QFR No - 8000836555

Defect Details

NC No.	8000836555
NC Date	12/07/2023
NC Submission Date	
Part No.	53BAQ00102
Part Name	BASE VALVE CASE
Supplier Name & Code	100177-SPECIALITY SINTERED PRODUCTS P
ETL Plant	1143-ETL Suspension Halol, Vadodara
Defect Details	DIMETER UNDERSIZE-OUTER DIAMETER Ø18 +0.07/0.1 MM OD U/S

1. Problem Description

Defect Description	Base valve case Step OD Ø 18 +0.07/+0.1 mm undersize found up to 18.03 mm
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	2
Is Defect Repeatative?	No
Defect Sketch / Photo	o0yyzxonfdku0me0vq3w5gu0.png

Supplier Communication Details

Quality Head Email ID	Kalyan.babar@specialitysintered.com
Plant Head/CEO Email ID	Datta.gadhave@ssplpune.com
MD Email ID	lalit.chaudhari@ssplpune.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	18000	40000	0	10000	5000	73000
Check Qty	18000	0	0	10000	5000	33000
NG Qty	1473	0	0	0	0	1473

Action taken on NG part

Scrap	1473
Rework	0
Under Deviation	0

Containment Action
100% inspection done for all WIP parts for 18.07 to 18.10 mm with snap gauge

3. Process Flow

Process Flow Description
RM Inspection - Mixing - Forming - Sintering - debarring - Sizing - steam - machining - PDIR - packaging & Dispatch

4. Process Details

Process / Operation	Sizing
Outsource	Yes
Machine / Cell	10S2
Machine / Cell No.	10S2

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	in correct inspection frequency	verified inspection frequency at PDIR inspection done as per sample plan IS2500	X
Method	In correct set up approval done	verified the set up approval observed OD undersize observed)	O
Method	in correct method used for inprocess inspection	interviewing with line inspector observed Micrometer used for first off inspection	X
Material	in correct RM used	verified the Supplier RM TC obseved RM used as per drawing	X
Machine	in correct selection of machine	verified the machine and observed 10S1 machined used for sizing	X
Man	unskilled inspector	interviewing with the inspector and obaserved inspector is aware about inspection method	X
Tool	in correct Die used	verified the die and observed die is undersize	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	No
Checking Freq.	Sampling
Sampling	No
Sample Size	IS2500

7. Root Cause Analysis (Occurance)

Why 1	OD undersize observed spec 18.07-18.10 mm observed 18.03 mm
Why 2	OD undersize in sintering process
Why 3	Low growth in sintering process
Why 4	density at forming process is kept low (Density variation)
Why 5	
Root Cause (Occurance)	density at forming process is kept low (Density variation)

Root Cause Analysis (Outflow)

Why 1	OD undersize observed spec 18.07-18.10 mm observed 18.03 mm
Why 2	not detected in sintering process
Why 3	inspection done on sample basis

Why 4	
Why 5	
Root Cause (Outflow)	inspection done on sample basis

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	For new tools incoming inspection started	Mr Mayur	04/08/2023	01/08/2023	Completed
Outflow	Snap gauge introduced for first off inspection	Mr Sunil	04/08/2023	02/08/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	snap gauge verification for firat off
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	IS2500

10. Evidance of Countermeasure

Occurance (Before)	No tool verified at inward 508_Occurance_Before.docx
Occurance (After)	New tool verification started at inward as per tool drawing 508_Occurance_After.jpg
Outflow (Before)	Micro meter used for verification of OD 508_Outflow_Before.jpg
Outflow (After)	snap gauge introduced for inspection for OD 508_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	013AQ00123

12. Document Review

Documents	WISOP
Specify Other Document	NA

13. Effectiveness Of Action

Reviewed Quantity	100
Reason for submission	ok