QFR No - 7000944097

Defect Details

NC No.	7000944097
NC Date	12/09/2023
NC Submission Date	
Part No.	520PP01902
Part Name	WHEEL CLUTCH FINISHED UPGRADE
Supplier Name & Code	100656-MADHURA DIE CAST PVT.LTD
ETL Plant	1132-ETL K-226/1 TRANSMISSION
Defect Details	DAMAGES-HEAVY B/H , DAMAGE HARD SPOT ,CHIP OFF

1. Problem Description

Defect Description	Heavy Blow Hole observed at Friction face & Lug Face
Detection Stage	Receipt
Problem Severity	Function
NG Quantity	2640
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	madhuradiecast@gmail.com
Plant Head/CEO Email ID	madhuradiecast@gmail.com
MD Email ID	madhuradiecast@gaikegroup.in

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	0	0	0	500	1000	1500
Check Qty	0	0	0	500	1000	1500
NG Qty	0	0	0	1	0	1

Action taken on NG part

Scrap	1
Rework	0
Under Deviation	0

Containment Action
100% SEGERATION DONE AT SUPPLIER END STARTED BLUE IDENTIFICATION DOT MARK ON COMPONENTS

3. Process Flow

Process Flow Description
1.Casting 2.fetling 3. CNC 1st Set-up 4.CNC 2nd Set-up 5.Drilling & Tapping 6.Final Inspection

4. Process Details

Process / Operation	casting
Outsource	No
Machine / Cell	HPDC 400T
Machine / Cell No.	2

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Training not given to Operator	Training Plan and on job training record checked.	O
Material	Degassing Frequency	Melting cum furnace degassing report verified & found ok.	O
Tool	Cooling system of die	Cooling system of die found ok condition	O
Machine	Injection pressure	Injection pressure was not constant for every shot	X
Man	Unskill operator on machine	Skill matrix verified & Found ok.	O

6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	VISUAL INSPECTION
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

7. Root Cause Analysis (Occurance)

Why 1	Heavy Blow Hole observed at Friction Face & Lug Face
Why 2	Injection pressure was not constant for every shot.
Why 3	The accumulator cylinder pressure was not constant.
Why 4	The foam was generated due to the oil and N2 gas mixed up.
Why 5	
Root Cause (Occurance)	The oil seal of the accumulator piston leaked.

Root Cause Analysis (Outflow)

Why 1	Heavy Blow Hole Observed at Friction Face & Lug Face
Why 2	Ok parts & Not ok Parts are mixed at the final stage
Why 3	The tag was not available for the ok bins and not the ok bins.
Why 4	
Why 5	
Root Cause (Outflow)	The tag was not available for the ok bins and not the ok bins.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	1 Heat exchanger temperature maintained on lower side and machine temperature maintained between 45° C to 50° C. 2.Heat exchanger tubes & descaling done. 3.Cooling tower unit clean and descaling done.	Production Supervisor	29/09/2023	29/09/2023	Completed
Outflow	1.Defective photos big size of board made and displayed. 2.Defective part handling procedure made in local language and A3 SIZE holding displayed. 3. Eye sequence chart in local language and A3 SIZE holding displayed at final inspection table. 4.Training and awareness given to Inspector. 5.Inspector Licenses implemented 6.Lux level maintained as per standard	Quality Engineer	29/09/2023	29/09/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100 % visual inspection started with identification Marking
Inspection Method	Other
Other Inspection Method	Visual Inspection
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	The cooling tower unit was not clean and descaling. 550_Occurance_Before.png
Occurance (After)	1. Heat exchanger tube descaling done. 2. Cooling tower unit clean and descaling done. 550_Occurance_After.png
Outflow (Before)	identification tag was not available in the final inspection bin. 550_Outflow_Before.jfif
Outflow (After)	Awarness Training Provide to Final Inspection Inspector & Parts Loading operator. 550_Outflow_After.jfif

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	ALL ETL COMPONENT

12. Document Review

Documents	InspCheckSheet
Specify Other Document	QA OPL

13. Effectiveness Of Action

Reviewed Quantity	1000
Reason for submission	Ok