QFR No - 7001062399

Defect Details

NC No.	7001062399
NC Date	11/10/2024
NC Submission Date	
Part No.	S1JL03533B
Part Name	PISTON ROD BOTH SIDE MACHINED
Supplier Name & Code	101255-MAHAVIR INDUSTRIES
ETL Plant	1118-ETL E-92,93 Suspension
Defect Details	LENGTH UNDERSIZE-T.LENGTH U/S SPE=173.30+/-0.20 OBS=172.1

1. Problem Description

Defect Description	LENGTH UNDERSIZE-T.LENGTH U/S SPE=173.30+/-0.20 OBS=172.1
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	14
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality@mahavirind.co.in
Plant Head/CEO Email ID	planthead@mahavirind.co.in
MD Email ID	

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	600	0	0	0	0	600
Check Qty	600	0	0	0	0	600
NG Qty	14	0	0	0	0	14

Action taken on NG part

Scrap	14
Rework	0
Under Deviation	0

Containment Action
All Material segregation at Customer End

3. Process Flow

Process Flow Description
RM inward - store - Band Saw Parting -Straightening - CNC-1(Mounting Side - CNC-2(Piston Side)- Final inspection - Packing - Dispatch - Transport

4. Process Details

Process / Operation	CNC-2(Piston Side
Outsource	Yes
Machine / Cell	CNC-9
Machine / Cell No.	CNC Section

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Machine	Machining Process & Inspection Method Wrong	Machining Process is ok But Inspection Method Wrong	X
Man	Unskilled operator	As per Skilled Matrix Operator is skilled	O
Tool	Wrong Tool Insert Use	Correct carbide Insert Facing and Turning Tool Use	O
Material	Wrong Grade And other grade Material Use	Correct Grade F15.4-EN8D Material use .	O
Method	Machine Condition Not OK	As per Daily Check sheet Machine Condition was ok but Stopper Not OK	X

6. Inspection Method Analysis (Current)

Inspection Method	Instrument
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	20Nos /Bin

7. Root Cause Analysis (Occurance)

Why 1	LENGTH UNDERSIZE-T.LENGTH U/S SPE=173.30+/-0.20 OBS=172.1
Why 2	During piston side machining, the part was resting too deep in the CNC chuck
Why 3	CNC Resting stopper lock Nut Loose
Why 4	
Why 5	
Root Cause (Occurance)	CNC Resting stopper lock Nut Loose.

Root Cause Analysis (Outflow)

Why 1	LENGTH UNDERSIZE-T.LENGTH U/S SPE=173.30+/-0.20 OBS=172.1
Why 2	Sampling measuring Frequency Very Low.
Why 3	Hourly 5 Nos Inspection By Inspector.
Why 4	
Why 5	
Root Cause (Outflow)	Sampling measuring Frequency Very Low.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Arrange an additional lock nut to secure the resting stopper lock nut.	Production Head	14/10/2024	14/10/2024	Completed
Outflow	The length measurement sampling frequency has been increased to 10 samples instead of 5.	Quality Head	14/10/2024	14/10/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Length measurement sampling frequency has been increased to 10nos samples instead of 5.nos
Inspection Method	Instrument
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	10Nos

10. Evidance of Countermeasure

Occurance (Before)	CNC Resting stopper lock Nut Loose. 1140_Occurance_Before.jpg
Occurance (After)	Arrange an additional lock nut to secure the resting stopper lock nut. 1140_Occurance_After.jpg
Outflow (Before)	Sampling measuring Frequency Very Low. 1140_Outflow_Before.docx
Outflow (After)	The length measurement sampling frequency has been increased to 10Nos samples instead of 5Nos. 1140_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All Piston Rods

12. Document Review

Documents	ControlPlan, PFMEA, JHCheckSheet
Specify Other Document	No

13. Effectiveness Of Action

Reviewed Quantity	
Reason for submission	