |
| Why 5 | Mesh Changing Freq. Not decided. |
| Root Cause (Occurance) | Mesh Changing Freq. Not decided. |

Root Cause Analysis (Outflow)

| Why 1 | Can Not detected at ASM |
|----------------------|---|
| Why 2 | Powder Coating at Outsource. (Customer /Supplier End) |
| Why 3 | |
| Why 4 | |
| Why 5 | |
| Root Cause (Outflow) | Powder Coating Out Source (Customer /Supplier) |

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

| Туре | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|-----------|---|----------------|-------------|-------------|-----------|
| Occurance | Qty. per Basket reduced from 600 nos. to 400 nos. per basket & added in Work Instruction. | Lalit Sharma | 30/07/2022 | 30/07/2022 | Completed |
| Occurance | Awareness Training Provided to Concerned person for Work Instruction ammedment. | Lalit Sharma | 02/08/2022 | 02/08/2022 | Completed |
| Occurance | Mesh Changing Freq. Added in Control Plan | Lalit Sharma | 01/02/2023 | | Completed |
| Occurance | Sealant Grade Changed from PC504 to IM3000 to improve Impregnation Quality. | Ultraseal. | 28/10/2022 | | Completed |

9. Inspection Method After Customer Complaint

| Change In Inspection System | Yes |
|------------------------------------|---|
| Change Details | Supervisor Verification for part Qty. in Basket as per W.I. |
| Inspection Method | Other |
| Other Inspection Method | as per w.i. |
| Check Point at Final Inspection | No |
| Checking Freq. | 100% |
| Sampling | No |
| Sample Size | 10 |

10. Evidance of Countermeasure

| Occurance (Before) | 01. Check Point not added in Work Instruction for qty per basket. 02. Sealent Grade Change from PC504 to IM3000 (Suggested by Impregnation Supplier) 47_Occurance_Before.png |
|--------------------|--|
| Occurance (After) | Work Instruction Updated for Qty. per Basket 47_Occurance_After.pdf |
| Outflow (Before) | Awareness not evident to concern person for Qty. per basket. 47_Outflow_Before.jpg |
| Outflow (After) | Awareness Training provided to concerned person 47_Outflow_After.pdf |

11. Horizontal Deployment

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

12. Document Review

| Documents | WISOP |
|------------------------|-------|
| Specify Other Document | W.I |

13. Effectiveness Of Action

 Reviewed Quantity
 4000

 Reason for submission
 No any Peel Off Reported after Action Taken