

## Defect Details

NC No.	7000985442
NC Date	14/02/2024
NC Submission Date	
Part No.	F2FA19033M
Part Name	K0PG FORK PIPE MACHINED
Supplier Name & Code	101109-TUBE INVESTMENTS OF INDIA LIMI
ETL Plant	1136-ETL Suspension Sanand
Defect Details	HOLE BLOCK-1.50 hole Problem

## 1. Problem Description

Defect Description	Hole block 1.50mm in Fork Pipe K0PG
Detection Stage	Receipt
Problem Severity	Function
NG Quantity	170
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

## Supplier Communication Details

Quality Head Email ID	anandms@tii.murugappa.com
Plant Head/CEO Email ID	girisha@tii.murugappa.com
MD Email ID	mukeshahuja@tii.murugappa.com

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	3000	0	0	1300	500	4800
Check Qty	3000	0	0	1300	500	4800
NG Qty	170	0	0	0	0	170

## Action taken on NG part

Scrap	0
Rework	170
Under Deviation	0

## Containment Action

100% inspection done for Drill Hole 1.50 mm with Pin Gauge at customer end & In-house stock available.

## 3. Process Flow

**Process Flow Description**

RM - CNC MACHINING - DRILLING - DEBURRING - INSPECTION - BIN PACKING - DISPATCH.

**4. Process Details**

<b>Process / Operation</b>	DRILLING
<b>Outsource</b>	No
<b>Machine / Cell</b>	DRILLING MACHINE
<b>Machine / Cell No.</b>	DRILL MACHINE - 01

**5. Problem Analysis**

Type	Possible Cause	Fact Verification	Jud
Tool	Drill hole burr not cleaned	Verified & found drill hole burr not getting removed from drill hole ID	X
Method	Deburring operation not done	Verified & observed deburring operation being done	O
Man	unskilled manpower	Verified record & found Skilled	O

**6. Inspection Method Analysis (Current)**

<b>Inspection Method</b>	Other
<b>Other Inspection Method</b>	Deburring Process
<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>	HOLE BLOCK-1.50 hole Problem
<b>Why 2</b>	Drill hole burr does not get removed in a deburring operation
<b>Why 3</b>	generation of an excess hard burr at hole ID
<b>Why 4</b>	Drill warn out before defined frequency of drill change
<b>Why 5</b>	Drill bit Manufacturing defect
<b>Root Cause (Occurance)</b>	Drill bit Manufacturing defect

**Root Cause Analysis (Outflow)**

<b>Why 1</b>	HOLE BLOCK-1.50 hole Problem
<b>Why 2</b>	Drill hole burr does not get removed in a deburring operation
<b>Why 3</b>	Drill hole burr not getting detected in Visual inspection
<b>Why 4</b>	No Inspection Specified in the final Inspection Quality plan for the drill hole block
<b>Why 5</b>	
<b>Root Cause (Outflow)</b>	No Inspection Specified in the final Inspection Quality plan for the drill hole block

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	check point added in Hourly inspection report for Drill hole block	Mr. Abhishek Yadav	10/03/2024	08/03/2024	Completed
Outflow	Inspection Specified in the final Inspection Quality plan for the drill hole block by using Pin gauge as per samplinug plan	Mr. Abhishek Yadav	10/03/2024	08/03/2024	Completed

## 9. Inspection Method After Customer Complaint

<b>Change In Inspection System</b>	Yes
<b>Change Details</b>	Inspection Specified in the final Inspection Quality plan for the drill hole block by using Pin gauge as per samplinug plan
<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>	Sampleplan

## 10. Evidance of Countermeasure

<b>Occurance (Before)</b>	No checkpoint added in Hourly inspection report for Drill hole block <a href="#">677_Occurance_Before.pdf</a>
<b>Occurance (After)</b>	checkpoint added in Hourly inspection report for Drill hole block <a href="#">677_Occurance_After.pdf</a>
<b>Outflow (Before)</b>	No Inspection was Specified in the final Inspection Quality plan for the drill hole block by using Pin gauge as per the sampling plan <a href="#">677_Outflow_Before.pdf</a>
<b>Outflow (After)</b>	Inspection Specified in the final Inspection Quality plan for the drill hole block by using Pin gauge as per sampling plan <a href="#">677_Outflow_After.pdf</a>

## 11. Horizontal Deployment

<b>Horizontal Deployment Required</b>	Yes
<b>Applicable Machine / Model / Plant</b>	K86

## 12. Document Review

<b>Documents</b>	InspCheckSheet
<b>Specify Other Document</b>	Quality Plan

## 13. Effectiveness Of Action

<b>Reviewed Quantity</b>	5
<b>Reason for submission</b>	Hole block 1.5 mm in fork pipe KOPG.

