QFR No - 7001053895

Defect Details

NC No.	7001053895
NC Date	16/09/2024
NC Submission Date	
Part No.	F1LG00902B
Part Name	SEAT PIPE -K86A
Supplier Name & Code	100538-NARINDER PARKASH AND CO
ETL Plant	1136-ETL Suspension Sanand
Defect Details	LENGTH UNDERSIZE-Short Lenght ,concentricity found NG

1. Problem Description

Defect Description	Total length specification 152-0.2 observation 150.51 mm
Detection Stage	Receipt
Problem Severity	Fitment
NG Quantity	1500
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	6000	10000	18000	15000	5000	54000
Check Qty	6000	10000	18000	15000	5000	54000
NG Qty	1500	525	0	0	0	2025

Action taken on NG part

Scrap	2025
Rework	0
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.	CNC-12

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	Instrument /Gauge not Callibrated	No linkage with defect observed.	O
Man	Process Operator Negligence	No linkage with defect observed.	O
Man	Final Q-gate Inspector Negligence	No linkage with defect observed.	O
Method	Wrong Setting	No linkage with defect observed.	O
Material	Wrong material mixed	No linkage with defect observed.	O
Method	Tool was damage	After verification we found tooling method was inadequate	X
Method	NG parts skipped at final Q-gate	Verified found NOT OK	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	As per std

7. Root Cause Analysis (Occurance)

Why 1	Total length less & concentricity found NG
Why 2	The CNC machine cut more material than necessary, making the part shorter than the required length.
Why 3	Seatpipes were mispositioned, leading to incorrect length measurement during clamping.
Why 4	metallic chip was stuck in the stopper, increasing the apparent length of the part.
Why 5	The stopper design allowed chips to accumulate and interfere with accurate part positioning.
Root Cause (Occurance)	The stopper design allowed chips to accumulate and interfere with accurate part positioning.

Root Cause Analysis (Outflow)

Why 1	Total length less & concentricity found NG
Why 2	Defected part did not detected during inspection.
Why 3	Parts were skipped during the Inspection.
Why 4	The sampling Inspection method followed for Concentricity & Visual Inspection method use for length gauge with the help of flat plat

Why 5	Sampling Quantity was less for concentricity & Visual inspection method was inadequate for total length .
Root Cause (Outflow)	Sampling Quantity was less for concentricity & Visual inspection method was inadequate for total length .

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Q-Alert to be displayed at CNC work stations .	Mr. Princ	17/09/2024	16/09/2024	Completed
Occurance	Training to be given for correct part placement.	Mr. Harwinder	17/09/2024	16/09/2024	Completed
Occurance	The stopper is designed to be modified to eliminate areas where chips can rest or become stuck	Mr. Mohinder toti	25/09/2024	23/09/2024	Completed
Outflow	Q- Alert to be displayed at the final Inspection	Mr. Princ	17/09/2024	16/09/2024	Completed
Outflow	100% length inspection to be started with the help of length gauge & Sampling qty doubled for concentricity.	Mr. Vinay tiwari	19/09/2024	18/09/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Sampling Qty doubled for concentricity & 100 % length inspection started.
Inspection Method	Sp. Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	The stopper design allowed chips to accumulate and interfere with accurate part positioning. 1098_Occurance_Before.jpeg
Occurance (After)	The stopper is designed to be modified to eliminate areas where chips can rest or become stuck . 1098_Occurance_After.jpeg
Outflow (Before)	Sampling Quantity was less for concentricity & Visual inspection method was inadequate for total length . 1098_Outflow_Before.jpeg
Outflow (After)	100% length inspection to be started with the help of length gauge & Sampling qty doubled for concentricity. 1098_Outflow_After.jpeg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All similar models

12. Document Review

Documents	ControlPlan, PFMEA, WISOP, InspCheckSheet
Specify Other Document	NO

13. Effectiveness Of Action

Reviewed Quantity	5
Reason for submission	Total length specification 152-0.2 observation 150.51 mm