QFR No - 8000851228

Defect Details

NC No.	8000851228
NC Date	07/11/2023
NC Submission Date	
Part No.	165FZ00322
Part Name	HUB CLUTCH BROACHED JW/BM-150
Supplier Name & Code	101100-CAST 4 ALUMINIUM PVT LTD
ETL Plant	1132-ETL K-226/1 TRANSMISSION
Defect Details	CRACKS-CRACK ISSUE

1. Problem Description

Defect Description	Hub Clutch observed crack (Repeated occurrence)
Detection Stage	Inprocess
Problem Severity	Function
NG Quantity	2
Is Defect Repeatative?	Yes
Defect Sketch / Photo	h1etbmobscijlsy1xp32ecw3.jpg

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	2268	0	0	7000	0	9268
Check Qty	2268	0	0	7000	0	9268
NG Qty	4	0	0	7	0	11

Action taken on NG part

Scrap	11
Rework	0
Under Deviation	0

Containment Action
Segregation done for 7000 nos of JW hub at cast 4 end from which 7 parts are found for crack.

3. Process Flow

Process Flow Description
RM--->Melting--->Cleaning--->Cleaning--->PDC

4. Process Details

Process / Operation	PDC
Outsource	No
Machine / Cell	PDC Machine
Machine / Cell No.	PDC M/C No.

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Tool	Erosion mark	Yes, possible	O
Machine	Excess clamping pressure of CNC Chuck	Yes, possible	O
Tool	Scoring mark on die	Yes, possible	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	Crack Observed on the friction face of JW Hub.
Why 2	Cracks observed at same position i.e. on the Gate Area side and in the cavity no. 3 only.
Why 3	Casting was getting stuck in the die while ejecting .
Why 4	Scoring observed in the die and excess rubbing mark observed on the part.
Why 5	Erosion mark observed near gate area & scoring on die.
Root Cause (Occurance)	Erosion mark observed near gate area & scoring on die.

Root Cause Analysis (Outflow)

Why 1	Crack part found at ETL.
Why 2	Crack was not identified by the two inspectors only.
Why 3	Training was given to all of the inspectors still these two inspector was not able to detect the crack part.
Why 4	Training effectiveness was not monitored
Why 5	
Root Cause (Outflow)	Training effectiveness was not monitored

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	1. Die polishing done while PM. 2. New die planning will be done on the priority basis.	1. Die maint. team 2. Top management	17/11/2023	17/11/2023	Completed
Outflow	1. One Point lesson displayed and training given to the inspectors 2. Training effectiveness monitoring for these two inspectors will be planed. 4. For crack checking special marking is given. 5.Part is being checked under the magnifying glass 6.DP test on the gate area will be done on the sampling basis.	Mr. Qasim	10/11/2023	10/11/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Part is being checked under the magnifying glass
Inspection Method	Other
Other Inspection Method	Visual Inpection
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	Scoring mark on die 590_Occurance_Before.png
Occurance (After)	Die polishing done while PM. 590_Occurance_After.jpeg
Outflow (Before)	NA 590_Outflow_Before.png
Outflow (After)	Part is being checked under the magnifying glass 590_Outflow_After.png

11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	NA

12. Document Review

Documents	PMCheckSheet, PFMEA, WISOP
Specify Other Document	NA

13. Effectiveness Of Action

Reviewed Quantity	1000
Reason for submission	OK