QFR No - 8000847104

Defect Details

NC No.	8000847104
NC Date	03/10/2023
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	RUN OUT MORE-FITMNET ISSUE DUE TO TEETH R/O UPTO 1 MM

1. Problem Description

Defect Description	Customer Return -Fitment issue due to teeth run out found up to 1.15 mm against 0.2 mm
Detection Stage	Customer End
Problem Severity	Fitment
NG Quantity	2
Is Defect Repeatative?	No
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	1000	0	0	500	600	2100
Check Qty	1000	0	0	500	600	2100
NG Qty	2	0	0	1	1	4

Action taken on NG part

Scrap	4
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	CNC 1ST Set-up
Outsource	No
Machine / Cell	CNC
Machine / Cell No.	06

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Unskill operator operate machine	Skill matrix verify found ok	O
Material	Wrong grade Material is used	Verified & Found OK	O
Method	Input & output material bin not identified on CNC stage	Verified & Found ok	O
Machine	Jaw clamping pad area in CNC chuck got wear	Found Not OK	X

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	1:1

7. Root Cause Analysis (Occurance)

Why 1	Fitment issue due to teeth run out found up to 1.15 mm against 0.2 mm
Why 2	CNC machine chuck Jaw abnormal clamping
Why 3	out of three one jaw got play during clamping
Why 4	Jaw clamping pad area in CNC chuck got wear
Why 5	Jaw clamping area play found upto 0.15 mm.
Root Cause (Occurance)	Jaw clamping pad area in CNC chuck got wear

Root Cause Analysis (Outflow)

Why 1	Fitment issue due to teeth run out found up to 1.15 mm against 0.2 mm
Why 2	Teeth Runout checking not checking at Final stage
Why 3	
Why 4	
Why 5	
Root Cause (Outflow)	Teeth Runout checking not checking at Final stage

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	1. Started 100% Inspection with attribute type teeth runout Checking gauge at Final stage. 2. Also Fitment checking parameter with meeting part 3W4S hub added in final inspection check sheet. 3. Inspection Agreement & PDIR is revised for 100% inspection with attribute type teeth runout gauge. 4. Started doc audit daily basis & data maintained .	Quality Supervisor	05/10/2023	05/10/2023	Completed
Occurance	1.New chuck is provided & old chuck is send for reconditioning . 2.Started Jaw Clamping (Working condition) Verification on daily JH Activity . 3.PM Plan revised Mentioned specific dimension of chuck guide area 14 mm tolerance upto, +H7(0.025mm). 4.Started Chuck Inspection by using master Ring & dial stand point verified in daily JH activity. 5.Jaw Boring frequency is define in PM Check sheet & its monitoring started. 6.Clamping pressure validation started interlock given to chuck clamping pressure. 7.New attribute Relation gauge manufacturing is started . Mgf .Target Date – 05.11.2023 8.Customer complain action sustenance verification register maintain.9.Special Jaw Chuck to be implemented at CNC Machining to avoid part shift & Achieve teeth runout .	Production Supervisor	15/10/2023	05/10/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Started 100% Inspection with attribute type teeth runout Checking gauge at Final stage. Also Fitment checking parameter with meeting part 3W4S hub added in final inspection check sheet.
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	1:10

10. Evidance of Countermeasure

Occurance (Before)	Jaw clamping pad area in CNC chuck got wear 561_Occurance_Before.jpg
Occurance (After)	.1.New chuck is provided & old chuck is send for reconditioning . 2.Started Jaw Clamping (Working condition) Verification on daily JH Activity . 3.PM Plan revised Mentioned specific dimension of chuck guide area 14 mm tolerance upto, +H7(0.025mm). 4.Started Chuck Inspection by using master Ring & dial stand point verified in daily JH activity. 5.Jaw Boring frequency is define in PM Check sheet & its monitoring started. 6.Clamping pressure validation started interlock given to chuck clamping pressure. 7.New attribute Relation gauge manufacturing is started . Mgf .Target Date – 05.11.2023 8.Customer complain action sustenance verification register maintain.9.Special Jaw Chuck to be implemented at CNC Machining to avoid part shift & Achieve teeth runout . 561_Occurance_After.xlsx
Outflow (Before)	Teeth Runout checking not checking at Final stage 561_Outflow_Before.mp4
Outflow (After)	Started 100% Inspection with attribute type teeth runout Checking gauge at Final stage. Also Fitment checking parameter with meeting part 3W4S hub added in final inspection check sheet. 561_Outflow_After.jfif

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	3W4S WHEEL CLUTCH FINISHED UPGRADE

12. Document Review

Documents	ControlPlan, PMCheckSheet, PFMEA, JHCheckSheet, InspCheckSheet
Specify Other Document	NO

13. Effectiveness Of Action

Reviewed Quantity	10000
Reason for submission	OK