

Developer

Semiconductor & Microsystems

Fabrication Laboratory

Revision: B

Rev Date: 05/12/2017

Approved by:

_____/_____/_____
Process Engineer_____/_____/_____
Equipment Engineer

1 SAFETY PRECAUTIONS

1.1 Hazards to the Operator

- 1.1.1 Read the materials safety data sheets for the materials that will be used.
- 1.1.2 Make sure that the lid is closed before spinning a wafer.
- 1.1.3 Wear safety glasses at all times.

1.2 Hazards to the Tool

- 1.2.1 When changing the chuck between 4 and 6 inch, there is a special screw that must be removed from the chuck with an Allen wrench. The screw has a vacuum port in it and if lost, must be replaced with the same type.
- 1.2.2 Do not adjust the settings for the Developer or DI water rinse.
- 1.2.3 Only CD-26 Developer may be used in this system.
- 1.2.4 Do not use excessive spin speeds or wafer may break. Avoid spinning above 3000rpm.

2 INSTRUCTIONS

2.1 Service Chase Set Up

- 2.1.1 In service chase 2735, on the South Nitrogen Manifold 2375, verify **CEE-100 DEV. SPINNER N2** valve is ON.

2.2 Program Numbers

- 2.2.1 There are 10 program spots (# 0-9)
- 2.2.2 **Program #0** is reserved for the standard 4 inch wafer program.
- 2.2.3 **Program #1** is reserved for the standard 6 inch wafer program.
- 2.2.4 **Program #9** is open for general use and may be changed by anyone.
- 2.2.5 **Programs #2-8** may be signed out. These will be purged quarterly.

2.3 Running a Program

- 2.3.1 If the system has not been used for a while, run a blank wafer to purge out bubbles.
- 2.3.2 Load the wafer.
- 2.3.3 Press **Run**, put in the **number** and press **Enter**. Close the lid and press **Start**. The system will do a centering check. Center the wafer if needed. Press **Start** again to run the program.

- 2.3.4 When the program is complete, press Reset to stop the alarm.
- 2.3.5 If the system runs low on developer, an alarm in the chase will sound.
- 2.3.6 Dry the lid with a clean wipe if needed.

2.4 Entering a Program

- 2.4.1 Programs start with step **0** and go up to **9**.
- 2.4.2 Press **Program**. Display will prompt **PROG MODE/PROG#**. Enter your program number and press **Enter**.
- 2.4.3 Display will prompt **DISPENSE 1=ON 0=OFF**. Select **1** and press **Enter**.
- 2.4.4 Display will prompt **PG/# VEL/0**. Enter a spin speed for **Step 1** and press **Enter**. To write over another spin speed, press **Clear**, enter the new spin speed and press **Enter**.
- 2.4.5 Display will prompt **PG/# RMP/0**. Enter a ramp rate and press **Enter**. (0-30,000)
- 2.4.6 Display will prompt **PG/# STEP-0 NOZZLE #1**. Select a nozzle and press **Enter**.
 - 2.4.6.1 No Dispense =0
 - 2.4.6.2 Developer Dispense =1
 - 2.4.6.3 DI Rinse Dispense =2
- 2.4.7 Display will prompt **PG/# TIME/0**. Enter a time and press **Enter**.
- 2.4.8 The program will advance to the next step. Display will prompt **PG/# VEL/1**. Enter a velocity for **Step 2** and press **Enter**. To end the program, press **Clear** and **Enter**.
- 2.4.9 Excessive spin speeds may cause wafer breakage. Do not spin above 3000rpm.

2.5 Stopping a Run

- 2.5.1 Press **Stop**.

2.6 Resetting the System

- 2.6.1 Press the **Reset** button.

2.7 Changing the Chuck

- 2.7.1 Use the Allen wrench to remove the screw. The screw has a vacuum port in it and if lost, must be replaced with the same type.
- 2.7.2 When finished be careful to properly orient the chuck and replace the Allen screw.

Summary of Changes	Originator	Rev/Date
Original Issue	Dave Yackoff	01/24/2006
Updated section 2.1 – N2 Valve is now always ON	Peter Morici	05/12/2017

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