QFR No - 7000932465

Defect Details

NC No.	7000932465
NC Date	26/07/2023
NC Submission Date	
Part No.	550BZ01402
Part Name	CAP OIL LOCK - DF01
Supplier Name & Code	100106-SHARP ENGINEERS.
ETL Plant	1136-ETL Suspension Sanand
Defect Details	PARALITY NOT OK.-Parallelism out of specification 0.04 mm

1. Problem Description

Defect Description	Parallelism NG of cap oil lock
Detection Stage	Receipt
Problem Severity	Function
NG Quantity	2445
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality@apw3.co.in
Plant Head/CEO Email ID	kurund.ma@sharp-engineers.com
MD Email ID	urkhandelwal@sharp-engineers.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	22000	20000	0	10000	0	52000
Check Qty	22000	20000	0	10000	0	52000
NG Qty	2445	0	0	6	0	2451

Action taken on NG part

Scrap	0
Rework	2445
Under Deviation	0

Containment Action
Segregation done immediately for suspected material and defective 2445 nos rejected and quarantine from ok parts,

3. Process Flow

Process Flow Description
10) RM Inward inspection 20) Storage 30) Parting, Drilling & Forming 40) Chamfering 50) OD Ø 18.05 grinding 60) Plating Process (Outsource) 70) Inward Inspection 80)

4. Process Details

Process / Operation	Parting, Drilling & Forming
Outsource	No
Machine / Cell	TRAUB MACHINE
Machine / Cell No.	SE/SSAL/01

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Un-skilled Operator	Stage wise skill matrix and operator license are evident as per F/HR/06	O
Machine	Inadequate check Point in JH check sheet	Monthly JH check sheet available on machine and all the check point is being checked and recorded as	O
Method	Improper Material Flow	Material flow defined as per process flow and control plan and being followed	O
Tool	Tool life not getting as defined	Tool life is defined. But tool is found wear out before defined frequency.	X
Material	Incorrect Raw Material	Material observed as per customer requirement Ø16.10 EN1A , MTC verified as per drawing specificatio	O

6. Inspection Method Analysis (Current)

Inspection Method	Sp. Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	1:1

7. Root Cause Analysis (Occurance)

Why 1	Tool worn out on 500/sharpening earlier than defined frequency , drill worn out sometimes at end of the tool life near @500 Nos.
Why 2	In SS drill variation observed for parallelism at end of the tool life 500/sharpening.
Why 3	
Why 4	Drill life not getting as per defined frequency .
Why 5	
Root Cause (Occurance)	CAP OIL LOCK (df) tool life defined for 500/sharpening but drill Ø14.10 worn out earlier than defined frequency. Dimensional variation found at end of the tool life after 500/sharpening.

Root Cause Analysis (Outflow)

Why 1	Excess parallelism not detected at final inspection
Why 2	Sampling basis inspection as per SSPN 32:1200 Nos.

Why 3	Sampling frequency defined by system as per control plan.
Why 4	
Why 5	
Root Cause (Outflow)	100% inspection is not being done for parallelism.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	For TIN Coated Drill Initially 100% inspection will be done for parallelism to monitoring the results, after sustenance verification and joint discussion with ETL & SHARP inspection frequency will be changed .	Mr.Shaikh L.N.	26/07/2023	27/07/2023	Completed
Occurance	SS Tool life not getting as per defined so view of improvement in tool life inplace of SS TIN (Titanium Nitride) coated drill is being used, SPC done for coated and non coated drill after process validation TIN coated drill defined and added in the control plan.	Mr. DattaPandhre	27/07/2023	27/07/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	For TIN Coated Drill Initially 100% inspection will be done for parallelism to monitoring the results, after sustenance verification and joint discussion with ETL & SHARP inspection frequency will be changed .
Inspection Method	Sp. Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	1:1

10. Evidance of Countermeasure

Occurance (Before)	CAP OIL LOCK (df) tool life defined for 500/sharpening but drill Ø14.10 worn out earlier than defined frequency. Dimensional variation found at end of the tool life after 500/sharpening. 511_Occurance_Before.pptx
Occurance (After)	SS Tool life not getting as per defined so view of improvement in tool life in place of SS TIN (Titanium Nitride) coated drill is being used, SPC done for coated and non coated drill after process validation TIN coated drill defined and added in the control plan. Tool life defined 600/sharpening. 511_Occurance_After.pptx
Outflow (Before)	100% inspection is not being done for parallelism. 511_Outflow_Before.pptx
Outflow (After)	For TIN Coated Drill Initially 100% inspection will be done for parallelism to monitoring the results, after sustenance verification and joint discussion with ETL & SHARP inspection frequency will be changed . 511_Outflow_After.pptx

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	HMSI(K86/K0LA)

12. Document Review

Documents	ControlPlan, PFMEA, WISOP, ProcessFlowChart, InspCheckSheet
Specify Other Document	NA

13. Effectiveness Of Action

Reviewed Quantity	
Reason for submission	