QFR No - 8000860135

Defect Details

NC No.	8000860135
NC Date	23/01/2024
NC Submission Date	
Part No.	S2BG00702B
Part Name	BRACKET UN P/C
Supplier Name & Code	100973-TESMO MOTORCAST PRIVATE LIMITE
ETL Plant	1143-ETL Suspension Halol, Vadodara
Defect Details	THREADING NOT OK-BRACKET PERPENDI. 3.98MM AGAINST 0.25 MM

1. Problem Description

Defect Description	Bracket Perpendicularity found up to 3.98 mm against 0.25mm with respect to M9 thread
Detection Stage	Inprocess
Problem Severity	Function
NG Quantity	2
Is Defect Repeatative?	No
Defect Sketch / Photo	15plfd5vcoimbjgdpc2mlgki.jpg

Supplier Communication Details

Quality Head Email ID	harish.bala@tesmomotorcast.com
Plant Head/CEO Email ID	harish.bala@tesmomotorcast.com
MD Email ID	svkallani@tesmomotorcast.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	15000	12000	0	0	0	27000
Check Qty	15000	12000	0	0	0	27000
NG Qty	548	0	0	0	0	548

Action taken on NG part

Scrap	548
Rework	0
Under Deviation	0

Containment Action
Stargate all parts and strengthen our final quality stages

3. Process Flow

Process Flow Description
PDC - Inspection - Deburring - Grinding - Buffing - Tapping - Inspection.

4. Process Details

Process / Operation	Die Casting
Outsource	No
Machine / Cell	PDC
Machine / Cell No.	PDC-250 ton.

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Material	Insert internal diameter ovr size	Found at line, checked by verniew	O
Tool	Core Pin side undersize	Verniew	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	10

7. Root Cause Analysis (Occurance)

Why 1	Bracket Perpendicularity found more than 0.25mm of M9 thread
Why 2	M9 thread not perpendicular in tapping
Why 3	Insert fitted not completely on parts
Why 4	Insert get tilted in die casting process
Why 5	Insert and Core pin clearance was more
Root Cause (Occurance)	Insert ID oversize, which not identified in lot sampling 5-from 1000nos.

Root Cause Analysis (Outflow)

Why 1	More than 0.25mm, M9 Thread Perpendicularity found at customer end
Why 2	Parts skipped from final inspections
Why 3	Perpendicularity checking frequency was very low, checking by mandrill.
Why 4	On line checking process in final stage not available
Why 5	
Root Cause (Outflow)	Perpendicularity checking frequency increased.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status

Occurance	Insert inward inspecting sampling quantity increased from 5 to 50 nos	Inward Quality	29/01/2024	04/03/2024	Completed
Outflow	Checking frequency increases in final stage	Final Quality Engr	29/01/2024	04/03/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Inward insert quality checking nos per lot increases from 05 to 50 nos
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	50

10. Evidance of Countermeasure

Occurance (Before)	Bracket Perpendicularity found more than 0.25mm of M9 thread 650_Occurance_Before.jpg
Occurance (After)	Inwards inspection sampling size increases from 05 to 50 nos, also marking on each bags with approval on request note. 650_Occurance_After.jpeg
Outflow (Before)	Perpendicularity checking frequency less & checked with mandrill. Checking process not available in final stage 650_Outflow_Before.mp4
Outflow (After)	Simple checking process implemented in final inspection stage as well as train multiple members for this process. 650_Outflow_After.mp4

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	KTEP, KWPK

12. Document Review

Documents	WISOP, InspCheckSheet
Specify Other Document	Inspection

13. Effectiveness Of Action

Reviewed Quantity	100
Reason for submission	OK