QFR No - 8000787245

Defect Details

NC No.	8000787245
NC Date	12/05/2022
NC Submission Date	
Part No.	520FZ01002
Part Name	HUB CLUTCH WITH INNER RING REML 6/7 PL
Supplier Name & Code	101100-CAST 4 ALUMINIUM PVT LTD
ETL Plant	1132-ETL K-226/1 TRANSMISSION
Defect Details	FITTMENT NOT OK.-Inner Ring Loose

1. Problem Description

Defect Description	Inner ring loose
Detection Stage	Warranty
Problem Severity	Function
NG Quantity	1
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	info@cast4aluminium.com
Plant Head/CEO Email ID	info@cast4aluminium.com
MD Email ID	kiran@cast4aluminium.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	1	0	0	0	0	1
Check Qty	1	0	0	0	0	1
NG Qty	1	0	0	0	0	1

Action taken on NG part

Scrap	1
Rework	0
Under Deviation	0

Containment Action
RM INWARD - MELTING - CASTING - GATE CUTTING & FETTLING - IN PROCESS INSPECTION - CNC MACHINING - RING PRESSING - BROACHING - OD GRINDING - FINAL INSPECTION - DISPATCH

3. Process Flow

Process Flow Description
RE-CHECK ALL PIPE LINE MATERIAL.

4. Process Details

Process / Operation	RING PRESSING
Outsource	Yes
Machine / Cell	PNEUMATIC PRESS MACHINE
Machine / Cell No.	PRESS MACHINE - 01

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	Check point for bolt tight/loose in PM check sheet.	Observed no check point in PM check sheet.	X
Machine	Scaling not available for bolt setting of sensor	Observed no scaling on machine to set bolt.	X
Material	Ring ID not as per specification	Observed ring oversize.	X

6. Inspection Method Analysis (Current)

Inspection Method	Pokayoke
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	5 NOS

7. Root Cause Analysis (Occurance)

Why 1	Ring not pressed properly due to pressing loader setting disturbed.
Why 2	Loader was shifted from the sensor face due to loose bolting.
Why 3	Pressing loader travelling length gets disturb due to bolt loose tightening.
Why 4	Scaling was not available to set bolt of sensor on machine.
Why 5	No check point for bolt loose/tight in PM check sheet.
Root Cause (Occurance)	Scaling not available for bolt setting of sensor.

Root Cause Analysis (Outflow)

Why 1	Inspector not able to judge loose ring press operation.
Why 2	Part not detected in process validation.
Why 3	Ring ID inspection was on sample basis 5 nos/lot.
Why 4	
Why 5	
Root Cause (Outflow)	Ring ID inspection was on sample basis 5 nos/lot

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	1) Scaling provide to sensor setting on machine. 2) Check point added in PM check sheet and is monitored on daily basis. 3) Red colour coding implemented on setting piece rejection material.	Mr. Deepak Singh	17/05/2022	17/05/2022	Completed
Outflow	1) Process validation done on daily basis. 2) 100% inspection for ring ID on air ring gauge. 3) Q-Alert displayed. 4) Training given to inspector and operator	Mr. Deepak Singh	17/05/2022	17/05/2022	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100% inspection for ring ID at inward inspection stage.
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)	No scaling on machine to set sensor. 112_Occurance_Before.png
Occurance (After)	Scaling provided to set sensor. 112_Occurance_After.png
Outflow (Before)	Process validation report. 112_Outflow_Before.jpg
Outflow (After)	Air gauge to inspect 100% at inward inspection stage. 112_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	Not applicable.

12. Document Review

Documents	PMCheckSheet, PokayokeCheckSheet, InspCheckSheet
Specify Other Document	Inward check sheet.

13. Effectiveness Of Action

Reviewed Quantity	1000
Reason for submission	ok