

Process Name/ Little:			
Terminal	Cut Surface	Monitoring	(Etchina)

Document No: Effective Date: WI-ENG-PDE-005

SEP 2 8 2017

WORK INSTRUCTION Product Code/Name:

Customer Code:

Rev.No.:

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Common n/a Records/Remarks/ No. Work Procedure/Illustration **Quality Pointers** Procedure Part 3 1. Electrolysis 1-1, CEL-02 Structure **Etching Unit** Voltmeter **Mode Change SW** Display the current voltage "Copper etching mode" or "Aluminum etching mode" Power Indicator When Power On Green is Lit Power Limit Indicator When there is Excess Electric Current Red is Lit **Etching Power Volume SW** Pen Holder / Etching Liquid Cup **Electric Power Voltage** Adjust the Etching Power Electrolysis Etching Pen and Liquid Material can be held in the Cup Adjust the Voltage **Etching Liquid** 2-1 Pour adequate amount of Etching Liquid to the Cup Max: 2mL 12417 Prepare Approve 9/27/17 A Arañes T. Sugiyama R. Alcantara

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Details of Change

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3. Unit Power On Set the Mode

No.

3-1 Power SW (located at the back side of unit) On and set the mode SW to Copper

Work Procedure/Illustration





4. Power Adjustment

4-1 Adjust the voltage



Check if automatically set to 15V Etching condition depends on the voltage. Higher voltage means strong etching.

5 Etching Pen

5-1 Dip the Etching Pen to the Etching Liquid



Dip the Etching Pen to the Etching Liquid adequately

Frequency of Etching Pen Tip Replacement is every 300 times of usage.

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Etching

6-1. Etching

Rub the surface of the sample using the Etching Pen







Gently scratch the cut surface of the sample by the tip of the Etching Pen. Full area shall be covered. Don't scratch strongly.

Remove excess etching liquid using cotton swab.

Inspection of the Cut Surface 7-1. Inspection of Cut Surface by PC Monitor



If etching is not enough, repeat the etching procedure.

If etching condition is not good, repeat etching at higher voltage, i.e., adjust the voltage SW, page 1, 1-1.

Example of not good etching condition:

Blurred image

Dirty Cross section

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