

## Defect Details

<b>NC No.</b>	7000824219
<b>NC Date</b>	10/03/2022
<b>NC Submission Date</b>	
<b>Part No.</b>	165FY00422
<b>Part Name</b>	HUB CLUTCH 3W4S MACHINED & BROACHED
<b>Supplier Name &amp; Code</b>	100656-MADHURA DIE CAST PVT.LTD
<b>ETL Plant</b>	1132-ETL K-226/1 TRANSMISSION
<b>Defect Details</b>	DIMETER UNDERSIZE-minor dia u/s plug not qualify

## 1. Problem Description

<b>Defect Description</b>	Minor dia u/s plug not qualify
<b>Detection Stage</b>	Receipt
<b>Problem Severity</b>	Fitment
<b>NG Quantity</b>	12
<b>Is Defect Repeatative?</b>	No
<b>Defect Sketch / Photo</b>	

## Supplier Communication Details

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

## 2. Stock Details &amp; action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
<b>Total Qty</b>	1350	0	0	500	800	2650
<b>Check Qty</b>	1350	0	0	500	800	2650
<b>NG Qty</b>	12	0	0	2	0	14

## Action taken on NG part

<b>Scrap</b>	14
<b>Rework</b>	0
<b>Under Deviation</b>	0

## Containment Action

1.100% Stock segregate at customer end and Supplier end stock.

## 3. Process Flow

## Process Flow Description

1.Casting 2.fetling 3. CNC 1st Set-up 4.CNC 2nd Set-up 5.Broaching 6.Final Inspection

## 4. Process Details

<b>Process / Operation</b>	Broaching
<b>Outsource</b>	No
<b>Machine / Cell</b>	BROACHING
<b>Machine / Cell No.</b>	MDCPL/BROACHING/01

## 5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	Component was not proper kept on broaching fixture.	Broaching fixture checked and verify found ok	O
Man	Unskilled operator operated machine	Skill matrix plan verify operator is skillful found	O
Tool	Broach tool life monitoring not effectively monitor	Tool life monitoring sheet not available.	X
Material	Hard point impurity material is used for broaching	Component checked found ok	O

## 6. Inspection Method Analysis (Current)

<b>Inspection Method</b>	Gauge
<b>Other Inspection Method</b>	
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	Sampling
<b>Sampling</b>	No
<b>Sample Size</b>	1 : 5

## 7. Root Cause Analysis (Occurance)

<b>Why 1</b>	Broch wear
<b>Why 2</b>	Broach Reshaping not done as per decided frequency
<b>Why 3</b>	
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Occurance)</b>	1.Broch wear 2.Broach tool life not monitor

## Root Cause Analysis (Outflow)

<b>Why 1</b>	Inspection frequency is less
<b>Why 2</b>	unskilled inspector
<b>Why 3</b>	
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Outflow)</b>	Inspection frequency is less

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	1. Inspection frequency of minor dia by plug gauge increases	QA.Supervisor	04/01/2022		Completed
Occurance	1.Tool life monitoring incorporated in Broaching machine. 2.Broach tool monitoring sheet is available and verify by production supervisor	Production Supervisor	04/01/2022		Completed

## 9. Inspection Method After Customer Complaint

<b>Change In Inspection System</b>	Yes
<b>Change Details</b>	Minor dia checking and final inspection by plug gauge on sampling bases and started 100% by plain plug gauge
<b>Inspection Method</b>	Gauge
<b>Other Inspection Method</b>	
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	100%
<b>Sampling</b>	No
<b>Sample Size</b>	1:5

## 10. Evidance of Countermeasure

<b>Occurance (Before)</b>	Broach wear broach life not effectively monitored as per decide frequency <a href="#">12_Occurance_Before.jpeg</a>
<b>Occurance (After)</b>	Broach life monitoring started as per decide frequency & start verifying pokayoke verification sheet on weekly basis for broach machine counter <a href="#">12_Occurance_After.pdf</a>
<b>Outflow (Before)</b>	Inspection Frequency less 01:05 on sampling basis <a href="#">12_Outflow_Before.pdf</a>
<b>Outflow (After)</b>	Control plan updated at final inspection stage for minor dia inspection started 100% by plain plug gauge <a href="#">12_Outflow_After.pdf</a>

## 11. Horizontal Deployment

<b>Horizontal Deployment Required</b>	No
<b>Applicable Machine / Model / Plant</b>	Broach Machine

## 12. Document Review

<b>Documents</b>	ControlPlan, PokayokeCheckSheet, InspCheckSheet
<b>Specify Other Document</b>	Broach life sheet

## 13. Effectiveness Of Action

<b>Reviewed Quantity</b>	10000
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**Reason for submission**

There is one system we have implemented to monitor broach tool life why it was bypassed pl give explanation and action on same