#### QFR No - 8000843595

### Defect Details

NC No.	8000843595
NC Date	07/09/2023
NC Submission Date	
Part No.	B2GQ01903O
Part Name	MASTER CYLINDER RAW CASTING- C101 H
Supplier Name & Code	100398-MANOJ INDUSTRIES
ETL Plant	1120-ETL K-226/2 Disc Brakes
Defect Details	BLOW HOLES-LEAKAGE AT CUSTOMER END

# 1. Problem Description

Defect Description	Leakage
Detection Stage	Customer End
Problem Severity	Safety
NG Quantity	1
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

# Supplier Communication Details

Quality Head Email ID	qad@manojindustrieskop.com
Plant Head/CEO Email ID	foundry@manojindustrieskop.com
MD Email ID	mgnt@manojindustrieskop.com

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	1300	0	0	0	0	1300
Check Qty	1300	0	0	0	0	1300
NG Qty	1	0	0	0	0	1

### Action taken on NG part

Scrap	1
Rework	0
Under Deviation	0

Containment Action	

Process Flow Description	
Casting production	

#### 4. Process Details

Process / Operation	Casting production
Outsource	No
Machine / Cell	MI Tilt -19
Machine / Cell No.	MI Tilt -19

### 5. Problem Analysis

Type Possible Cause Fact Verification Jud	-				
		Туре	Possible Cause	Fact Verification	Jud

### 6. Inspection Method Analysis (Current)

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

### 7. Root Cause Analysis (Occurance)

Why 1	Leakage observed at customer end.
Why 2	Shrinkage porosity observed at below barrel OD at corner radius
Why 3	Improper feeding of material at barrel OD area
Why 4	Due to cross sectional variation shrinkage porosity observed.
Why 5	
Root Cause (Occurance)	Due to cross sectional variation shrinkage porosity observed.

### Root Cause Analysis (Outflow)

Why 1	Leakage observed at customer end.
Why 2	Defect not seen by nacked eyes
Why 3	
Why 4	
Why 5	
Root Cause (Outflow)	

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

Туре	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	We are adding extra feeder as per proposed action it will help to feed the casting below lug area	D B LAD	21/09/2023	29/09/2023	Completed

# 9. Inspection Method After Customer Complaint

Change In Inspection System	No
Change Details	no change
Inspection Method	Other
Other Inspection Method	DP test done
Check Point at Final Inspection	No
Checking Freq.	Sampling
Sampling	No
Sample Size	daily

### 10. Evidance of Countermeasure

Occurance (Before)	Leakage observed at bellow lug area 542_Occurance_Before.png
Occurance (After)	We are adding extra feeder as per proposed action it will help to feed the casting below lug area 542_Occurance_After.png
Outflow (Before)	Leakage observed at bellow lug area 542_Outflow_Before.png
Outflow (After)	 542_Outflow_After.png

### 11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All C101 master cyl

#### 12. Document Review

Documents	
Specify Other Document	no

### 13. Effectiveness Of Action

Reviewed Quantity	500
Reason for submission	NO leakage found in received lot