

Defect Details

NC No.	8000849150
NC Date	19/10/2023
NC Submission Date	
Part No.	53BJF00102
Part Name	PISTON (Ø18)
Supplier Name & Code	100177-SPECIALITY SINTERED PRODUCTS P
ETL Plant	1143-ETL Suspension Halol, Vadodara
Defect Details	DIMETER UNDERSIZE-OD UNDERSIZE FOUND UPTO 17.904MM

1. Problem Description

Defect Description	Piston OD 17.923 ~ 17.943 mm Undersize found up to 17.904 mm
Detection Stage	Receipt
Problem Severity	Function
NG Quantity	5
Is Defect Repeatative?	Yes
Defect Sketch / Photo	gh5t3exnukab30icfh4ky1b.jpg

Supplier Communication Details

Quality Head Email ID	ganesh.padwalkar@specialitysintered.com
Plant Head/CEO Email ID	lalit.chaudhari@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	30600	9000	0	9000	20000	68600
Check Qty	30600	9000	0	9000	20000	68600
NG Qty	12600	0	0	0	0	12600

Action taken on NG part

Scrap	12600
Rework	0
Under Deviation	0

Containment Action

1) Warehouse :-For 20,000 no's 100 % Checking Done By SSPL Representative , Transit :- Nil . 2) All FG material Hold and started 100 % OD inspection of parts By Ring Gauge started.

3. Process Flow

Process Flow Description

1)Forming 2)Sintering ,3)Sizing, 3)Machining .5)Drilling.6)Pre dispatch Inspection .7)Packing & Dispatch.

4. Process Details

Process / Operation	Sizing
Outsource	No
Machine / Cell	45s1
Machine / Cell No.	45S1

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Unskilled Operator	Skilled Operator At Sizing Operation Verified Found Ok	O
Method	Incorrect Method Of Inspection	Verified Inspection Method As PerControl Plan Decided. Decided	O
Tool	Incorrect Tool	Verified Sizing Die Bottom Side Chamfer Height Excess	X
Material	Incorrect Raw Material	Verified Ok	O
Machine	Wrong Machine Used For Sizing Operation .	Verified Found Ok Correct Machine Used .	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	75

7. Root Cause Analysis (Occurance)

Why 1	Piston OD 17.923 ~ 17.943 mm Undersized found up to 17.904 mm
Why 2	During The Sizing Process Part Getting Under Size
Why 3	Sizing Die Bottom Side Chamfer Height Excess.
Why 4	Die Bottom Side Chamfer Height Checkpoint Not Available In Tool Control Plan .
Why 5	
Root Cause (Occurance)	Die Bottom Side Chamfer Height Checkpoint Not Available In Tool Control Plan .

Root Cause Analysis (Outflow)

Why 1	Piston OD 17.923 ~ 17.943 mm Undersized found up to 17.904 mm
Why 2	Defective part Pass from Final Inspection .
Why 3	Not Detected In Final Inspection.
Why 4	-Inspection Done As Per Sampling Plan . .
Why 5	
Root Cause (Outflow)	-Inspection Done As Per Sampling Plan . .

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	On Job Training provided through Opl To inspectors .	Sunil Shejwal	20/11/2023	20/10/2023	Completed
Outflow	100 % Inspection Started Till Permanent Action Implementation	Sunil Shejwal	20/11/2023	20/10/2023	Completed
Occurance	1. Check Point Of Chamfer Height Checkpoint Added In Tool Control Plan .	Mr Mahesh Shinde	25/10/2023	20/10/2023	Completed
Outflow	Quality Alert displayed at final inspection and Sizing section	Sunil Shejwal	22/11/2023	20/10/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	No
Change Details	No Change
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	Check Point Not Available In Tool Control Plan 585_Occurance_Before.pdf
Occurance (After)	Check Point Of Chamfer Height Checkpoint Added In Tool Control Plan . 585_Occurance_After.pdf
Outflow (Before)	Sampling Inspection At Final Inspection . 585_Outflow_Before.pdf
Outflow (After)	100 % Od Inspection Started Till Action Implementation . 585_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	NA

12. Document Review

Documents	ControlPlan, InspCheckSheet
Specify Other Document	Opl

13. Effectiveness Of Action

Reviewed Quantity	50
Reason for submission	ok