

	Gautam Solar Private Limited	Document No.	GSPL/IQC/WI/008
	Document Title: Quality(IQC)	Issue Date	01-12-2024
	Type of Document: WI For Auto Peel Tester Machine	Rev. No./Date	00
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1. **Purpose:** To determine the soldering quality (peel force) of ribbon with solar cell
2. **Scope:** For all type of cell used In GSPL.
3. **Reference Documents:** NA
4. **Authority and Responsibility:** IQC/IPQC Engineer
5. **Procedure:** As below

NOTE:

Rules for Operating Personnel

1. Never use a machine if you are not trained or not Familiar with it.
2. Never Remove Shield or Machine Guard.
3. Wear Proper PPE as Per Requirement.
4. Check the Safety device on a regular, Periodic basic to confirm that they are operating correctly.
5. Keep hand and Body clear when Operating Machine, Always Maintain a safe distance

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6. Never try to climb or extent your hand over safety device, Equipment and Guards.

Work Instructions (Steps)	Pictures	Check Points
<ol style="list-style-type: none"> 1) Take a Soldered sample of solar cell for performing solderability test of cell to ribbon for front and back Side. 2) Place the cell into the soldering peel test fixture/Zig as shown in picture (Fig1). 3) Insert the ribbon and lock it & Place the ribbon onto the ribbon Picker to start the test (Fig.2). 4) Open the “TOP_12 Channel ” Software from the Desktop screen (Fig.3). 5) After open the software click on “Test Standard” dragdown icon. And choose recipe as per Cell make. 6) If any New supplier Cell /New bus 	  Fig.1 Fig.2  Fig.3	

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bar pattern cell running on line
which recipe not add in then add
New recipe.

Steps For Making New Recipe:

- 1) Click on Tool icon (Edit Standard)
and follow below steps for Cell
recipe add.

- A. Click on add button.
- B. Enter cell recipe name
(Fig.1.1, Fig1.2).

- C. Measure the cell size and
divide into the interval (**For**

Example :- There are two
gaps in the attached image
cell so the interval will be
from 1 to 80 for interval one
and 81 to 157 for interval
two) (Fig2.1, Fig2.2).

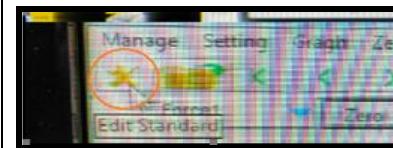


Fig.1.1

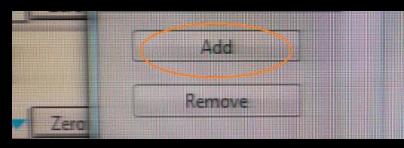


Fig.1.2



Fig.2.1

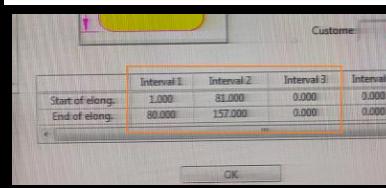


Fig2.2

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- 7) Now back to main screen and Click on Zero Button.
- 8) Now click on the test button for soldering peel testing.

Acceptance Criteria :-

Average Soldering Peel Test Result per ribbon should be ≥ 1 N

Atleast greater than 75% of overall soldering pads for each side must fulfill the specs.

Remarks: More than 2 continuous unsoldered pads not allowed and 3 in scattered manner even if value of 2 pads are more than 1N. At least 75% of overall soldering pads for each side must fulfill specs. in case, these criteria are not fulfilled then we shall take another sample along with necessary action, if required

Reaction Plan: Please stop the machine and inform the maintenance if retest failed

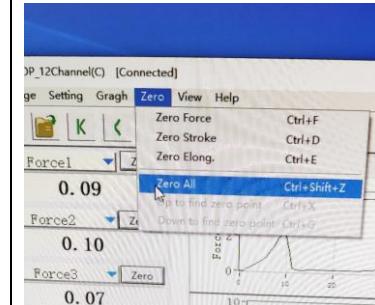


Fig.3

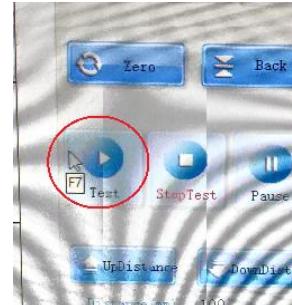


Fig.4

General safe work procedures:

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	Machine Grounding
	Danger High Voltage and Non Touching
 Danger	In an Urgent situation and if not avoided, it will result in serious casualties.
 Warning	Potential urgent situation, and if not avoided, it will result in serious casualties.
 Warning	Potential situation if not avoided, it will result in Minor injuries or property loss.

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