QFR No - 8000820736

Defect Details

NC No.	8000820736
NC Date	16/02/2023
NC Submission Date	
Part No.	16JPP00117
Part Name	WHEEL CLUTCH REML 6 PLATE / 7 PLATE
Supplier Name & Code	101100-CAST 4 ALUMINIUM PVT LTD
ETL Plant	1132-ETL K-226/1 TRANSMISSION
Defect Details	TAPPING O/SIZE.-TAPPING OVER SIZE

1. Problem Description

Defect Description	Threading Oversize *Minor Dia found oversize up to 6.02 mm against 5.13 mm)
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	3
Is Defect Repeatative?	Yes
Defect Sketch / Photo	oalbh4q0u5jzjx4ubsgt2ova.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	900	990	1050	5322	2250	10512
Check Qty	900	990	1050	5322	2250	10512
NG Qty	18	6	5	14	2	45

Action taken on NG part

Scrap	45
Rework	0
Under Deviation	0

Containment Action
1.Spindle head height increase by 12mm. 2. Inspection frequency increases to 100%. 3) Plug gauge provided for checking minor dia.

3. Process Flow

Process Flow Description
PDC-GATE CUTTING -FETTLING-CNC MACHINING-DRILLING & TAPPING-FINAL INSPECTION

4. Process Details

Process / Operation	Drilling & Tapping
Outsource	No
Machine / Cell	Machine No-05
Machine / Cell No.	Machine No-05

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	During the drilling operation drilling loose burr was stuck on drill, due to this burr hole get cut.	Observed burr on drill.	O
Method	Coolant flow observed improper, due to improper coolant flow material get stuck on drill.	Coolant not flow to all drill.	O
Method	Coolant flow observed in lower side (3% to 4%) due that drill get heat during drilling operation.	Coolant concentration observed 3.5%.	O
Method	100 % inspection observed with minor dia plug gauge without identification marking.	Marking not available on parts.	O

6. Inspection Method Analysis (Current)

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

7. Root Cause Analysis (Occurance)

Why 1	Minor diameter of REML Wheel was observed 6.04 mm against 4.92 mm.
Why 2	During the drilling operation loose burr was stuck on drill, due to this burr hole get cut excess in drilling.
Why 3	Coolant flow observed improper, due to improper coolant flow material get stuck on drill.
Why 4	Coolant concentration observed in lower side (3% to 4%), due to the coolant concentration drill get heat.
Why 5	
Root Cause (Occurance)	Coolant flow observed improper, due to improper coolant flow material get stuck on drill.

Root Cause Analysis (Outflow)

Why 1	Part knowledge not found evident to final inspector.
Why 2	Inspection frequency observed on sample basis.
Why 3	100% inspection observed by using minor diameter plug gauge without identification marking
Why 4	
Why 5	

Root Cause (Outflow)	100% inspection observed by using minor diameter plug gauge without identification marking, so we found the owner ship missing.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	We have increase the coolant pipe & coolant flow.	Mr. Datta Moin.	22/02/2023	21/02/2023	Completed
Occurance	We started to maintained the coolant concentration in higher side 5% to 6 %.	Mr. Datta Moin.	22/02/2023	21/02/2023	Completed
Outflow	Training & awareness provided to final inspector & operator.	Mr. Mahesh ghadmode.	22/02/2023	21/02/2023	Completed
Outflow	We started 100% inspection for minor diameter checking with plug gauge with 100% identification marking.	Mr. Mahesh ghadmode.	21/02/2023	20/02/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	We started 100% inspection for minor diameter checking with plug gauge.
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)	Coolant flow is improper or not sufficient for drilling operation. 371_Occurance_Before.xlsx
Occurance (After)	Provided the proper coolant flow with maintained coolant concentration 5% to 6% & we started the coolant concentration monitoring on production report. 371_Occurance_After.jpg
Outflow (Before)	Sample basis inspection 10 nos per hours. 371_Outflow_Before.xlsx
Outflow (After)	Started 100% inspection by using plug gauge. 371_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	3W4S Wheel & K70 Wheel SPM Machine.

12. Document Review

Documents	ControlPlan, InspCheckSheet
Specify Other Document	no

13. Effectiveness Of Action

Reviewed Quantity	2000
Reason for submission	OK