

## CHANGE ORDER

Form: 9-PR-0014-9-FO-0001

Version: 1

Page 1/3

Record No.: 9-PR-0014-9-FO-0001-4-RC-0141

Title: Cancel Film inspection at App3, burr removal at housing process for T-Con product

Proposed by (Change Owner): Thu DTM

Date: 8-Aug-2024

## A - CHANGE INFORMATION:

## A.1 Change category:


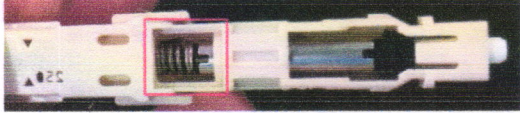

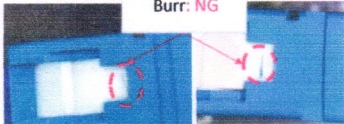
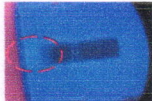
☐ Man☐ Material☒ Method/Document☐ Machine, Tool/Jig☐ Process☐ Supplier☐ Factory/Section☐ Others: .....


Customer requirement/Agreement related

☒ NO☐ YES☐ Need customer's approval☐ Need notification to customer☒ No need customer's approval/notification to customer

## A.2 Change description:

To improve for productivity and cost down for T-Con product, we propose to 4M change for some processes at Film inspection and housing process as below:

Process	Current	Change
Polishing	Polishing for T-Con product	Keep the same current operation
Film inspection	A. Cleaning fiber and body by air gun B. Appearance check for product by microscope for below items: 1- End face of GUMI 2- V-Groove surface. 3- Position of bare fiber in V-Groove. 4- End of fiber in 4 marks	A. Keep the same current operation B. Cancel 1- Cancel. Reason: remove duplicate inspection process, we have another checking step at Gumi & ferrule assy process 2- Cancel. Reason: have temporary cap cover from after ferrule to polishing process. 3. Cancel: Reason: checking step at ferrule assembly process 4. Cancel. Reason: remove duplicate inspection process, we have another checking step at ferrule assembly process
Body assembly	Body assembly for T-Con product	Keep the same current operation
Housing	Housing T-Con product by Housing tool: 	Keep the same current operation
Housing	Check the Spring: - No missing springs - The spring is not stuck or misaligned 	Keep the same current operation
Housing	- Check the Key of "PS for SCGT" are assembled completely by Jig and Microscope - Assembly Coupling to product 	Keep the same current operation
Housing	Appearance after Housing: - To check and remove burr after housing (100% currently)  Burr: NG Remove burr	- <Cancel to check and remove burr after housing> + Have no effect to function of product. + Still meet requirement about appearance for T-Con products: Appearance inspection: No damage, stain<=5mm, no contamination, scratch can not catch by finger + This is internal inspection for product
	- To check the Coupling: No crack. Check Coupling crack: NG 	- Keep the same current operation

Housing	Assembly Holder to Coupling 	- Keep the same current operation
---------	--	-----------------------------------

#### A.3 Application scope:

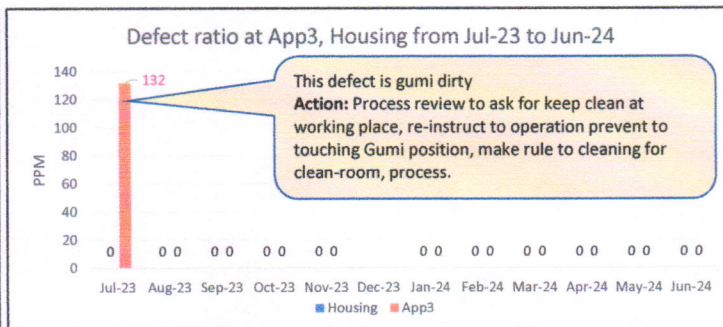
Apply for product type as specification below:

No.	Product Name	Spec Number (*)	Note:
1	KY-T-Connector S-LG KY-T-Connector S-LM-R	S-GAISHI-71-2186-(*)	(*) is latest revision of specification

#### A.4 Change reason:

1. Still meet requirement about appearance for T-Con products: Appearance inspection: No damage, stain<=5mm, no contamination, scratch can not catch by finger
2. Increase productivity for T-Con products about 2.6% from 13.43 to 13.79 (set/MH)
3. Review the defect of appearance check at Film inspection process and housing process from Jul-2023 to Jun-2024 as below:

Month	Output (pcs)	Defect (ppm)	
		appearance check key of plug frame+stopring	appearance before body assembly process
Jul-23	45534	0	131.770
Aug-23	27780	0	0
Sep-23	35070	0	0
Oct-23	10800	0	0
Nov-23	22350	0	0
Jan-24	34650	0	0
Feb-24	22200	0	0
Mar-24	34996	0	0
Apr-24	31533	0	0
May-24	32453	0	0
Jun-24	29013	0	0



#### 4. Cost effectiveness:

Estimate cycle time reduced

Items	T-CON	
	Before	After
Cycle time (s)	268	261
Line balance (%)	95%	
Conversion ratio (%)	12%	
Productivity increase(set/MH)	0.305584	
PC rate(USD/MH)	\$ 2.89	
Plan (set/month)	46,000	
Saving (MH/month)	4,037	3,932
	105.45	
Cost reduction(USD/month)	\$ 304.75	

#### B - RISK ASSESSMENT

\* Changes concerning to processes under scope of FMEA:

FMEA review ☒ Yes ☐ No, Reason : .....

Review result:

FMEA No. & Current version	FMEA name	Result	New version (in case "Update")
0-PR-012-0-FO-001-4-RC-0070_ver 4	PFMEA T-Connector Gumi	Update	version 5

\* Other changes:

No.	Risk	Action to address risk	PIC	Due date	Status
1	-	-	-	-	-
2	-	-	-	-	-
3	-	-	-	-	-



C - CHANGE CONTROL:

C.1 Change verification

☐ Yes ☒ No, reason : Simplified checking items frequency only.

Trial run/test result record (Technical report no.).....

C.2 Document review

☒ Yes ☐ No, reason : .....

No.	Document No. & Current version	Document name	New version	Actual completion date
1	4-QC-0081 version 11	QC flow chart T-CONNECTOR GUMI	12	Done on 5-Sep-24
2	4-OP-611-4-PS-014-0004 version 10	HOUSING Ky-FA Connector Plug SC - Housing tool	11	Done on 5-Sep-24
3	000-4-PS-014-0057 version 5	Housing KY-T-Connector S-LG	6	Done on 5-Sep-24
4	4-OP-0081-4-PS-061-0001 version 8	APPEARANCE 3	9	Done on 5-Sep-24

C.3 Training requirement

☒ Yes ☐ No

☐ Re-train, not update qualification record

☐ Re-train, update qualification record

Training record No./Meeting minutes: .....

C.4 Initial Control

☐ Yes ☒ No

Initial control plan No.: .....

Initial control completion report No.: .....

D - CHANGE APPROVAL/NOTIFICATION:

D.1 Manager's approval:

Signature: [Signature] Date: 09/Aug/2024  
Comment: .....

D.2 Dept Manager upwards' approval:

Signature: ..... Date: .....  
Comment: .....

D.3 Customer's approval:

Signature: ..... Date: .....  
Comment: .....

E - CHANGE IMPLEMENTATION:

Confirm implementation completed & closing:

Change already applied from (date or ID# or PO#): Apply from 5-Sep-2024

Manager confirm:

All required actions are completed ☒

Signature: [Signature] Date: 15/09/2024

Comment: .....