#### **Defect Details**

NC No.	8000877824
NC Date	11/06/2024
NC Submission Date	
Part No.	F2LG07702B
Part Name	SEAT PIPE - J1C2 FF
Supplier Name & Code	100539-N P ENTERPRISES
ETL Plant	1117-ETL K-228/9 Suspension
<b>Defect Details</b>	NOT AS PER SPECIFICATION-GROOVE DIA. OVERSIZE

# 1. Problem Description

<b>Defect Description</b>	GROOVE DIA. OVERSIZE
<b>Detection Stage</b>	Inprocess
Problem Severity	Fitment
NG Quantity	13
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

# Supplier Communication Details

Quality Head Email ID	quality@npcindustries.in
Plant Head/CEO Email ID	anand@npcindustries.in
MD Email ID	ajay@npcindustries.in

# 2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	960	14000	0	0	0	14960
Check Qty	960	14000	0	0	0	14960
NG Qty	13	0	0	0	0	13

#### Action taken on NG part

Scrap	0
Rework	13
Under Deviation	0

#### Containment Action

segregate all material at both end

#### 3. Process Flow

#### Process Flow Description

Process Flow Description 1.0 Raw Material 2.0 Cutting 3.0 Drawing 4.0 Head Formation 5.0 Rough Grinding 6.0 Punching 7.0 CNC Head Turning 8.0 CNC Boring & Facing 9.0 Tapping 10.0 Chamfering 11.0 ID Deburring 12.0 Finish Grinding 13.0 Final Inspection 14.0 Cleaning 15.0 Oiling 16.0 Packing & Dispatch.

#### 4. Process Details

Process / Operation	CNC Head Turning
Outsource	No
Machine / Cell	CNC
Machine / Cell No.	BC-CNC-21

#### 5. Problem Analysis

Туре	Possible Cause	Fact Verification	Jud
Man	Operator unaware	Operator found to be aware about the process	0
Man	Negligence of quality inspector at in process	Quality inspector found to be non negligent .	0
Tool	Damage of Grooving Insert	It was verified and observed that Grooving Insert got damaged which resulted in width becoming under	Х
Tool	Forging dia over	Forging dia observed to be correct. No linkage with defect observed	
Machine	Wrong program selection	It was verified that correct program was selected for machining.	0
Method	NG part skipped at Final inspection	It was verified and observed that parts skipped during sampling at final inspection	Х
Method	Improper clamping of insert	It was observed that clamping of insert is proper	0

### 6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	Visual
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	as per std

### 7. Root Cause Analysis (Occurance)

Why 1	Groove width undersize	
Why 2	Step observed	
Why 3	Grooving Insert got damaged	
Why 4	Part could not be clamped properly	
Why 5	Rough Grinding dia down due to Rough Grinding Setting parts mixed	
Root Cause (Occurance)	Rough Grinding dia down due to Rough Grinding Setting parts mixed	

#### Root Cause Analysis (Outflow)

Why 1	Groove width undersize
Why 2	Could not be detected at Final Inspection
Why 3	Skipped in Sampling inspection

Why 4	
Why 5	
Root Cause (Outflow)	Skipped in Sampling inspection

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

Туре	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Quality alert to be displayed at CNC station	Mr. Princ	12/06/2024	11/06/2024	Completed
Outflow	Quality alert to be displayed at final inspection station	Mr. Princ	12/06/2024	11/06/2024	Completed
Outflow	Min level 3 operator will be allowed to operate CNC Head Turning Machine	Mr. Harwinder	14/06/2024	13/06/2024	Completed
Outflow	100% inspection with Slip Gauge to be done before dispatch	Mr. Ankush	13/06/2024	12/06/2024	Completed
Occurance	Rough Grinding setting parts to be quarantined in Lock & Key Bin by Quality Inspector himself	Mr. Ankush	13/06/2024	12/06/2024	Completed
Outflow	Training to be provided to all CNC operators for abnormal sound and checking insert manually	Mr. Harwinder	14/06/2024	13/06/2024	Completed

# 9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100% inspection with Slip Gauge to be done before dispatch
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

# 10. Evidance of Countermeasure

Occurance (Before)	Open redbin used for rejection pcs at rough grinder 845_Occurance_Before.jpeg
Occurance (After)	Locked Redbin implemented at rough grinder 845_Occurance_After.jpeg
Outflow (Before)	use sampling method for inspection at final Q gate 845_Outflow_Before.png
Outflow (After)	100 % inspection to be started with slip gauge and Q alert to be displayed at final Q gate. 845_Outflow_After.jpg

# 11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	Similar model

# 12. Document Review

Documents	ControlPlan, PFMEA, InspCheckSheet
Specify Other Document	No

# 13. Effectiveness Of Action

Reviewed Quantity	100
Reason for submission	ОК