QFR No - 8000849095

Defect Details

NC No.	8000849095
NC Date	19/10/2023
NC Submission Date	
Part No.	550LG06702
Part Name	SEAT PIPE-(HMS-30 & HMP-30)
Supplier Name & Code	100929-HARSHAD ENGINEERING COMPANY
ETL Plant	1143-ETL Suspension Halol, Vadodara
Defect Details	RUN OUT MORE-OD GREEOVE RUNOUT FOUND UPTO 1.49 MM

1. Problem Description

Defect Description	Hex OD Runout 1.49 mm found against 0.5 mm with respect to thread
Detection Stage	Receipt
Problem Severity	Function
NG Quantity	2
Is Defect Repeatative?	Yes
Defect Sketch / Photo	gh5t3exnukab30icfhh4ky1b.jpg

Supplier Communication Details

Quality Head Email ID	qaharshad@miteshauto.com
Plant Head/CEO Email ID	sjkadam@miteshauto.com
MD Email ID	auto.mitesh@gmail.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	8000	6000	4000	5000	3500	26500
Check Qty	8000	6000	4000	5000	3500	26500
NG Qty	2	0	0	1	0	3

Action taken on NG part

Scrap	3
Rework	0
Under Deviation	0

Containment Action
100 % sorting done for ETL End, HEC WIP & FG material with identification/star mark on each box

3. Process Flow

Process Flow Description
Cutting-Draw-Head Formation-Rough Grinding-CNC (Head, Boring & Tapping)-Punching-Finish Grinding-Final Inspection-Packing-Dispatch

4. Process Details

Process / Operation	Tapping
Outsource	No
Machine / Cell	Tapping machine
Machine / Cell No.	161

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Machine	Drilling Spindle TR Bad Found upto	Found upto 0.07 mm, spec. 0.05 mm	X
Machine	Collet TR wrt Tapping Spindle not ok	Found upto 0.03 against 0.05 mm	O
Machine	Face cutter TR Bad	Found ok within 0.02 against 0.05 mm	O

6. Inspection Method Analysis (Current)

Inspection Method	Sp. Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	As IS 2500

7. Root Cause Analysis (Occurance)

Why 1	Groove Runout wrt Threading found Excess
Why 2	Threading Conc. wrt shank Dia. excess
Why 3	Bore Conc. wrt OD excess
Why 4	Boring/Drilling Spindle alignment found 0.07 to 0.08 against 0.05 mm.
Why 5	Boring Spindle alignment disturb
Root Cause (Occurance)	Boring Spindle alignment disturb

Root Cause Analysis (Outflow)

Why 1	Groove Runout wrt Threading found Oversize
Why 2	Skipped From Final inspection
Why 3	Sampling Insp. plan followed
Why 4	Not detect while inspection
Why 5	
Root Cause (Outflow)	Not detect while sampling inspection

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Drilling Spindle TR wrt Collet checking freq. decided on weekly Basis	DDJ	02/11/2023		Completed
Occurance	Drilling Spindle TR set within 0.03 mm	D.D. Jopale	30/10/2023	31/10/2023	Completed
Outflow	Collet Wise Runout check as per in-process insp. freq.	QA Inspector	02/11/2023		Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	No
Change Details	NA
Inspection Method	Sp. Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	IS2500

10. Evidance of Countermeasure

Occurance (Before)	Drilling Spindle alignment disturb 586_Occurance_Before.pdf
Occurance (After)	Drilling Spindle TR set within 30 Microns by using dial gauge, Weekly Spindle TR checking Freq. decided 586_Occurance_After.pdf
Outflow (Before)	Parts check by using lever dial gauge as per sampling freq. 586_Outflow_Before.pdf
Outflow (After)	Gauge Made to check bore conc. wrt shank & Runout checked collet-wise as per In-process Insp. freq. daily basis. 586_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	CNC, CS & SPM

12. Document Review

Documents	InspCheckSheet
Specify Other Document	NA

13. Effectiveness Of Action

Reviewed Quantity	10
Reason for submission	ok