

## Defect Details

<b>NC No.</b>	8000826358
<b>NC Date</b>	15/04/2023
<b>NC Submission Date</b>	
<b>Part No.</b>	S2CW00307B
<b>Part Name</b>	D NUT DUKE 200 WITH CANISTER
<b>Supplier Name &amp; Code</b>	100106-SHARP ENGINEERS.
<b>ETL Plant</b>	1118-ETL E-92,93 Suspension
<b>Defect Details</b>	DIAMETER OVER SIZE-O/D OVER SIZE SPE=21.0+0.30 OBS=21.60MM

## 1. Problem Description

<b>Defect Description</b>	DIAMETER OVER SIZE-O/D OVER SIZE SPE=21.0+0.30 OBS=21.60MM
<b>Detection Stage</b>	Inprocess
<b>Problem Severity</b>	Fitment
<b>NG Quantity</b>	499
<b>Is Defect Repeatative?</b>	No
<b>Defect Sketch / Photo</b>	

## Supplier Communication Details

<b>Quality Head Email ID</b>	quality@sharp-engineers.com
<b>Plant Head/CEO Email ID</b>	kurund.ma@sharp-engineers.com
<b>MD Email ID</b>	urkhandelwal@sharp-engineers.com

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
<b>Total Qty</b>	540	0	0	0	0	540
<b>Check Qty</b>	540	0	0	0	0	540
<b>NG Qty</b>	499	0	0	0	0	499

## Action taken on NG part

<b>Scrap</b>	499
<b>Rework</b>	0
<b>Under Deviation</b>	0

## Containment Action

Inspection done with DVC for ETL End Material

## 3. Process Flow

**Process Flow Description**

RM Receipt & Inspection, Parting and Drilling, CNC I, CNC II, Milling, Deburring, Heat Treatment, Shot Blasting, Powder Coating, Inward Inspection, Final Inspection, PDI, Packing & Forwarding

**4. Process Details**

<b>Process / Operation</b>	1st Setup CNC
<b>Outsource</b>	No
<b>Machine / Cell</b>	CNC
<b>Machine / Cell No.</b>	8

**5. Problem Analysis**

Type	Possible Cause	Fact Verification	Jud
Tool	Insert wear out	Insert life defined found OK	O
Material	Hard Material	TC verified found OK	O
Machine	Machine parameter not OK	Verified and found all parameter within spec	O
Method	Coating thickness allowance	OD dimn maintained 21+0.3, No Coating allowance	X
Man	Unskilled manpower	Operator level defined, found adequate	O
Method	No checkpoint for OD 21+0.3	Checkpoint added but on sample basis with DVC	X

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

<b>Inspection Method</b>	Other
<b>Other Inspection Method</b>	DVC
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	Sampling
<b>Sampling</b>	No
<b>Sample Size</b>	as per CP

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

<b>Why 1</b>	Fitment issue in D Nut Canister Duke 200
<b>Why 2</b>	OD 21+0.3 mm oversized
<b>Why 3</b>	Dimension maintained 21+0.3 as per CP
<b>Why 4</b>	After coating Diameter oversized
<b>Why 5</b>	No coating allowance kept
<b>Root Cause (Occurance)</b>	Diameter observed oversized Due to No coating allowance

**Root Cause Analysis (Outflow)**

<b>Why 1</b>	Fitment issue in D Nut Canister Duke 200
<b>Why 2</b>	OD 21+0.3 mm oversized
<b>Why 3</b>	Not detected during inspection
<b>Why 4</b>	sample basis inspection with DVC
<b>Why 5</b>	
<b>Root Cause (Outflow)</b>	Sample basis inspection with DVC

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Plating allowance kept 0.2 mm	QA Suprvisor	20/04/2023	18/04/2023	Completed
Outflow	Checking method changed from DVC to Snap Gauge with Controlled Size 21+0.1mm only	Production Supervisor	20/04/2023	18/04/2023	Completed

## 9. Inspection Method After Customer Complaint

<b>Change In Inspection System</b>	Yes
<b>Change Details</b>	Checking method changed from DVC to Snap Gauge with Controlled Size 21+0.1mm only
<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>	IS 2500

## 10. Evidence of Countermeasure

<b>Occurance (Before)</b>	No powder coating allowance at machining stage <a href="#">411_Occurance_Before.pdf</a>
<b>Occurance (After)</b>	Considering powder coating allowance Size put as 21.0+0.1mm at machining stage. <a href="#">411_Occurance_After.pdf</a>
<b>Outflow (Before)</b>	Before no any inspection done for the OD size 21.0+0.30mm at Final inspection. <a href="#">411_Outflow_Before.pdf</a>
<b>Outflow (After)</b>	After complaint for the OD Size 21.0+0.30mm inspection started by Snap Gauge 100%. <a href="#">411_Outflow_After.pdf</a>

## 11. Horizontal Deployment

<b>Horizontal Deployment Required</b>	Yes
<b>Applicable Machine / Model / Plant</b>	D Nut XF1C1 1D1- E92

## 12. Document Review

<b>Documents</b>	ControlPlan, PFMEA, InspCheckSheet
<b>Specify Other Document</b>	-

## 13. Effectiveness Of Action

<b>Reviewed Quantity</b>	500
<b>Reason for submission</b>	Evidence of Countermeasure not relevant with respect to Action Submitted, Resubmit Again

