

## Defect Details

<b>NC No.</b>	8000870485
<b>NC Date</b>	08/04/2024
<b>NC Submission Date</b>	
<b>Part No.</b>	520BK01573
<b>Part Name</b>	CALIPER BODY INTEGRAL TYPE PULSAR
<b>Supplier Name &amp; Code</b>	101414-G. S. ENGINEERING
<b>ETL Plant</b>	1120-ETL K-226/2 Disc Brakes
<b>Defect Details</b>	BLOW HOLES-PIN HOLE, BLOW HOLE DENT &DAMAGED

## 1. Problem Description

<b>Defect Description</b>	BLOW HOLES-PIN HOLE, BLOW HOLE DENT &DAMAGED
<b>Detection Stage</b>	Receipt
<b>Problem Severity</b>	Aesthetic
<b>NG Quantity</b>	600
<b>Is Defect Repeatative?</b>	Yes
<b>Defect Sketch / Photo</b>	

## Supplier Communication Details

<b>Quality Head Email ID</b>	bhange.shrikant@rediffmail.com
<b>Plant Head/CEO Email ID</b>	subhashmarathe45@gmail.com
<b>MD Email ID</b>	

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
<b>Total Qty</b>	4780	0	0	0	0	4780
<b>Check Qty</b>	4780	0	0	0	0	4780
<b>NG Qty</b>	600	0	0	0	0	600

## Action taken on NG part

<b>Scrap</b>	600
<b>Rework</b>	0
<b>Under Deviation</b>	0

## Containment Action

Segregation to ETL end

## 3. Process Flow

### Process Flow Description

Raw material -- Melting -- Degassing -- Core manufacturing -- Casting manufacturing -- De-coring -- Gate cutting -- Fettling & Buffing -- Punching -- Heat Treatment -- Shot Blasting -- Finel Inspection -- Dispatch.

## 4. Process Details

<b>Process / Operation</b>	GDC
<b>Outsource</b>	No
<b>Machine / Cell</b>	GDC Machine
<b>Machine / Cell No.</b>	M/C No.:- 03

## 5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Turbulence is created while pouring metal into the die	Saucer is arranged for pouring the metal so that the metal reaches all the cavities uniformly	O
Tool	Insufficient air vents in the die, core gas was entrapment	Adequate air vents are provided in the die so that air escapes easily	O

## 6. Inspection Method Analysis (Current)

<b>Inspection Method</b>	Other
<b>Other Inspection Method</b>	Visually
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	100%
<b>Sampling</b>	No
<b>Sample Size</b>	100 %

## 7. Root Cause Analysis (Occurance)

<b>Why 1</b>	Blow hole observed in casting
<b>Why 2</b>	core gas entrapped in casting during process
<b>Why 3</b>	Inadequate venting to escape gas from cavity during casting
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Occurance)</b>	Inadequate venting to escape gas from cavity during casting

## Root Cause Analysis (Outflow)

<b>Why 1</b>	Blow hole observed in casting
<b>Why 2</b>	Visually not detected in casting
<b>Why 3</b>	Open after machining process at customer end
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Outflow)</b>	Open after machining process at customer end

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	Training given to operator & Q gate inspector. 100% inspection before & after shot blasting	Mr. S Dhabe	06/05/2024	29/04/2024	Completed
Occurance	Vent to be provided in die from easy escape of gases during casting	Mr. S Marathe	06/05/2024	29/04/2024	Completed

## 9. Inspection Method After Customer Complaint

<b>Change In Inspection System</b>	Yes
<b>Change Details</b>	in-process every hour a visual inspection by production supervisor / QA, DP test is conducted every shift ,100% visual inspection before & after shot blasting & 100% visual inspection before final dispatch.
<b>Inspection Method</b>	Other
<b>Other Inspection Method</b>	Visually
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	100%
<b>Sampling</b>	No
<b>Sample Size</b>	100%

## 10. Evidence of Countermeasure

<b>Occurance (Before)</b>	Air vents depth 0.1mm .Inadequate air passing through this <a href="#">739_Occurance_Before.jpg</a>
<b>Occurance (After)</b>	Air vents depth 0.2mm. This helps the air to escape freely <a href="#">739_Occurance_After.jpg</a>
<b>Outflow (Before)</b>	Eye sequence chart <a href="#">739_Outflow_Before.pdf</a>
<b>Outflow (After)</b>	Eye sequence chart is updated <a href="#">739_Outflow_After.pdf</a>

## 11. Horizontal Deployment

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

## 12. Document Review

<b>Documents</b>	WISOP
<b>Specify Other Document</b>	NO

## 13. Effectiveness Of Action

<b>Reviewed Quantity</b>	200
<b>Reason for submission</b>	No defect observed in latest lot

