Defect Details

NC No.	8000785331
NC Date	26/04/2022
NC Submission Date	
Part No.	520FG00101
Part Name	HELICAL GEAR K-70
Supplier Name & Code	100987-FLASH VIVEN MACHINING TECHNOLO
ETL Plant	1132-ETL K-226/1 TRANSMISSION
Defect Details	RUN OUT MORE-RUNOUT NOT OK,ID UNCLEAN

1. Problem Description

Defect Description	Runout Excess Upto 0.6 mm as against 0.15 mm
Detection Stage	Inprocess
Problem Severity	Function
NG Quantity	160
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	sgn.quality@flashgroup.in
Plant Head/CEO Email ID	dkj.mfg@flashgroup.in
MD Email ID	sv.md@flashgroup.in

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	3625	2000	2000	500	1500	9625
Check Qty	3625	2000	2000	500	1500	9625
NG Qty	81	0	0	12	23	116

Action taken on NG part

Scrap	81
Rework	0
Under Deviation	0

Containment Action

100% Flatness checking at Final inspection stage Next 5 lots with Blue dot marking near bore Diameter.

3. Process Flow

Process Flow Description

 ${\it CNC-Hobbing-HT-Bore\ honning-teeth\ honning-Final\ inspection-dispatch}$

4. Process Details

Process / Operation	нт
Outsource	No
Machine / Cell	heat treatment
Machine / Cell No.	ht

5. Problem Analysis

Туре	Possible Cause	Fact Verification	Jud	
Machine	Warpage	Visual	Х	

6. Inspection Method Analysis (Current)

Inspection Method	Instrument
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100

7. Root Cause Analysis (Occurance)

Why 1	Bend Near ID location	
Why 2	Warpage near ID	
Why 3	Resting on outer face in stack of 5 parts in HT charge	
Why 4	No resting on counter face possibility of warpage	
Why 5	No provision	
Root Cause (Occurance)	No resting on counter face possibility of warpage	

Root Cause Analysis (Outflow)

Why 1	Skip at Final QA
Why 2	Sampling base inspection
Why 3	
Why 4	
Why 5	
Root Cause (Outflow)	1) 100% Flatness checking at Final inspection stage Next 5 lots with Blue dot marking near bore Diameter. 2) OPL & Q Alert Displayed

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

		Туре	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
--	--	------	------------------------	----------------	-------------	-------------	--------

	1. To provide spacer in between two parts to such that				
Occurance	gear rest on plane face 2. Lower end provide Square	AGD	30/06/2022	30/06/2022	Completed
	type spacer in between charge & part				

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	1) 100% Flatness checking at Final inspection stage Next 5 lots with Blue dot marking near bore Diameter. 2) OPL & Q Alert Displayed
Inspection Method	Instrument
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100

10. Evidance of Countermeasure

Occurance (Before)	No resting on counter face possibility of warpage. 67_Occurance_Before.xlsx
Occurance (After)	To provide spacer in between two parts to such that gear rest on plane face Lower end provide Square type spacer in between charge & part 67_Occurance_After.xlsx
Outflow (Before)	Sampling base inspection 67_Outflow_Before.xlsx
Outflow (After)	100% Visual & Flatness checking at Final inspection stage Next 5 lots with Blue dot marking near bore Diameter. 67_Outflow_After.xlsx

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	JZ551400 & PF551402, DX551227

12. Document Review

Documents	WISOP
Specify Other Document	no

13. Effectiveness Of Action

Reviewed Quantity	1000
Reason for submission	OK