### **Defect Details**

NC No.	8000859512
NC Date	19/01/2024
NC Submission Date	
Part No.	520KT00102
Part Name	ROD BUSH
Supplier Name & Code	100176-GKN SINTER METALS PRIVATE LIMI
ETL Plant	1146-ETL Suspension Narasapura
<b>Defect Details</b>	MATERIAL DEFECT-CRACK ISSUE

# 1. Problem Description

Defect Description	Rod bush crack issue
<b>Detection Stage</b>	Inprocess
Problem Severity	Safety
NG Quantity	272
Is Defect Repeatative?	No
Defect Sketch / Photo	

# Supplier Communication Details

Quality Head Email ID	Rajendra.Sethiya@gknpm.com
Plant Head/CEO Email ID	Pratik.Dharangaonkar@gknpm.com
MD Email ID	Rajesh.Mirani@gknpm.com

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	46000	0	0	23000	0	69000
Check Qty	46000	0	0	23000	0	69000
NG Qty	274	0	0	0	0	274

#### Action taken on NG part

Scrap	274
Rework	0
Under Deviation	0

#### **Containment Action**

Stock lying at ETL end & GKN end segregated for crack issue.

#### 3. Process Flow

#### **Process Flow Description**

Mixing-Forming-Sintering-Heat Treatment-Barreling-Final Inspection-PDI

### 4. Process Details

Process / Operation	Forming
Outsource	No
Machine / Cell	Forming Press
Machine / Cell No.	NA NA

## 5. Problem Analysis

Туре	Possible Cause	Fact Verification	Jud
Method	Forming material handling inadequate	Material is handled in plywood trays at forming stage	Х
Man	Unskilled Operator	Skill matrix verified, found OK	0
Tool	Wrong tools used	Tools report verified, found OK	0
Material	Raw material NG	RM Test report verified, found OK	0
Material	Density NG	MTR Verified, found OK	0
Material	Hardness NG	MTR Verified, found OK	0
Machine	Machine breakdown	In process reports verified, found OK	0

## 6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	Visual Inspection
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100 %

## 7. Root Cause Analysis (Occurance)

Why 1	Crack observed in rod bush
Why 2	Crack got generated during handling of material at sintering stage
Why 3	During forming to sintering material handled plywood trays
Why 4	During sintering material loaded in wire mesh trays from plywood trays
Why 5	
Root Cause (Occurance)	During sintering material loaded in wire mesh trays from plywood trays

## Root Cause Analysis (Outflow)

Why 1	Crack observed in rod bush
Why 2	Crack part skipped from visual inspection
Why 3	No check point available at final inspection
Why 4	
Why 5	

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

Туре	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Awareness training given to concern operators to use wire mesh trays instead of plywood trays	Mr. Rohan G	15/04/2024	13/04/2024	Completed
Outflow	Checkpoint added at final inspection WI	Mr. B Avhad	15/04/2024	13/04/2024	Completed
Occurance	From forming to sintering material will be handled in wire mesh trays instead of plywood trays	Mr. Rohan G	15/04/2024	13/04/2024	Completed
Outflow	Awareness training given to concern persons	Mr. B Avhad	15/04/2024	13/04/2024	Completed

# 9. Inspection Method After Customer Complaint

Change In Inspection System	No
Change Details	NA
Inspection Method	Other
Other Inspection Method	Visual Inspection
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100 %

### 10. Evidance of Countermeasure

Occurance (Before)	Plywood trays used 642_Occurance_Before.pptx
Occurance (After)	Wire mesh trays implemented 642_Occurance_After.pptx
Outflow (Before)	No check point 642_Outflow_Before.ppt
Outflow (After)	Check point added 642_Outflow_After.ppt

## 11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	NA

### 12. Document Review

Documents	ControlPlan, PFMEA, WISOP
Specify Other Document	NA

# 13. Effectiveness Of Action

Reviewed Qua	ntity	1000
Reason for sub	mission	problem in rod bush but in action plan photo piston