

Endura

## STANDARD OPERATING PROCEDURE

CAFE Name: *endura*

Model  
Number: Endura 5500

Location: ICL

What it does: metal sputtering system

**Introduction:** The Endura PVD System is a fully automated Physical Vapor Deposition (PVD) system Using single-wafer, multi-chamber design. The system deposits thin metal films used in interconnect metallization on 6" (150mm) wafers. The system offers the possibility of depositing Aluminum (Al), Aluminum-2%Silicon (Al-2%Si), Titanium (Ti) and Titanium-Nitride (TiN) metal layers.

**Safety:** The Load-lock cassette door closes under pneumatic pressure. Avoid placing fingers or foreign objects between the door and the chamber edge while the door is closing. Personal injury or damage to the machine could result.

**Procedure:**

1. In CORAL Use the "ENGAGE" command to get screen control of the system.
2. **Log In:** This action must be done in order to gain access to the system: Click UNDER *Applied Materials Metal Deposition* title (top of the screen).

*User Name:* USER <Enter> *Password:* USER <Enter> Click on *PROCESSING*

3. **Main Screen:** Follow the drop-window sequence bellow to access such screen: Wafer ->> Monitor Wafers
4. **Put System in Manual** (Note: If the system is already in manual, go to step-5. Manual can be determined by the white color of the "System" and "Wafer" drop-windows) If not in manual: From main screen: *Wafer -> Stop -> Control System -> Automatic -> Manual..*
5. **Open Load Lock A:** From Main Screen (step-3): *Wafer -> Load/Unload A*
6. **Load your Wafers** into the Cassette: Wafers ought to be placed in every slot starting on slot #1
7. **Load Sequence:** From Main Screen (step-3): *Control System-> Click on Sequence Selection, Click on the desired sequence (they are in alphabetical order) and click on it again on the Sequence selection line.*
8. **Close Load Lock:** From Main Screen (step-3): *Wafer -> Load/unload A* (it will take a few minutes for base pressure to take place)
9. **Delete and Create your wafers:** Delete all wafers from the cassette after the pump down: Click wafer #1 *START DELETE RANGE* Click wafer #25 *END DELETE RANGE* Click on slot #1 *CREATE WAFER IN CASSETTE A*, Repeat this procedure for as many wafers as needed.
10. **Put System in Automatic:** From Main Screen (step-3): *Control System-> Manual ->Automatic.* Click on "confirm wafer position" red title at the bottom of the screen
11. **Start your Run:** From Main Screen (step-3) *Wafer->RUN*
12. **Finishing Your Run:** Put system in Manual from Main Screen (step-3): *Wafer-> Stop->Control System -> Automatic->Manual.*
13. **Remove your Wafers:** From Main Screen (step-3): *Wafer -> Load/unload A.*
14. **Close load lock:** From Main Screen (step-3): *Wafer -> Close Door A...*
15. In CORAL Use the "DISENGAGE" to complete your operation.

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