

## Defect Details

<b>NC No.</b>	8000874506
<b>NC Date</b>	16/05/2024
<b>NC Submission Date</b>	
<b>Part No.</b>	520DZ00212
<b>Part Name</b>	FORK BOLT K60-(DS181012)
<b>Supplier Name &amp; Code</b>	100189-SANGKAJ STEEL PVT LTD.
<b>ETL Plant</b>	1117-ETL K-228/9 Suspension
<b>Defect Details</b>	NOT AS PER SPECIFICATION-DIMN. 7.5 UNDERSIZE - (4.0+0.1) + (3.5 )

## 1. Problem Description

<b>Defect Description</b>	DIMN. 7.5 UNDERSIZE - (4.0+0.1) + (3.5 )
<b>Detection Stage</b>	Inprocess
<b>Problem Severity</b>	Fitment
<b>NG Quantity</b>	402
<b>Is Defect Repeatative?</b>	No
<b>Defect Sketch / Photo</b>	

## Supplier Communication Details

<b>Quality Head Email ID</b>	qualityassurance@sangkaj.com
<b>Plant Head/CEO Email ID</b>	steel@sangkaj.com
<b>MD Email ID</b>	anirudh.2007@hotmail.com

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
<b>Total Qty</b>	1600	0	0	800	1000	3400
<b>Check Qty</b>	1600	0	0	800	1000	3400
<b>NG Qty</b>	402	0	0	36	0	438

## Action taken on NG part

<b>Scrap</b>	436
<b>Rework</b>	0
<b>Under Deviation</b>	0

## Containment Action

All material at ETL End & at Sangkaj Steel is segregated, Defective Qty is scrapped.

## 3. Process Flow

**Process Flow Description**

RM Inward-RM Inward inspection-Traub Machining(Semi-finish Blank)-Grinding-Tapping-Thread Rolling-Plating-Final Inspection-Packing &amp; dispatch

**4. Process Details**

<b>Process / Operation</b>	Traub Machining
<b>Outsource</b>	Yes
<b>Machine / Cell</b>	Traub machine
<b>Machine / Cell No.</b>	04

**5. Problem Analysis**

Type	Possible Cause	Fact Verification	Jud
Tool	Tool Worn Out	Worn Out Tool Doesn't Cause huge Variation	X
Man	New or Unskilled operator	Experienced & Skilled Operator is deputed for production	X
Material	Input Material not ok	Part manufactured through Continuous bar Feeding & RM Bar Found OK	X
Method	Inadequate Inspection Method	No Checkpoint for the Parameter in the Inprocess & in Final Inspection.	O
Machine	Variation due to Machine	Machine Condition found ok	X
Tool	Wrong Tool Used	part produced by using another tool used for similar category Parts	O

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

<b>Inspection Method</b>	Instrument
<b>Other Inspection Method</b>	
<b>Check Point at Final Inspection</b>	No
<b>Checking Freq.</b>	Sampling
<b>Sampling</b>	No
<b>Sample Size</b>	50:500

**7. Root Cause Analysis (Occurance)**

<b>Why 1</b>	7.50 mm Dimension found undersize
<b>Why 2</b>	Wrong forming Tool used for machining
<b>Why 3</b>	Forming Tools not identified with Part Names.
<b>Why 4</b>	Tool Identification not mentioned in the WI
<b>Why 5</b>	
<b>Root Cause (Occurance)</b>	Tool Identification not mentioned in the WI

**Root Cause Analysis (Outflow)**

<b>Why 1</b>	7.50 mm Dimension found undersize
<b>Why 2</b>	Defective Parts Skipped from Inspection.
<b>Why 3</b>	During Inspection this parameter is not checked
<b>Why 4</b>	Verification of this parameter not Included in Inspection Checklists.
<b>Why 5</b>	Inspection Checklists are inadequate.

**Root Cause (Outflow)**

Inspection Checklists are Inadequate

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	7.50mm Dimension Verification added in Following Checklists- 1. Supplier In-process Inspection Report, 2.Supplier PDIR Report, 3.Sangkaj Steel's Inward Inspection Report 4.PDIR	Mr. Anil Chaudhari	03/06/2024	03/06/2024	Completed
Occurance	1.Forming Tools are identified with Part names. 2.Setting WI Updated, it is mentioned in the WI that Every Tool should have Part Names on them.	Mr. Anil Chaudhari	03/06/2024	03/06/2024	Completed

**9. Inspection Method After Customer Complaint**

<b>Change In Inspection System</b>	Yes
<b>Change Details</b>	Dimension 3.50mm Added In Supplier PDIR, Supplier In-process Inspection Report, Inward Inspection & PDI Report of Sangkaj Steel. Inspection will be Followed on Sampling Basis.
<b>Inspection Method</b>	Instrument
<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>	50:500

**10. Evidance of Countermeasure**

<b>Occurance (Before)</b>	No Identification of Forming Tool with part Names <a href="#">809_Occurance_Before.pptx</a>
<b>Occurance (After)</b>	Part Names Engraved on the Tool with manual Engraving Machine <a href="#">809_Occurance_After.pptx</a>
<b>Outflow (Before)</b>	No Checkpoint Available for this Dimension <a href="#">809_Outflow_Before.pptx</a>
<b>Outflow (After)</b>	Checkpoint added in the PDIR, Hourly inspection and Inward Inspection Report <a href="#">809_Outflow_After.pptx</a>

**11. Horizontal Deployment**

<b>Horizontal Deployment Required</b>	Yes
<b>Applicable Machine / Model / Plant</b>	Fork Bolt JD, 5TSF

**12. Document Review**

<b>Documents</b>	ControlPlan, InspCheckSheet
<b>Specify Other Document</b>	PDIR

### 13. Effectiveness Of Action

**Reviewed Quantity**

50

**Reason for submission**

Judgment wrong Occurrence side root cause can do better